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Neo-Mercantilism in The Semiconductor Industry: The Chinese Strategy

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ABSTRACT

This paper examines the impact of China's neo-mercantilist policies on its semiconductor industry. China strategically employs a neo-mercantilist approach to enhance its technological capabilities and strengthen its position in the global semiconductor sector. The research method used in the paper is qualitative. The study analyzes the multifaceted strategies encompassing industrial policies, trade practices, and technological advancements to understand their contributions to the industry's growth and resilience. It also explores how this growth benefits China's economy and highlights the role of economic factors in shaping political partnerships. The findings demonstrate that China's neo-mercantilist policies have played a pivotal role in fostering the development of its semiconductor sector through targeted industrial policies and trade practices. The emphasis on technological advancements has reduced dependence on foreign technology and enabled the production of high-quality semiconductors domestically. The semiconductor industry's growth in China has positively impacted the economy, contributing to job creation, increased exports, and enhanced economic competitiveness. Moreover, the paper highlights the importance of economic factors in driving political partnerships, as China's semiconductor industry growth has facilitated collaborations based on mutual economic interests.

Keywords: Neo-Mercantilism, Semiconductors, Industry, China, United States

INTRODUCTION

Despite unprecedented technological advances, economics and politics have maintained their basic foundations throughout the history of nations as we know them. While hundreds of years ago most of the trade between regions consisted of basic goods such as spices and textiles, the exchanges now include complex manufactured electronic devices. One of these devices is semiconductors (sometimes referred to as integrated circuits, ICs, or chips) which are

an essential component of electronics, enabling advances in communications, computing, healthcare, military systems, transportation, and more.

This paper does not aim to delve into the technical engineering aspects of the semiconductor industry. Instead, it focuses on examining the strategies employed by China in this sector and how these strategies have unexpectedly contributed to its economic growth. The perspective of "new mercantilism" is adopted to analyze this issue, as it recognizes the inherent drive of individuals and nation-states to create and maintain wealth and power in order to safeguard their security and independence against various real or perceived threats (Balaam & Dillman, 2018). In this particular case, the perceived threats mainly stem from the United States and its allies.

China and the United States have had a recent history of tiff-for-taff exchanges that have been extensively researched by scholars in the fields of economics, technology and trade examining the geopolitical and economic dimensions of the semiconductor industry, focusing on the motivations of both China and the United States in their engagement in the so-called "chip war." But still, the discussion does not connect these motivations to the growth of the gross domestic product and draw links on how these economic strategies have enhanced China's political alliances in its search to expand its influence abroad.

The main literature on these topics revolves around the US-China trade conflict (Bown, 2021; Liang & Ding, 2020; Medlock III et al., 2021), neo-mercantilist practices and its impact on the global political economy (Berdell et al., 2019), neo-mercantilism and its dynamics (Ziegler & Menon, 2014) and China's neo-mercantilist practices and its impact on innovation (Atkinson, 2012; Ezell, 2021) or investment (Huimin et al., 2018; Wen & Zhao, 2021), rise as a global power (Yu, 2017) and consequences for industrial countries (Wübbeke et al., 2016).

China's motivations are primarily driven by its desire to reduce its dependence on foreign semiconductor suppliers, particularly from the United States. The Chinese government has identified the semiconductor industry as a strategic sector crucial for national security and economic development. They have pursued an aggressive strategy of investing in domestic chip manufacturing, technology acquisition, and fostering innovation. China, recognizing the strategic value of semiconductors, has adopted neo-mercantilist policies to advance its domestic semiconductor capabilities and aims to become self-reliant in semiconductors and challenge the technological dominance of the United States in the industry.

The United States, on the other hand, has been concerned about national security implications, especially in the context of intellectual property theft, and seeks to protect its technological leadership. The U.S. government has taken measures, such as imposing tariffs, export restrictions, and sanctions, to curtail China's access to advanced semiconductor technology. This is partly driven by economic considerations to protect American industries and jobs, but also by security concerns related to the use of semiconductor technology in critical infrastructure and defense applications.

One of the key concerns associated with neo-mercantilist policies is the requirement for global account balances to sum up to zero. This means that if there are deficit countries, there must also be surplus countries. When all nations strive to achieve positive trade surpluses, the paradox of thrift arises, indicating that such efforts can lead to a decrease in overall economic activity. Deficit countries may respond by implementing protectionist measures to restrict imports from surplus countries in an attempt to restore external balance. However, such trade restrictions often result in retaliatory actions, leading to a slowdown in global trade that is detrimental to all parties involved. Additionally, it can foster resentment between surplus and deficit countries, undermining the potential for alliances and partnerships to form (Berdell et al., 2019). Interestingly, China stands as an exception to this trend.

Given this context, it can be understood that neomercantilism is a risky bet with implications for numerous countries, especially in a globalized market and even more so antagonizing the United States. However, its semiconductor industry has been successful with its neo-mercantilist practices despite the many efforts from the United States to hinder this strategic industry.

Considering these facts, this paper will investigate the motivations and implications of China's recent mercantilist strategies in the semiconductor industry by addressing three questions. How have China's neo-mercantilist policies strengthened its semiconductor industry? What are the factors that have driven its success despite having to compete with the United States? And finally, how has this competition helped China to gain more power and allies? The paper will be divided in three parts: first introducing the theoretical framework of neo-mercantilism, then the discussion on China's policies in the semiconductor industry and finally how these strategies have help to foster competitive and interconnected economic and political relations with other countries.

Mercantilism is an economic and political doctrine developed in Western European countries between 1500 and 1800 in which statesmen, policymakers, and merchants sought to increase wealth through state action (F.-L. T. Yu, 2019). Heckscher (1935) reports in detail how Western European nations pursued mercantilist policies through the 16th and 18th centuries. It differs from neo-mercantilism in its historical context and modern application. Key differences between the two are found in their A) historical context: Mercantilism guided the economic policies of many nations -particularly in Europe. Neomercantilism, on the other hand, emerged as a term in the 20th century to describe certain aspects of modern economic practices; B) goals: Mercantilism aimed to maximize a nation's wealth and power by promoting exports and accumulating precious metals, such as gold and silver. The focus was on maintaining a positive trade balance through a combination of protectionist measures and state intervention in the economy C) role of the state: In mercantilism, the state played a significant role in guiding and controlling economic activities. Neomercantilism, while still recognizing the importance of state intervention, also considers the role of market forces and international economic institutions.

Neomercantilism is a modern iteration of mercantilism that emerged after World War II. Unlike traditional mercantilism, which primarily emphasized policies aimed at generating trade surpluses, neomercantilism encompasses a broader range of protectionist trade, finance, and development measures with the objective of fostering economic prosperity and bolstering national security (Balaam & Dillman, 2018).

Robert Gilpin introduced a valuable distinction between malevolent and benign forms of mercantilist behavior. Malevolent mercantilism refers to aggressive economic tactics and expansionist policies employed by nations to enhance their territorial, political, and economic influence at the expense of other nations, often going beyond what is considered reasonable for self-protection. On the other hand, benign mercantilism is characterized by defensive measures aimed at safeguarding the domestic economy against adverse economic and political forces. Differentiating between the two forms, however, can be challenging, as the distinction often appears to be a matter of degree rather than a clear dichotomy (Balaam & Dillman, 2018).

It would be unconventional to categorize Chinese practices strictly as either malevolent or benign. Only time and market developments will ultimately reveal which policies may be perceived as more malevolent or benign in their consequences. (Scott & Scott, 2011)defines neo-mercantilist strategies (which he prefers to call enhanced mobilization strategies) as "overarching economic development policies designed specifically to enable a country to catch up to its competitors".

The implementation of neo-mercantilist policies by China is well documented and scholars (Beeson, 2009; F.-L. T. Yu, 2019; Ziegler & Menon, 2014) generally agree on the essence or the nature of these practices. However, they differ in the fact that their policies are beneficial. Beeson (2009) observes that "China is actively embracing elements of Neomercantilism and state interventionism" in international economic affairs but there are some paradoxes in its developmental state that do not completely make it right, despite its unprecedented recent growth spurt. For (Verma, 2016) China is the modern world's most successful mercantilist state whose policies have developed the country into a global industrial, economic, and military power and in doing so accumulated the largest foreign exchange reserves in history.

Some of the concepts and variables of the neo-mercantilist framework are trade balance, industrial policy, protectionism, state intervention, strategic resources, and intellectual property protection. Trade balance refers to the difference between a country's exports and imports of goods and services over a certain period. A positive trade balance -or trade surplus-occurs when a country's exports exceed its imports. Conversely, a negative trade balance, or a trade deficit, happens when a country's imports exceed its exports.

Industrial policy refers to a government's strategic approach and interventions to support and promote the growth and development of specific industries within a country. It

involves a range of measures such as financial incentives, tax breaks, subsidies, infrastructure development, research and development support, and trade policies designed to enhance competitiveness and foster innovation within targeted sectors.

Protectionism is an economic policy approach that aims to shield domestic industries from foreign competition through the implementation of trade barriers and restrictions. Protectionist measures can include tariffs (taxes on imported goods), quotas (limits on the quantity of imports), subsidies to domestic industries, and regulations that favor local businesses over foreign competitors. The primary objective of protectionism is to safeguard domestic industries, preserve jobs, and maintain or improve the trade balance.

State intervention refers to the active involvement of the government in economic activities and decision-making processes. It can take various forms, such as direct ownership and operation of industries, regulations and oversight, fiscal policies, and monetary policies. State intervention is often implemented to correct market failures, promote economic stability, address social issues, and achieve specific policy objectives, such as supporting strategic industries or ensuring equitable distribution of resources.

Strategic resources are essential materials, commodities, or assets that are crucial for a country's economic, political, or military interests. These resources can include energy sources (such as oil and gas), minerals, rare earth elements, water, arable land, and other valuable natural resources. Governments often develop strategies and policies to secure and protect access to strategic resources, as their availability can significantly impact a country's economic competitiveness and national security.

Intellectual property protection refers to legal frameworks and measures designed to safeguard the rights of creators and innovators over their intangible assets, such as inventions, patents, trademarks, copyrights, and trade secrets. Intellectual property protection aims to encourage innovation and creativity by granting exclusive rights to individuals and organizations and ensuring that they can reap the rewards of their intellectual efforts. This protection allows creators to control and monetize their creations, fostering economic growth and technological advancement.

RESEARCH METHODS

The research method used in the paper is qualitative. The researchers rely on secondary data sources, including journals, articles, book chapters, official government publications, and news from reliable sources. Data collection for this research is conducted through a technique called Desk Research. This involves gathering existing information and data from various published sources without directly interacting with individuals or conducting primary data collection methods such as surveys or interviews. The researchers review and analyze the available literature and documents related to neo-mercantilism in the semiconductor industry, specifically focusing on the Chinese strategy.

Data analysis in this research is performed using the technique of triangulation. Triangulation involves comparing and cross-referencing multiple data sources to validate and strengthen the findings. In this case, the researchers likely analyze and synthesize the information obtained from different secondary sources, looking for patterns, themes, and insights related to the Chinese strategy of neo-mercantilism in the semiconductor industry. It's important to note that the provided information is based on the title of the research paper and general knowledge of qualitative research methods. For a more comprehensive understanding of the specific research methods and techniques employed in the paper, it would be necessary to refer to the complete research document.

RESULTS AND DISCUSSION

Old policies in a new world: Neo-mercantilism

To address how China's neo-mercantilist policies have bolstered its semiconductor industry, it is essential to outline the significance of semiconductors in today's market. Semiconductors serve as the foundational technology for modern electronics and play pivotal roles in various sectors such as communications, computing, transportation, healthcare, energy, and more, which are at the forefront of global technological advancement. With the semiconductor industry currently valued at \$334 billion, its global nature underscores interdependence, reliant on intricate global value chains driven by international collaboration, substantial investments in research and development (R&D), open markets, protection of intellectual property, talent cultivation, and complementary policies. Notably, China stands out as the world's fastest-growing and largest market for finished semiconductors, accounting for nearly 27% of global demand, as reported by the World Semiconductor Trade Statistics (WSTS) organization. Participation in China's expansive market is imperative for global companies, just as involvement in the extensive global semiconductor supply chain is crucial for Chinese firms to thrive on a global scale (Goodrich & Policy, 2016).

Neo-mercantilism, also known as enhanced mobilization strategies, typically requires a country to perceive and acknowledge an external threat or challenge that justifies the adoption of market-distorting policies. These policies aim to increase savings, lower wage and capital costs, enhance risk-adjusted returns on investment (both human and physical), maintain an undervalued exchange rate, and divert economic resources from consumption to production, thereby reducing imports and promoting exports. When implemented successfully, these policies can result in rapid industrialization and economic growth. However, they often face challenges when their initial objectives are met, and a transition to a post-enhanced mobilization strategy becomes necessary.

Sweden, Japan, and Ireland serve as examples of countries that implemented successful enhanced mobilization strategies but encountered difficulties in transitioning from those strategies, leading to substantial economic setbacks. In contrast, China has managed to

withstand the pressures and sustain its successful strategies up to the present day. However, China's success has been identified as having come at the expense of its trading partners, particularly those that provide the demand for its goods. According to (Palley, 2006), China's neo-mercantilist policies, which heavily rely on the United States as a destination for its manufactured goods, have played a significant role in the expansion of the United States' trade deficit, the decline of its manufacturing sectors, and the vulnerability of its financial sector..

Palley also points that these factors together may undermine the strength of the US economy, forcing it to grow more slowly or fall into recession, either of which would lead to a reduction in demand for Chinese goods and thereby rebound on the Chinese economy, driving it into recession or lowering its rate of growth. Nonetheless and oddly enough, the contrary has happened mostly due to the neo-mercantilist policies applied to its semiconductor sector with China overtaking Taiwan and South Korea as the leading manufacturer of semiconductors in the world.

Table 1. Source: Semiconductor Equipment and Materials International (SEMI, 2022)

| | | Country | | | | | |
|------|-------|---------|----------------|------------------|-------|--------|--------|
| Year | China | Taiwan | South Korea | North America | Japan | Europe | Others |
| 2022 | 28.3 | 26.8 | 21.5 | 10.5 | 8.4 | 6.3 | 6 |
| 2021 | 29.6 | 24.9 | 25 | 7.6 | 7.8 | 3.3 | 4.4 |
| 2020 | 18.7 | 17.2 | 16.1 | 6.5 | 7.6 | 2.6 | 2.5 |
| 2019 | 13.5 | 17.1 | 10 | 8.2 | 6.3 | 2.3 | 2.5 |
| 2018 | 13.1 | 10.2 | 17.7 | 5.8 | 9.5 | 4.2 | 4 |

Another indicator of China's aggressive investment into industrialization is found in the fact that among the biggest world economies, China is the one with the biggest share of its Gross Domestic Product (GDP) invested in the industrial sector, surpassing most G7 economies and India.

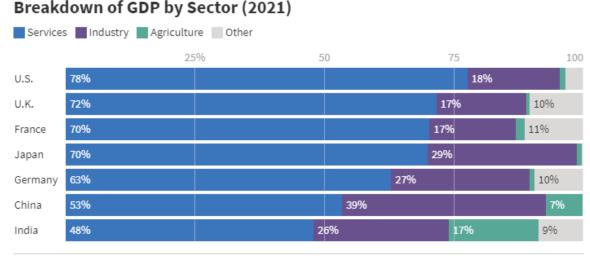


Figure 1. Source: Center for Strategic and International Studies (CSIS, 2021).

China's massive industrial and manufacturing production has been a driving force behind the country's economic expansion. However, it has also made China heavily dependent on exports. Economic policymakers have aimed to shift China away from export-driven growth towards an economy more fueled by domestic consumption. Yet, China's GDP continues to be substantially tied to exports. During the Global Financial Crisis of 2009, a sharp drop in global demand led to a steep decline in Chinese exports, resulting in a significant decrease in the contribution of net exports to China's GDP growth. On the other hand, during the Covid-19 pandemic, large government stimulus measures in the United States and Europe boosted demand for Chinese exports. As a result, 25 percent of China's GDP growth in 2020 came from exports—the highest level since 1997

Furthermore, China's international infrastructure development policy is specifically designed to bolster its neo-mercantilist and hegemonic influence in Asia and beyond, solidifying its economic and political dominance in the region. This behavior bears resemblance to the historical English pursuit of trade route dominance in the seventeenth century, aiming to secure power and prosperity. While not everyone agrees that China's policies are unabashedly neo-mercantilist, the consequences in terms of external balance remain largely the same, regardless of their underlying motivations.

As previously stated, the trade balance serves as a significant gauge of a country's economic well-being and its interactions with other nations. In 2021, China emerged as the leading global exporter of semiconductors, with exports amounting to \$49.2 billion. In contrast, it ranked as the second-largest importer, with semiconductor imports totaling \$13.4 billion. Consequently, China achieved a positive trade balance of \$35.8 billion in the semiconductor sector (Observatory of Economic Complexity, 2023).

China implements a range of mercantilist policies to enhance its trade surplus, allowing for the accumulation of significant foreign reserves. Atkinson (2012) outlines two main types of Chinese mercantilist policies in trade. The first type comprises measures aimed at stimulating exports and reducing imports. These include currency manipulation, imposing high tariffs, and providing tax incentives for exports. It is worth noting that while these policies benefit both Chinese firms and foreign companies operating in China, they primarily aim to foster Chinese exports.

The second type of mercantilist policies focuses on supporting Chinese firms while creating obstacles for foreign companies operating within China. These policies can involve preferential treatment, subsidies, or regulatory barriers that favor domestic firms over their foreign counterparts. This discriminatory approach aims to provide advantages to Chinese companies, promoting their growth and competitiveness in the domestic market while limiting the market opportunities for foreign businesses. Overall, China's mercantilist policies aim to bolster its trade surplus and support domestic industries, but they often result in imbalances and trade tensions with other countries.

These policies include land grants and rent subsidies to Chinese-owned firms; preferential loans from state banks; tax incentives for Chinese-owned firms; benefits to state-owned enterprises and generous export financing. To help Chinese firms catch up with foreign technology, the Chinese government controls foreign purchases and joint-venture requirements to force foreign firms to transfer technology to China (Atkinson, 2012).

(Goodrich & Policy, 2016)identifies three crucial pillars of China's national policy structure that support its semiconductor industry. Firstly, there is a high-level government task force in place, led by Vice-Premier Ma Kai, which oversees industrial strategy and sets development targets for the semiconductor sector. This task force, known as the leading small group (LSG) for semiconductor development, includes an experts group that consists of industry representatives. However, the participation of foreign stakeholders in this group has not been extended.

The second pillar involves the implementation of national strategies. In 2014, China released the Promotion of a National IC Industry Development Guidelines, which aims to build a comprehensive semiconductor industry ecosystem within the country. The objective is for China to become a global leader in all major segments of the semiconductor industry by 2030. Notably, the "Made in China 2025" policy has received significant attention, particularly in addressing the deficiencies of the Chinese manufacturing industry compared to developed nations. This policy emphasizes the need to enhance key technologies and independent innovation capabilities, primarily through increased research and development (R&D) investments in Chinese firms.

These pillars of China's national policy structure demonstrate a clear commitment and prioritization of semiconductor technology development, production, and control at the highest

levels of Chinese leadership. The government's involvement, strategic planning, and substantial funding play integral roles in supporting the growth and advancement of the domestic semiconductor industry.

The plan, also known as MIC2025, was launched in 2015 with the aim of "transforming China from a big manufacturing country to a strong manufacturing country". These authors conclude that CM2025 helped increasing firms' R&D investment mainly through government subsidies and financing facilities and that the bias towards state-owned enterprises (SOEs) is significant. However, the findings reveal a serious problem of MIC2025: providing subsidies may increase firms' R&D investment in the short term, but it goes against the goal of improving firms' independent innovation ability as it breaks the principle of competition neutrality.

Another one of these policies can be found in China's "Five-Year Plans", which outline ambitious targets for technological self-sufficiency and innovation. The semiconductor industry has been a focal point, with policies encouraging domestic R&D, fostering collaboration between academia and industry, and incentivizing the establishment of semiconductor manufacturing facilities.

China's support for state-owned semiconductor enterprises, such as SMIC (Semiconductor Manufacturing International Corporation), plays a pivotal role in its neo-mercantilist strategy. Financial support, preferential treatment in procurement contracts, and strategic partnerships have enabled these entities to compete globally and enhance their technological capabilities.

Finally, regarding the third pillar of massive government funding, A key aspect of China's IC Promotion Guidelines is the massive investment funds established by the central and local Chinese governments and state-directed entities aimed at building or acquiring a leading semiconductor industry. Until 2016, the National IC Fund had raised \$21 billion, while local government funds had raised \$26 billion. The majority of this investment capital comes from government sources and other quasi-governmental "societal" funding, primarily state-owned enterprises (SOEs). These funds finance investment, merger, and acquisition activities targeting companies and technologies across all stages of the semiconductor development and fabrication lifecycle. China has leveraged its economic clout to gain access to critical semiconductor technologies through international trade practices. It has employed strategic acquisitions, joint ventures, and technology transfers to reduce reliance on foreign suppliers and foster domestic innovation.

Another important factor is that Chinese leaders believe that a strong and powerful nation can be enhanced through science and technology. China's Fifteenth National Congress set the goals and tasks of invigorating China through science and education. Action Scheme is formulated to push forward educational reform to enhance China's innovative capacity (Ministry of Education, P.R. China, 1998). Nationalism in China's technological development picked up the pace after the government introduced two key policies: the medium- and long-

term Program for Science and Technology Development in 2006, and the "strategic emerging industries" initiative in 2010 (Hansen, 2014).

Protectionism encompasses a variety of other measures in addition to tariffs, including quotas, subsidies, regulations, and non-tariff barriers. Quotas restrict the number of imported goods that can enter a country. Subsidies provide financial assistance or incentives to domestic industries, making them more competitive. Regulations can be imposed to favor domestic products or to create technical barriers to trade. Non-tariff barriers include various administrative and bureaucratic requirements that can hinder imports.

Semiconductors play a crucial role in the ongoing trade war between the United States and China, making them a primary target of US sanctions against China. The United States has been implementing technology sanctions on China for an extended period, leveraging its status as the world's leading technology power. These sanctions primarily stem from the United States' prominent position in relevant industries and concerns about China's rapid advancement in the high-tech sector.

According to (Hu et al., 2022; Y. Yu et al., 2024), the production of chips holds a unique status as the core element within the semiconductor industry, impacting national economic development and international competitiveness. Recognizing this, the United States has sought to impede China's progress in high technology by utilizing its industrial supply chain influence and leveraging its dominant position within the global political and economic power structure. Through its industrial supply chain power, political influence, and economic strength, the United States aims to hinder China's development in high technology. By imposing technology barriers and sanctions, the United States aims to limit China's access to advanced semiconductor technologies and impede its growth in the industry. These actions reflect the United States' strategic utilization of its industrial and geopolitical leverage to obstruct China's advancements in high-tech sectors.

Moreover, when examining the semiconductor trade dynamics between the United States and China, it becomes evident that there exists an unequal relationship in terms of supply and demand. The United States, serving as China's largest chip supplier, annually exports over a third of its total chip sales to China. As the technological leader in high-tech production, the United States has historically dominated the US-China semiconductor trade (Ravi, 2020). In July 2018, the US imposed a 25% tariff on semiconductor imports from China, marking one of the initial Chinese products targeted by the US government. Interestingly, integrated circuits and the equipment necessary for their production were noticeably absent from China's extensive list of retaliatory measures. Despite the trade war, China continued to increase its imports of these products from the US by 2020, underscoring the dependence and irreplaceability of Chinese companies on US-related semiconductor imports.

Although export subsidies are considered illegal under the World Trade Organization (WTO) regulations, China has employed them to support domestic firms. Reports from 2005

indicated that the Chinese government provided over \$2.4 billion in export subsidies (Atkinson, 2012). Additionally, in 2007, China allocated over \$15 billion in subsidies to boost exports in its steel industry. The United States filed a legal complaint with the WTO, alleging that China's support for its steel exporters involved unfair cash grants, rebates, and preferential loans. However, it is worth noting that Chinese subsidies extend beyond the steel industry. The Chinese government also provides subsidies to various clean energy sectors, particularly the solar and wind power industries

In short, the Chinese government successfully adopted mercantilist weapons including exchange rate manipulation, tariff, and export subsidies to boost its industries and export and restrict foreign competition. However, it is not the only country that has been implementing this type of policy to try to take advantage of its position in such a crucial commodity in the tech race. The United States also has implemented certain neo-mercantilist practices as well as other developed countries.

In most cases, the media and research tend to focus on the perceived "malpractices" of developing countries, while overlooking the historical use of similar policies by advanced industrialized nations. This raises the argument that it is somewhat hypocritical for developed countries to attempt to prevent developing nations from employing these policies today. Many emerging economies desire a balance between weak protection of Intellectual Property Rights, a combination of protectionism and free trade, and sufficient time to enhance their institutions without undue pressure from Western countries and institutions to swiftly adopt democracy and eradicate corruption. However, it appears that developed nations are conveying the message to emerging economies: "Do as we say, not as we did (and sometimes still do)!" This highlights the perceived double standards in the approaches and expectations of developed countries towards emerging economies (Balaam & Dillman, 2018). Regarding technological development, by promoting domestic semiconductor companies, China aims to strengthen its technological capabilities and reduce reliance on foreign technology. This can accelerate the development of indigenous innovation, research and development, and intellectual property creation in China. It may also lead to increased competition and innovation within the global semiconductor industry, contrary to what some scholars (Atkinson, 2012; Ezell, 2021) argue.

To summarize this section, China's neo-mercantilist policies have strengthened its semiconductor industry and its semiconductor industry has strengthened its neo-mercantilist policies. Additionally, the factors that have driven its success despite having to compete with the United States are major state intervention with precise objectives and guidelines: strategic state-led industrial policy, investment in Research and Development (R&D), state-owned enterprises (SOEs) and subsidies, long-term planning and vision (MIC2025, 5-Year Plans, etc.), technology transfer and acquisition, global trade practices (leveraging its economic power to secure access to critical technologies and markets), flexible regulatory environment (showing flexibility in accommodating and supporting the growth of strategic industries) and a massive

domestic and international market, in addition to its technology-oriented education system and talent pool.

The last question to answer is how has this competition helped China to gain more power and allies. It was mentioned in the first section of this paper that increasing trade restrictions typically lead to retaliation and that can result in a slowdown in trade, which is undesirable for everyone, and it can even lead to resentment between surplus and deficit countries reducing the possibilities of making allies and establishing partnerships, nevertheless, this is not the case of China.

First, we have elucidated that the Chinese government possesses a unified vision for all its strategies. It would be naïve to think that China would establish economic or political relations with a country without having a potential benefit to get out of that partnership. In this case, we have two elements: the main commercial partners and the Belt Road Initiative (BRI).

Regarding the first one, China has trade partners all over the world and in 2022 had individual trade surpluses with the overwhelming majority of its trade partners: 174 of the 234 countries and territories listed. These trade surpluses are especially visible in China's trade relationships with many of the world's largest economies, including the U.S. and India, with \$401.1 billion and \$100.3 billion surpluses respectively.

| Country | Imports (2022 USD) | Exports (2022 USD) | Balance (2022 USD) |
|-------------------|--------------------|--------------------|--------------------|
| ■ United States | \$177.7B | \$578.8B | +\$401.1B |
| Hong Kong | \$7.8B | \$295.2B | +\$287.4B |
| ■ Netherlands | \$12.5B | \$117.4B | +\$104.9B |
| ≖ India | \$17.5B | \$117.7B | +\$100.3B |
| I•I Mexico | \$17.4B | \$77.3B | +\$59.8B |
| ## United Kingdom | \$21.8B | \$81.0B | +\$59.2B |
| Vietnam | \$88.0B | \$144.4B | +\$56.4B |
| Singapore | \$33.9B | \$80.0B | +\$46.1B |
| ■ Philippines | \$23.0B | \$63.9B | +\$40.9B |
| Poland | \$5.1B | \$38.0B | +\$32.9B |

Figure 2. China's Imports and Exports by Country in 2022. Source: Visual Capitalist, 2023.

A significant portion of China's trade deficits are observed in its dealings with major Asian economies. The largest deficit is with Taiwan, primarily driven by imports of semiconductors. China also experiences deficits with Japan (amounting to -\$11.9 billion) and South Korea (amounting to -\$37.8 billion), the second and fourth-largest economies in the region, respectively. These deficits are largely attributed to imports of electronics and machinery. In addition to economic considerations, China's trade deficits are also influenced by strategic

needs. For example, deficits exist with oil-producing countries such as Russia and Saudi Arabia. China also has a trade deficit with Australia, which is a crucial supplier of raw materials like iron, gold, lithium, and liquefied petroleum gas.

As highlighted by Du and Wallace (2023), China's trade relationships extend beyond economic factors and encompass historical, geopolitical, and strategic considerations. These relationships are also utilized for political purposes. The case of Taiwan exemplifies this complexity. Taiwan plays a crucial role in the chip market, making it both a valuable trade partner and a contentious rival. China considers Taiwan as part of its territory, while Taiwan operates as a separate, self-governed entity.

Furthermore, China's increasing investments in infrastructure across Asia and Africa are reflected in growing trade balances with developing countries, which are poised to become significant trade partners in the future. This aligns with Beijing's objective of integrating diplomacy with neighboring countries, major powers, and developing nations under a comprehensive framework of "new type of international relations underpinned by win-win cooperation."

Regarding Southeast Asia, there has been a shift from aggressive foreign policy to economic engagement and subsequently back to assertive foreign policy. Xi Jinping has integrated development and security, as well as institution-building and island-building, to establish a network centered around China, organized according to Chinese interests, and guided by Chinese values. While the Belt and Road Initiative (BRI) is promoted as an "inclusive" project, notable absences include the United States and Japan. This reflects Xi Jinping's efforts to reshape the norms, rules, and institutions of global governance, aspiring to transition from what is perceived as the US-led global liberal order to a Chinese-style globalization (Callahan, 2016).

CONCLUSION

In conclusion, China's neo-mercantilist policies have played a pivotal role in strengthening its semiconductor industry. Through a combination of industrial planning, state support for SOEs, strategic trade practices, and technological advancements, China has positioned itself as a formidable player in the global semiconductor market. However, the challenges and controversies associated with these policies underscore the delicate balance that must be maintained to ensure sustainable growth and global cooperation in the semiconductor industry.

While China's neo-mercantilist approach has strengthened its semiconductor industry, it has also faced criticism and challenges. Issues such as intellectual property concerns, market distortions, and accusations of unfair trade practices have generated tensions in the global semiconductor landscape. Wen and Zhao (2021) for example, note that China's economic policies can hardly be sustained in the long run and in the next years there must be changes in its approach to avoid a recession that would stop its growth.

However, combined with other strategies such as the "MIC2025", the Five-Year Plans and especially the Road Belt Initiative, which serve as a vehicle for creating a new global economic and political order attempting to increase its influence in Africa, Latin America, Middle East and South Asia, China pursues a pragmatic Mercantilist policy that combines a wide array of diplomatic and economic devices, China can keep growing and gaining more political and economic allies to balance the United States as the superpower.

Regarding whether the "Chinese model" can be transferable to other economies, authors such as Dellios (2005) conclude that China's rise as a global power provides an alternative to the US development model by incorporating capitalism into a socialist polity. China's economic success through Neo mercantilist strategies may become an incentive for other Asian developing nations such as the Philippines or African nations to follow. More research is required with other theoretical approaches to determine the possible outcomes for the long term consequences of Chinese neomercantilist practices and its implications for the global political economy as well as the influence of economics in politics and diplomacy.

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