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Technology platform competition between the United States and China: Decoupling and sanctions against Huawei

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Decoupling, defined as the deliberate and state-directed severing of economic ties between the world's two largest economies (the USA and China), is one of the most studied phenomena of contemporary international relations. The growing confrontation between the political systems and military machines of the United States and China extends into the economic sphere and increasingly affects the field of high technology. A number of experts consider the conflict of the modern superpowers for the leading position in the field of the new technologies as a manifestation of techno-nationalism, a new type of mercantilism that plays a key role in industrial policy and world trade of the leading economies of the planet. The article is focused on the new generation of interstate conflict, in which the technological giants act as proxy institutions of U.S. and Chinese state power. The distinctive feature of this new type of conflict is its overtly nonviolent nature. It manifests itself in the use by both sides of tools borrowed from economic sanctions and trade wars of the past. The China — US rivalry in the development and implementation of the latest technologies is a non-military reincarnation of the thermonuclear arms race of the Cold War era. Nowadays the most economically powerful states of the planet, led by the USA, choose instruments of economic coercion to protect the existing status quo in the global system. Such measures allow them to adapt elements of the arms race and power rivalry of past eras to modern conditions.

Keywords: technological platforms, decoupling, international political economy, innovation mercantilism, Huawei Technologies.

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Introduction

Decoupling, defined as the deliberate and state-directed severing of economic ties between the world's two largest economies (the United States and China), is one of the most studied phenomena of contemporary international relations. Claims that it dominates U.S. — China economic relations are premature. The mutual trade between the two superpowers, measured in hundreds of billions of dollars, as well as the investment flows that persist between them, are still too significant in scale to argue that the U.S. — China decoupling is irreversible.

On the other hand, the growing confrontation between the political systems and military machines of the United States and China extends into the economic sphere and increasingly affects the field of high technology. In this article, we focus on the new generation of interstate conflict, in which the technological giants act as proxy institutions of U. S. and Chinese state power. Their rivalry is growing and has become one of the key drivers of international relations in the first quarter of the twenty-first century. In this century, many of the traditional forms of inter-country conflicts of the past have disappeared due to the qualitative change in the external environment in which all states, including the superpowers, interact. The end of the Cold War has eliminated the immediate threat of nuclear war. States were faced with the challenge of finding new mechanisms to regulate bilateral and inter-bloc relations in situations of confrontation and conflict.

It seems logical for us that in the new situation most economically powerful states of the planet, led by the United States, choose instruments of economic coercion. Such measures allow them to adapt elements of the arms race and power rivalry of past eras to modern conditions. Today, the growth of national economies, the increase in the volume of the domestic market, foreign exchange reserves and the share in international trade, are the equivalents of "power politics" in its classic political science meaning [1; 2]. And the rivalry in the development and implementation of the latest technologies is a non-military reincarnation of the thermonuclear arms race of the Cold War era.

Decoupling of the U.S. and Chinese economies and its manifestation in the form of competition between technological platforms as part of a larger conflict between the world's largest economy (the United States) and China's leading technology company Huawei Technologies Co., Ltd. (Huawei) is unprecedented for modern international relations. We consider the conflict between the U.S. and Huawei as an illustration of a qualitatively new practice of international relations in the emerging bipolar era.

Decoupling is not only aimed at creating hard barriers between the Chinese and U.S.-centric economies. It also aims to deprive the Chinese economy of one of the main resources for an unprecedented period of economic growth (more than 40 years), which began in 1978 with the "go-global" national policy of the PRC. Since China's accession to the WTO in 2000, thousands of Chinese state and private companies have expanded their presence in the world by investing, notably to acquire cutting-edge technology and strategic assets that were not available in the domestic market. Current technological war against Huawei is a determined attempt by Washington to sever the threads linking Chinese high-tech companies with their partners around the world.

In our research we assume that the entire might of the Chinese government stands behind Huawei, so the conflict in question is essentially an interstate conflict, albeit in a new form for traditional international relations. Aim of this article is to define and evaluate contemporary stage of decoupling between China and the United States by examining competition of the U.S. and Chinese technological platforms from the perspective of International Political Economy (IPE).

This article addresses four critical questions: What is technological platform? Why decoupling is touching upon sectors of cutting-edge technologies, including those, which are not yet exist and are emerging nowadays in heated debates on technospheres' diverging standards? What threats are embedded in techno-nationalism, which can be found in contemporary competition of US and Chinese technological platforms? What trends and tendencies in behavior of actors under consideration are of potential concern to broader international community?

This motivated us to formulate research question: If USA and China as the only two superpowers are able to manage competition of their technological platforms to catch up with innovations of the Fourth Industrial Revolution?

Methodology of research

International Political Economy, as one of the leading schools of international relations theory, has traditionally paid great attention to the importance of technology as an element of state power. Since its emergence in the 1970s, IPE has viewed technology as a key tool at the disposal of sovereign states, which they use to adjust their position in the global economy and the processes developing within it [3–5]. It was the IPE that managed to overcome the traditional "technophobia" of economic science, the tendency to ignore the role of technological innovation in the development of the national or world economy.

The uneven economic development the XXI century, marked by acute crises (2000–2001, 2008–2009, 2020–2021) and equally impressive periods of growth (2002–2007, 2010–2014) have highlighted the significance of the differences between country-specific types of capitalism. The differing responses of the Chinese and U.S. economies to sharp fluctuations in stock prices, securities, minerals, and exchange rates have placed the question of distinctive forms of modern capitalism at the center of the academic debate. Initially, the study of "Varieties of Capitalism" (VoC) was developed within Comparative Political Economy [6; 7], but since the mid-2010s it has attracted the attention of IPE experts [8; 9]. According to some of them, positions towards global economic institutions of different countries — including PRC and the USA — could be explained by recourse to their type of domestic capitalism [10; 11]. In our opinion, the VoC paradigm is helpful in answering the question that is fundamental to our study: What is the nature of capitalism in advanced (United States) and emerging (PRC) economies?

A number of experts consider the conflict of the modern superpowers for the leading position in the field of the new technologies as a manifestation of techno-nationalism, a new type of mercantilism that plays a key role in industrial policy and world trade of the leading economies of the planet [12]. Proponents of this approach rightly believe that there is a direct link between innovation in cutting-edge technology, on the one hand, and national security, economic prosperity, social stability in the country, on the other hand [13].

Both the United States and China are trying to reduce their technological dependence on each other. Chinese "innovation mercantilism" aims to promote its role as a rule-maker in the field of technology through innovation and promotion of its standards. Huawei is a typical, but by no means the only example of modern Chinese techno-nationalism. United States policy in its turn focuses on containing the "Chinese threat" by countering protectionism, subsidies, and government support that create unfair competitive advantages for China as Washington's main opponent in the struggle for international technological leadership.

The study of the dynamics and possible consequences of the U.S. and Chinese technological platforms' decoupling has drawn the attention of economists and political scientists working within the school of IPE.

Some experts believe that this process decides the question of global economic leadership [14], so that decoupling of the high-tech sector will inevitably be followed by other sectors of the U.S. and Chinese economy [15–17].

Scholars who oppose this view argue that the formation of a system of relations between the two superpowers will take a relatively conflict-free path. Occasional aggravation of official rhetoric or demonstratively hostile diplomatic steps will sometimes be possible, although they would not be damaging to the overall business relations of the parties [18; 19].

The examination of technological platforms as one manifestation of state power is closely linked to the phenomenon of the "Fourth Industrial Revolution" [20]. This revolution, which is currently gaining momentum, will have both winners and losers. The leaders of China and the United States, aware of the global consequences of the accelerated development of ICT, are making great efforts to ensure that their countries are among the winners.

Russian scholars, when addressing the topic of the U.S. — China conflict, including decoupling, use the "power transition theory" toolkit and consider the desire to build up "the military power of states" [21] to be the key motive of the policy. According to experts of the Valdai Club, the entire world and global economy is in the scope of their rivalry [22].

Technological platforms as an expression of state power in the modern era

There is no single definition of "technological platform" in the academic literature. Available definitions can be divided into two groups: 1) Descriptive, viewing technology platforms as the sum of devices, tools, and software products available to the authorities and private companies of individual states. 2) Functional, leaving aside the meaning of the phenomenon "technological platform", instead focusing on identifying the forms in which platforms manifest themselves in the real economic and political life of the planet.

For Adrian Bridgwater, senior contributor at Forbes, technological platform is "... complete software programming development environment and underlying subsystem with language, runtime, components and all associated libraries and binaries" [23]. Andrey Terekhov and Stanislav Tkachenko proposed a descriptive definition of "technological platform", which we took as a starting point for our research: "Technological platform is the sum total of technological means used to create devices, processes and technologies" [24].

The objective of this study is to fill the term "technological platform" with political and economic meaning to use it to study two issues that are relevant to the science of international relations: the competition between the United States and China for leadership in the production and use of new technologies, and the challenge by China to a unipolar world led by the United States.

In this article, the "technological platform of the state" is defined as the unique sum of technologies, software products and the institutions that ensure their operation and are available to the state and companies under its jurisdiction. These technologies can be used to ensure national security, and their creation, legal protection and promotion in the global market is achieved through the interaction of public authorities and business entities. Technological platform includes standards, the registration and promotion of which provides, even temporarily, exclusive rights (monopoly) to individual technologies and software solutions [25; 26].

We find it important to include Chinese perspective as it is less researched yet relevant for understanding China's actions and vision for its future — involving modernization under state guidance and prosperity for the society. According to Henry Kissinger, economic issues always have a political dimension in China. It must consider political implications of its economic actions and what effect they will have for political stability [27, p. 494]. Chinese President Xi Jinping confirmed Marxist political economy as "the bedrock for nation's growth" and stated that "in an ever-changing global environment, steering the economy into the future will be a major test for the Party" [28]. The Communist Party of China called for "innovation-driven, coordinated development for global progress, and development for the benefit of all" [29]. In line with that, Chinese experts emphasize importance of "economic restructuring and boosting innovation" [30] while promoting "development of the economy and enhancing social harmony and stability" [31].

System stability is an important research problem for IPE, with competing perspectives between neo-Marxists and the realist-liberal Hegemonic Stability Theory (HST) approaches. The crisis of 2008–2009 and, most recently the coronavirus pandemic, spurred increased government interventionism and represented "a blow to Hegemonic Stability Theory assumptions about the role of the hegemon" [32, p. 367].

Our study of technological platforms in the USA and China, and the political and economic effects of their current development, is based on functional definition of Terekhov and Tkachenko as well as on our own above-mentioned definition. It implies a specialized approach to studies of technological platforms, depending on the specific features of this forward-looking sector of research and development, which directly influence the political and socioeconomic aspects of relationship between two superpowers.

The role of government and market institutions in shaping U.S. and Chinese technology platforms

The world economy is currently undergoing a transition to a new technological cycle. The previous cycle was built on liberal values and the market economy. The new technological cycle will be defined by the competition of several models. Two such models have already taken shape in the United States and China. The European Union, Russia and several other states and regions are at the stage of contemplating the need for creation of their own technological models [33].

This process is still unfolding, the current models, both American and Chinese, reflect the realities of the previous era. It is still premature to assert that their institutions and structures will be defining a qualitatively new technological cycle. However, we are convinced that the result of the competition between the American, Chinese and perhaps some other technological platforms will be the global establishment of one of them and the marginalization of the other (others). Therefore, the stakes in the competition of technological platforms are very high. In fact, we are talking about global technological and politico-economic leadership for the next decades.

Researchers estimate that the digital economy of the planet ranges between 5% and 20% of global GDP and between 3% and 12% of global employment [34–36]. Since the beginning of this century, the growth of the digital economy has been more than two and a half times greater than the growth of the global GDP, being a key driver of the development of the global economy. The ICT industry is a barometer of the countries' competitiveness, since its output is used in all other sectors, making them more competitive. Experts recognize the measurable positive impact of ICT on economic indicators, including GDP ("digital spillover") [37; 38]. Intensified R&D and improved ICT infrastructure lead to long-term economic growth and increased productivity [39]. There is a proven positive link between the growth of countries' public investment in ICT and the competitiveness of their economies at the global level [40].

Chinese Government has successfully set up a homogeneous country-as-a-platform strategy, exporting digital infrastructure, which is currently playing an eminent role in the settings of technical standards, and instruments of control in the digital economy [41]. The stability of China's position in the global technology race is ensured by its R&D expenditures that have increased tenfold since 2000, while expenditures of the U.S. and the European Union have only increased by 30–50 %. China's R&D spending surpassed the European Union spending in 2014 and may soon surpass spending of the U.S. As a percentage of GDP, China's R&D spending has been higher than that of the European Union since 2013 [42].

Currently, China has set the goal of achieving superpower status in manufacturing, innovation in the areas of cybernetics, science, and technology by the centenary of the country (2049) [43]. To achieve it, a new model of economic development, called the "dual circulation", was officially presented in 2020. This strategy includes 1) reducing dependence on foreign countries and companies for critical technologies and goods, 2) promoting the dominance of local firms in the domestic market, and 3) using this dominance to compete globally [44]. These measures form the foundation of China's technological platform, which it seeks to promote on a global scale.

The current U.S. technological platform, built on liberal values and triumphant in the Cold War, was not based on market institutions alone. Competition and the constant stimulation of innovation are essential elements of the American model. But at all previous stages of the formation of the U.S. technological platform the state played the role of a locomotive.

Through policy decisions and budgetary funding measures, Congress and the U.S. President's Office gave momentum to the process, ensuring demand for innovation from the government, especially the Department of Defense. Later, the results of government efforts were picked up by U.S. business, disseminating new technologies on a global scale. Examples include:

 the construction of the U.S. Navy at the turn of the 19th and 20th centuries, promoted by the Monroe Doctrine and the "Open Door policy" with respect to China: the development program of the largest, along with the British, navy of the planet gave impetus to growth of metallurgy, instrument engineering, chemical industry, oil refining and production of powerful internal combustion engines;

- the creation of the U.S. Air Force on the eve of World War II enabled Washington to project its economic and military power more effectively on different regions of the planet; on the technological platform of military aviation later emerged civil aviation and the space industry, dominant in the world aviation and space exploration to the present day;
- development and implementation of packet switching technologies by DARPA¹ specialists, as well as the transition from analog to digital technologies. Based on these technologies and knowledge exchange with British experts ARPANET network was created in 1969. After its association with a similar network of the National Science Foundation funded by the US government, ARPANET became the foundation of the modern Internet. Later, ARPANET technologies were privatized at minimal cost by American private communication technology companies and formed the backbone of the national telecom industry.

Unique American management culture grew from a Protestant ethic that welcomed constant innovation. It allows the state to direct the technological development of the national economy without a rigid system of planning and direct interference in the economic process. The dialogue between government and business in the U.S. is conducted at the level of individuals, not the institutions they represent.

The "epistemic community" formed in this area includes representatives of the Presidential Administration and the U.S. Congress, the Pentagon and various intelligence agencies, heads of major financial institutions and journalists. Ideas in this epistemic community are transferred person-to-person, quickly evaluated from a scientific and commercial point of view, and then implemented with a minimum loss of time as well.

U. S. national security experts, including the DoD, have consistently argued that the nation's underlying commercial industrial foundations and resilient supply chains are central to country's national security, economic security, and technological leadership. In an executive action, Biden Administration started in 2021 a review of the supply chains for critical products including semiconductors [45]. It is no surprise that proposed \$2 trillion infrastructure plan (August 2021) would set aside \$50 billion additional government support for the semiconductor industry alone.

We believe that the new U.S. technology platform will be less liberal than the current one in its early stages, as the emerging elements of the new ecosystem require protection from the negative effects of competition. Thus, the conflict between the United States and leading Chinese technology company Huawei is inevitable due to peculiarities of current model of government-business interaction.

While the channels of interaction between government and business in the U.S. remain relatively transparent, similar mechanisms in China have been studied by scientists to a much lesser extent. China's technological development is carried out in accordance with medium-term development programs, which are designed by government experts and approved at the highest political level — by the Congresses and Plenums of the CPC.

¹ Defense Advanced Research Projects Agency of the U.S. Department of Defense.

The peculiarity of the Chinese system of public administration is the absence of strong "economic" ministries. The main role in the development of the national economy is played by the provincial level of government — 23 provinces, seven autonomous regions and four cities of central subordination. There is no doubt that these sub-national structures act in accordance with the decisions of the central PRC government. However, they have considerable autonomy in their work, which creates room for competition between provincial governments and companies established by them.

As for China's largest companies, including Huawei, while they are listed on the stock exchange and investors globally can purchase their shares, government agencies still retain control over their management. Thus, at present the Huawei operating company is 100% owned by a holding company, which is in turn approximately 1% owned by Mr. Ren Zhengfei, Huawei founder, and 99% owned by an entity called a "trade union committee" for the holding company. This fact has led a number of experts to suggest that Huawei is controlled by the government [46].

Whereas in the United States decoupling and its consequences are discussed during personal contacts between representatives of interested institutions that comprise an epistemological community, the response mechanism in China is less transparent, but no less effective.

The accession to the WTO in 2000 helped China increase foreign trade, primarily with the United States and other developed countries, and significantly strengthen its global position in technological development. Having entered this field as a rule-taker and "factory of the world", within two decades Beijing has elevated itself to the role of a rule-maker, both in terms of dominance in certain segments of technological platform development (5G, artificial intelligence, quantum computing) and as a manufacturer of mass high-tech products. The transformation of China's global role in technology went through several stages.

- "Indigenous Innovation" Program (2006–2020) [47] provided a set of laws, regulations and strategic programs aimed at creating incentives for Chinese enterprises to master modern technologies and increase the country's competitiveness. One of its key goals was the development of "national champions"². To facilitate their emergence government procurement rules were modified in favor of Chinese suppliers. Six high-tech industries computer equipment, telecommunications equipment, software products, new energy, energy-saving technologies, and modern office equipment have been prioritized for domestic innovation [48, p.84–85].
- The "Made in China 2025" strategic plan was announced in 2015 and formulated a strategy for China's economic development in the 13th and 14th five-year plans (2016–2025). The goal of the program is to achieve *self-reliance* of China's industry from foreign suppliers and accelerate the development of high-tech industries [49].
- "China Standards 2035" plan (2020) aims to ensure China's leadership in the development of *standards* for technologies crucial to the Fourth Industrial Revolution: 5G, the Internet of Things, quantum computing, artificial intelligence, and blockchain. Its implementation will allow Beijing to consolidate its function as a rule-maker in global technological development. To assert itself as a leader in the

² The PRC government refers to enterprises that play a central role in the modernization of the country's industry and are fully or partially controlled by the PRC authorities as national champions.

standardization of emerging technologies, China actively uses the Belt and Road Initiative, including the Digital Silk Road Initiative launched in 2015 [50; 51].

— Technology Infrastructure Plan (2021–2025) is the PRC's \$1.4 trillion government spending program for digital infrastructure. The plan was unveiled in 2020 and provides additional funding for the "Made in China 2025" and "China Standards 2035" programs. It should be noted that many of the companies receiving funds under this plan were on the U.S. government's "blacklist" or were added to it soon after [52].

Decoupling as a form of technological platform conflict

We define high-tech rivalry between China and the United States as "decoupling", because we believe that so far it is in the ICT sphere, and not in the sphere of trade or finance, that relations between the parties have reached the level of open confrontation. The study of the conflict allows us to predict the forms in which the confrontation between China and the United States will be expressed in future.

Valdai Club experts note the existence of only two technological platforms in the world (American and Chinese) and consider it a priority task for the Russian Federation to decide whether to join one of these platforms or to build its own, competing with the two already established ones [22, p. 3].

Since the technological platforms of China and the United States are based on similar physico-mathematical principles, the parties have no opportunity to create "national ICT technologies" that would be fundamentally different from those of the opponent. Their separation is only possible due to political decisions, which are implemented through the application of measures having a nature of *sanctions*. Thus, decoupling has a price that both national businesses and consumers in the two states in question will pay. Indirectly, this conflict already affects the interests of consumers around the world.

Although Obama Administration closely watched China through the lens of economic rivalry and national security, it was the victory of Republican candidate D. J. Trump in the 2016 election that started new dynamics of investment flows and trade and economic relations between the U. S. and China. That new phase demonstrated what decoupling would look like in action (see Fig. 1).

Technology was at the center of the U.S. — China decoupling from the beginning. The PRC was accused of intellectual property rights infringement, an argument typical of American economic diplomacy.

At the beginning of the U.S. — China trade war in the mid-2010s, electronics (25%) and various equipment (21.5%) accounted for a significant portion of Chinese exports to the United States. Imports from the U.S. of these categories of goods to China were significantly smaller both in terms of structure (only 12.7% and 11.8% of total imports, respectively) and in absolute volume. China's exports of electronics and equipment in 2019 were \$119 billion, compared with \$19.7 billion in 2010. This is compared to \$19.6 billion of U.S. exports to China. Indicators for high-tech equipment trade were even less favorable for Washington, at \$103 billion versus \$11.8 billion.

Total FDI volume between China and the United States for 2020 was \$15.9 billion, the lowest level since 2009 (see Fig. 2). This decline can be attributed to both the COVID-19 pandemic as well as growing tensions in U.S. — China relations. U.S. FDI in China fell by a third from 2019 to \$8.7 billion for 2020, the lowest level since 2004. The structure of U.S. FDI







Venture Capital data includes all funding rounds with at least one participating Chinese- or US-controlled venture fund (usually determined by general partner nationality) or other entity; value reflects the estimated proportional shares of each funding round attributable to Chinese or US investors. Source: US-China Investment Project by Rhodium Group and the National Committee on US-China Relations

Fig. 2. FDI flows between PRC and the United States

by industry has also changed. In the early 2000s U.S. investors prioritized labor-intensive industries aimed at Chinese consumers: food and automotive. After the 2008–2009 crisis, the focus shifted to high technology. This trend was interrupted in 2020, when investment in the ICT industry fell sharply (from over \$1 billion in 2019 to \$722 million in 2020).

Meanwhile, China's FDI in the United States rose slightly from \$6.3 billion in 2019 to \$7.2 billion in 2020 [44]. One explanation for this momentum is adoption of the "Made in China 2025" plan, under which the Chinese government supports national companies in mergers, equity investments and venture capital investments outside of China. Experts estimate that U.S. companies and banks hold more than \$700 billion in assets in China, with Chinese exports of goods to the United States reaching \$435.4 billion for 2020 and \$189.7 billion for January-May 2021 [53].

The PRC has been a key source of revenue for several large U.S. technology companies, especially before the trade war. For example, in 2019 Huawei alone purchased \$11 billion worth of components and parts from U.S. companies: Qualcomm and Broadcom chips, Microsoft and Google Android software, Lumentum, Qorvo, Skyworks Solutions, and Xilinx components. China (incl. Hong Kong) accounted for 26% of Intel Corporation's net revenue for 2020. For Apple Inc., the United States and China (incl. Hong Kong and Taiwan) were the only two major sources of net sales for 2018–2020.

Decoupling means that affected high-tech companies need to compensate for potential lost sales and handle sharp jumps in the share prices with each new announcement of new measures by the U.S. government. In fact, the U.S. share of semiconductor manufacturing capacity, which was 37 % in 1990, has dropped to 12 % by 2020; only 6 % of the new global capacity in semiconductor development located in the US. In contrast, experts projected that during the next decade China would add about 40 % of the new capacity and become the largest semiconductor manufacturing location in the world [54].

Conflict between the US Administration and Huawei

The conflict between the U.S. and China's high-tech companies has been developing for a long time, spanning along different presidential administrations. As early as 2010, shortly after China announced its "Indigenous Innovation" initiative, the US Chamber of Commerce published a report "China's Drive for Indigenous Innovation", which analyzed China's intentions to reduce its dependence on other countries for high-tech, and anticipated trade disputes and increased political rhetoric [55]. In 2016, the US Chamber of Commerce analyzed China's efforts to localize the production of ICT products and assessed them as a "striking example of techno-nationalism" [56]. The U.S. President's Council of Advisors on Science and Technology published a report focusing on semiconductors industry in the U.S. and China [57], oversight of PRC investments in U.S. technology companies intensified, and export controls were initiated to ban the export of high-tech chips used in the PRC's manufacturing of supercomputers [58].

In January 2017 the new U.S. President D.J. Trump proclaimed the strategy of economic nationalism as official U.S. policy. From a theoretical construct, decoupling became a part of the operational code of U.S. diplomacy. Trump administration has acted harshly, demonstrating its desire to achieve a goal of maintaining the dominant position of U.S. companies in the global market for high value-added goods and forcing China to continue to specialize in the export of low-value-added goods.

Since the early days of the Trump Administration, two groups of politicians and lobbyists have been developing different agendas regarding China. The "China hawks" group demanded strong action to curb China's technological development and limit its access to the U.S. market. It was led by Mike Pompeo, Director of the Central Intelligence Agency (2017–2018) and the U.S. Secretary of State (2018–2021), as well as Robert Lighthizer, the United States Trade Representative from 2017 to 2021. Their opponents, also critical of China but preferring to act more cautiously and "in concert" with European and Asian allies, were Steven Mnuchin, the U.S. Secretary of the Treasury (2017–2021), and representatives of big American businesses (including over 20 industrial associations) with interests in the Chinese economy.

Huawei's rapid rise and links to the Chinese state have long been a cause for U.S. concern. The company's total sales revenue grew at a CAGR of 14% between 2016–2020 and reached \$127.7 billion in 2020. As one of the world's leaders in ICT serving over three billion people worldwide, Huawei appeared in the epicenter of the U.S. agenda setting towards China. "China hawks" and moderates have reached a consensus that Huawei has benefited, either directly or indirectly, from the PRC's techno-nationalist policies [59]. Huawei was accused of engaging in activities that are contrary to U.S. national security or foreign policy interests, and in May 2019 U.S. Commerce Department's Bureau of Industry and Security added Huawei and 68 non-U.S. Huawei affiliates to the BIS Entity List. Restrictions were later further expanded, including under Biden administration. In June 2021 the U.S. Federal Communications Commission voted unanimously to advance a plan to ban approvals for equipment in U.S. telecommunications networks from Chinese companies deemed "national security threats", including Huawei. As a result of ongoing decoupling, Huawei's growth was halted, and in the first half of 2021 total sales revenue fell to \$49.6 billion from \$70.3 billion the year before [60].

Conclusion

The distinctive feature of this new type of conflict is its overtly nonviolent nature. It manifests itself in the use by both sides of tools borrowed from economic sanctions and trade wars of the past. We cannot ignore the fact that China's development in the field of ICT has an indirect effect on increasing the defense capabilities of this state. And Washington's retaliatory efforts to curb such development are dictated by concerns about its ability to maintain the current level of U.S. national security in the future.

While initially national security concerns were in focus of the conflict, it soon took on a vivid value coloring: in 2020, at the 56th Annual Security Conference in Munich, House Speaker Nancy Pelosi said that choosing Huawei's 5G network was equivalent to choosing "autocracy over democracy" [61].

China's assertive foreign trade policy, reinforced by the development of digital infrastructure within the country, as well as in its partner states, increases the conflict between Beijing and Washington, making the threat of further decoupling real. If the threat materializes, the planet faces a global technological bipolarity, and the fault line will run through Eurasia, whose states are already deeply integrated into the structures of the Chinese technological platform.

There is an increasingly popular view that the wars of the future will take place in cyberspace rather than on traditional battlefields. If we accept that view, then the conflict discussed in our article is the first large-scale confrontation between superpowers, in which the parties are competing for the most advantageous starting positions in the future confrontation.

Today's China is leading the high technology, striving through large-scale R&D expenditures to develop technology standards and promote them globally. The Belt and Road Initiative platform (including the Digital Silk Road), as well as specialized international organizations, are used for this task.

As China's technology platform continues to expand, this platform and companies using its resources will further increase their role in management of flows of goods and services. The digitalization of the labor market, industry, trade, and finance increases the importance of the technological platform, turning it into a center of gravity that determines the trajectory and speed of movement of the above-mentioned economic factors. So far, this process is only gaining momentum. But already today, countries seeking to protect their technological sovereignty preserve the governability of the national economy, and increase its competitiveness should pay increased attention to the development of a technological platform. This goal can be achieved by acting either at the national level or at the interstate level within the framework of IGOs.

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