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# China Does Not Want a Trade War<sup>1</sup> – The Case for Rare Earth Elements

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## SUMMARY

The aim of this paper is to evaluate China's growing geopolitical importance through a brief overview and an analysis of the US-Chinese relations after World War II. After a brief historical insight into the US trade policy, the most probable theoretical explanations leading to a U-turn in trade relations with most of the world are summed up. Thirdly, we aim to reevaluate China's geopolitical weight in light of the recent trade war, and finally further sophisticate the analysis through a case study of the market of rare earth metals and compounds. The conclusion is drawn that we might be approaching a new milestone in the hegemonic transfer but we have certainly not yet arrived at a turning point.

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**Keywords:** hegemony, trade war, USA, China, rare earth elements

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## INTRODUCTION

China's extremely rapid development seen in the past thirty years has been regularly raising the question whether a new shift in hegemony is to be expected in the world economy and politics. In this analysis this question is approached through the analysis of the relations between the United States of America and its emerging challenger, China, in the past 80 years. Next, the experience gained from the trade war that erupted last year is used for an analysis of the aforementioned relations. In order to start from a clear standpoint, the most probable causes of the trade war are summed up. Finally, a set of contemporary strategic resources, namely, rare earth elements are analysed in a case study.

## EVOLUTION OF THE GEOPOLITICAL SIGNIFICANCE OF THE USA AND CHINA - RELATIONS BETWEEN THE USA AND THE PRC

Relations between the United States of America and the People's Republic of China have been continuously developing for fifty years, although as usual between global powers, they have been characterised by crests and troughs. The USA contacted the PRC in the 1970's, during the policy of *détente* and the presidency of Richard M. Nixon. In those years the USA reassessed its international relations with developing countries, especially with China. The hostile and repulsive atmosphere was replaced by a cooperative approach. In addition, there was a shift in the relationship between China and the Soviet Union. After Stalin's death and Khrushchev's rise to power, by the end of the 1960's China and the Soviet Union had alienated and

become rather hostile. An apparent evidence of deterioration in their relationship was the border conflict that erupted in 1969 at the Ussuri River (Fischer, 1992). These circumstances contributed to negotiations between the USA and China, initiated by President Nixon and his Secretary of State Henry Kissinger. On the Chinese side, although Chairman Mao Zedong also took part in the negotiations, the talks were conducted by Zhou Enlai, Premier of the PRC and advisor to Chairman Mao (Kissinger, 2011). In Kissinger's opinion it would have been favourable for the United States if the world had moved from the former bipolar order towards a new equilibrium with five global powers cooperating and leading global geopolitics. Under such a scenario, the world would have become more predictable, since the leading powers could have balanced one another (Kissinger, 1994). Although the superpowers outdid every other country in military power, the political situation had changed: new players had emerged and challenged the leading roles of the superpowers. The rise of China, in other words, a kind of "tripolarisation" of the world, could have been the first step towards a politically multipolar world order, or at least Kissinger so believed. At the same time, China also made efforts at tightening relations with the USA to counterbalance the Soviet threat, as the latter seemed more perilous. Accordingly, in 1971, after one of Kissinger's visits in Beijing, the USA started secret negotiations with the People's Republic of China. One year later President Nixon also visited China, and the parties' negotiations resulted in the Shanghai Communiqué, which became the basis of US-Chinese relations. The principle of "One China, two systems" was laid down in this agreement (subsequently, it survived as Deng Xiaoping's idea of "One country, two systems"). On this basis, the United States acknowledged that all the Chinese living on both sides of the Taiwan Strait maintain that there is only one China, and Taiwan is part of China. As China was a member of the UN, Taiwan was sidelined in the United Nations, and because of improvement in US-Chinese relations, it was increasingly overshadowed. Nevertheless, the USA formally continued to recognise Taiwan as an independent state up to 1979.

Although in the 1970's the overture between the USA and China intensified, the US foreign policy adopted a different course in the 1980's. The idea of a multipolar world became obsolete. Kissinger now thought that the USA should distance itself from both the USSR and China. However, Jimmy Carter and his advisor, Zbigniew Brzezinski continued rapprochement to the communist China.

Gerard Ford inherited a cumbersome US foreign policy. He wished to provide financial assistance to South Vietnam, but the Congress did not support him. Thus the Vietnam War ended in 1975 with The USA's defeat. At the same time President Ford visited China and established even closer links.

After the 1976 death of Mao Zedong, Deng Xiaoping - who had previously been sent to exile several times - became the new leader of China. He initiated economic reforms and modernisation ("reform and opening up"), and China joined international organisations and agreed to the existing world order (Kissinger, 2015).

Deng Xiaoping elaborated the principles of a "Chinese type socialism" and a "social market economy" (Kissinger, 2015). The most important point in the reform programme was the elaboration of a planned economy and the adoption of an export-driven economic policy accompanied by modernisation. This direction was followed by Deng's successors Jiang Zemin, Hu Jintao and Xi Jinping. As the economy improved, increasing amounts of money were allocated to military expenditures and technological improvement. As a result, both the country's economy and its military forces became stronger (Brzezinski, 1997). China was granted American support to accomplish these reforms and to gain power, which seemed to be pivotal for the country to become one of the most important economies in today's world.

As for the USA, already the Carter administration was thinking in a tripolar world order along a Washington-Moscow-Beijing axis. The positive attitude of the USA had not changed. In 1979,

both countries opened embassies in the other's capital to open official diplomatic relations. This step meant that the USA recognised the government of the People's Republic of China as a representative of China. Thus, the United States officially abandoned all relations with Chinese Taipei, but did not stop supporting the island and maintained economic relations with it, without recognising it as an independent state (Taiwan Relations Act) (Kissinger, 2011).

After the Soviet intervention in Afghanistan, the policy of *détente* ended, and Ronald Reagan started to place pressure on the USSR, which ultimately resulted in the collapse of the Soviet Union and the Eastern Bloc (Szilágyi, 2013b). On the other hand, Reagan also tried to keep good relations with China. There were no major tensions between the two countries during the Reagan administration. Economic and political opportunities for China had widened due to the regime change. Although there was no reason to be afraid of Soviet threats, China made it clear that it expects the USA to stop any Soviet expansion. In this respect China lined up with the United States, however, later on it established a new type of relationship with Russia (Kissinger, 2011). China positioned itself against the two superpowers as the leading power of the third world, even though relations between China and the USSR slightly improved at end of the 1980's. Meanwhile, the Chinese-US relations became distrustful after the incident on Tiananmen Square in 1989. As a result, American investments dropped in China, and international trade interactions between the two parties weakened. President George W. Bush stressed his worries, and made efforts at mitigating retaliation. The Bush administration inhibited military cooperation between the two countries, stopped selling military and police instruments and tools of dual use, and discouraged the World Bank and other organisations from granting loans to China. However, growth in the Chinese economy slowed down in the 1990's primarily as a result of shocks in the world economy and not because of US retaliation for the Tiananmen incident. In the end of the 1980's, China followed a policy that was unique among the developing countries, defining itself as global player equivalent to the USA and the Soviet Union. The Chinese communist system was completely different from that of the Soviet Union or the Eastern Block. Sino-American relations considerably altered after the collapse of the bipolar world order and the USSR. The threat of the Soviet Union and the triangle diplomacy were completely out of the scheme. The United States remained the only superpower in the world. From this point on, China made it clear that it works for a multipolar world order (Kissinger, 2011).

Relations between China and the USA were normalised during the presidency of Bill Clinton. The Clinton administration hauled China up especially for its nonrespect for human rights, which was a precondition of granting the "Most Favoured Nation" privilege, only granted to China after long negotiations. At the same time the USA helped China in its efforts to join the General Agreement on Tariffs and Trade. Relations between the two parties became more complicated when Taiwan conducted a mimic warfare while preparing for its first independent elections (Kissinger, 2011). However, contacts between the two countries remained fairly normal. The US president visited China in 1998. In 1999 relations deteriorated again, when the Chinese embassy was unintentionally hit by a bomb during a NATO airstrike in Belgrade during the Yugoslavian war. A year later the USA and China agreed on the normalisation of their trade relations, thus the annual extension of the "Most Favoured Nation" privilege was no longer needed. Partly as a result of this agreement, China gradually became the most important trading partner of the United States. Friendly and fruitful relationship further improved during the Bush administration. Following the incident of 09.11 China committed to support the USA in the fight against terrorism. At the same time, China joined the World Trade Organisation, which gave another impetus to the unprecedented growth seen in the Chinese economy. Therefore, multinational companies headquartered in China evolved and made even more investment outside Asia, gaining increasing market shares in the world market.

Later on, during the presidency of Barack Obama the US-Chinese relations were stable and the dialogue between the parties continued in order to strengthen bilateral strategic economic

links. The idea of the two countries' joint action in global issues was raised. The first meeting in 2009 focused on global economic recession, the effects of climate change, the threat of nuclear weapons and humanitarian crises. Their commitment to cooperate was inspired by the immense impacts of the global financial crisis. This collaboration continued in 2015, when President Barack Obama and President Xi Jinping signed a declaration about their cooperation in climate protection, the protection of intellectual property rights, and international security. One year later China announced that it wishes to become the leading power of the world by the 21<sup>st</sup> century. Being an active player, China wishes to reform the global economic and political system because in the Chinese leaders' opinion in its current form it is unsuitable for dealing with the problems. The goal of the country is to reduce western dominance and the leading military role of the USA; however, it is ready to support the maintenance of the current system of international organisation such as the UN (Eszterhai, 2017).

The performance of the Trump administration, on the other hand, is not yet really adequate in this respect. Relations between the USA and China have become volatile. On the one hand, the USA has started to consider China as its main competitor in the world market. This is reflected in the protectionist sanctions of Donald Trump, which were already promised during the election campaign. On the other hand, this hostility can be explained by the appearance of Chinese ships in the South Chinese Sea.

China has obtained and maintained extraordinary importance for several decades. Although its economic growth has slowed, and inequality is still enormous within the country, it has become a leader not only in its region but also globally. It is also noteworthy that due to its rising population China is dependent on massive food import, and this makes the country rather vulnerable (Brzezinski, 2012).

China's East Asian rivals are Japan, India, Russia and the USA. In the past few years China has made efforts at enforcing its interests in the South Chinese Sea. Controlling this area is extremely important not only for trade but also because of fishing and the ownership of natural resources. Similar reasons underlie its rising interests in Middle Asia, in the Russian Far East, and in Mongolia. China aims to improve relations with Pakistan and Myanmar in order to weaken Indian power ambitions. Meanwhile, China also pays attention to North Korean relations, which can be a key political issue. Furthermore, Chinese presence is growing in Australasia, in Africa and also in Central Europe. Due to the policy of opening-up, China has increasingly defined itself as an antipode of the United States. Nowadays, the arenas of US-Chinese rivalry include South-East Asia and the South China Sea. As China wishes to expand its influence within these regions, it has been confronted not only by Asian countries but also the USA, the leading power of the Pacific region since the end of World War II. The American sensitivity is now associated with a different aspect of Albert T. Mahan's principles of sea power according to C. M. Mendes Dias: "Who rules the oceans, rules world trade. Who rules world trade, owns the resources of the world. Who owns the resources of the world, rules the world itself" (Szilágyi, 2013b). Dominating world trade is important for a hegemonic or an expectant hegemonic state. Accordingly, US-Chinese relations have recently become extremely volatile.

## RECENT CHANGES IN AND THE ANTECEDENTS OF THE CURRENT U.S. TRADE POLICY

For almost a quarter of a century, until the presidential campaign of Donald Trump, US trade policy was not a focus of political debate either in America or in the rest of the world. As Irwin (2017) states in his highly comprehensive overview of the history of US trade policy, the most important goals - although with very different weights throughout history - were the so called three R's: revenue, restriction and reciprocity. The most important goal of the first period from the establishment of the federal government until the Civil War was revenue. The next phase,

which lasted up to the Great Depression, was driven by the aim of protecting home producers and giving impetus to development in the domestic economy - termed “restriction”. The last period, which lasts to the present, has been characterised by liberalisation using reciprocal concessions with the formulation of trade agreements and taking an active part in the multilateral trading system hallmarked by the GATT - reciprocity.

Obviously, none of these periods can be considered homogeneous in terms of the measures taken or the extent of protectionism, yet, they proved to be stable in terms of the main goals, so US trade policy can be characterised as “stability despite conflict” (Irwin, 2017:689).

However, a focus on the most recent period reveals that the predictions given in the various theoretical models of international trade and the forecasts regarding development in the volumes of world trade have failed to materialise. Between 19412 and the appearance of Donald Trump as a significant presidential candidate, the main goal of trade policy was liberalisation. The US was a signatory of the GATT, although mostly based on fears of restraining its sovereignty, it rejected to ratify<sup>3</sup> the creation of the International Trade Organisation (ITO). Still, it continuously maintained a positive stance towards decreasing the obstacles of international trade and investment flows. Trade wars, naturally, have not remained unknown since WWII either. One plausible explanation of the US trade wars in the last five decades is a model that is able to bridge the gap to “Trump’s” trade war, which we aim to explain through a synthesis of the scientifically most convincing theories. Our standpoint is far from considering the various explanations independent of each other, although they emphasize different perspectives of the same problem that might make our understanding of the phenomenon more complex.

1) Eriksson et al. (2019) point out that the shocks and resulting trade wars reflect the international product life cycle (see Vernon, 1966 and in the fashion of a new trade theory Krugman and Venables), and can be attributed to the standardisation or the mature phase of certain industries. The authors identify three major shocks contributing to the decrease of the division of labour force employed in manufacturing: the Japan shock (1975-1985), the Tiger (Taiwan, South Korea, Singapore, Thailand and Hong Kong) shock (1975-1988) and the China shock (1990-2007). They find that the China shock is distinctively different from the previous ones, and hit hardest the areas with lower wages, lower educational attainment, higher unemployment and lower innovative capacity - massively increasing the adjustment costs, which restrains mobility.

2) Another important approach comes from the wealth and income inequality literature. Its current most prominent representatives (Milanovic, 2016; Alvaredo et al., 2018; Milanovic, 2019, forthcoming, etc.) argue that although capitalism triggered the fastest development in the history of humankind, it is not without unresolved problems. One of the most prominent such problems is growing inequality that in many cases leads to the emergence of populism. Acknowledging the volume limits of this paper we constrain ourselves to a working definition of populism based on Moffitt (2016) and Aiginger (2019): a political style, characterised by invoking everyday people to represent their interest vis-à-vis those of the élites; bad manners; playing on people’s fear, a crisis or a breakdown; changes of values and beliefs; political failures; efforts towards homogenisation, renationalisation, endangered by pluralism, globalisation, and multilateralism.

3) Hyper-globalisation and the disruptive role of technological change. In his many works Rodrik (see *inter alia* 2011) raises our attention to the globalisation trilemma in the fashion of the trilemma of international finance. He shows that “it is impossible to have hyper-globalisation, democracy, and national sovereignty all at once; we can have at most two out of three” (Rodrik, 2011:5). While Baldwin (2016; 2019) focuses on the disruptions created by historical events, technological change, globotics (new form of globalisation and robotics), artificial intelligence (AI) and remote intelligence (RI).

4) Mattoo and Staiger (2019) in their recent work raise the question of the trade policy consequences of a hegemonic transition. In this logical framework the US with its waning dominance deters from the rule-based (e.g. GATT/WTO) trade policy in favour of a selective power-based tariff bargaining system (trade war with specific countries) to effectively delay the hegemonic transition. This shift of trade policy at the same time is myopic, since the most important problems could or should be handled within the multilateral framework without falling in the Thucydides trap.

Donald Trump's positions towards trade policy might not at all have been surprising to his constituents, as they were forged in the 1980's. In 1987 he disclosed an open letter to his fellow citizens claiming that it was high time to decrease large trade deficits with certain partners (in those days the most important target was Japan).<sup>4</sup> In the 2016 presidential campaign his worldview in this field seemed to be very close to his earlier ideas voiced in the 1980's. After taking office, he instantly started to implement his campaign promises, as far as the American trade policy was regarded.

1) He withdrew the US from the Trans Pacific Partnership. This decision could have endangered the competitiveness of US sectors employing some 5-12 million workers (Council of Economic Advisers, 2016).

2) The North American Free Trade Agreement was renegotiated with Mexico and Canada, and a renamed US-Mexico-Canada Agreement (USMCA) was signed although it has not yet been ratified. Trump has been able to achieve beneficial changes mostly for the US automotive sector (for further details see Hufbauer-Globerman, 2018).

3) The US seems to be able to effectively obstruct the everyday operations of the WTO by blocking the selections of the new members to the Appellate Body. Furthermore, it questions the very existence of the organisation, expressing discontent with the operation of the Appellate Body, and its inability to conclude the Doha Development Round even after more than 15 years (for further details please see WTO, 2018). The President even made a threat to withdraw the US from the organisation, which would mean a direct death sentence to the most important multilateral trade organization of the world and its stabilising rules-based system (see above for the reasons of the US disinterest in maintaining or reforming it).

4) The US started a multiple trade war that hits China the most seriously. The US accuses China of disrespecting the intellectual property rights of the US companies involved in global value chains with the country; openly blames China with currency manipulation in order to accumulate a large trade surplus with the US, complains about the lack of transparency in the ownership and financing of Chinese enterprises, and finally requires easier access to Chinese markets.

After several years of antecedents, the actual trade war started on 6 July, 2018, when the US levied the first tariffs specifically on China. China instantly adopted retaliatory measures. For almost a year hits and retaliations were exchanged. A completely new period was launched by the US, when on 15 May, 2019 the Bureau of Industry and Security (BIS) of the US Department of Commerce announced the Addition of Huawei Technologies Co. Ltd. to the Entity List.<sup>5</sup> On 31 May, 2019 China announced the compilation of its own list of unreliable entities. On 6 June, 2019 the total amount of tariffs applied exclusively to Chinese goods reached USD 250 million, while the total Chinese tariffs exclusively applied to US goods amounted to USD 110 million (Dezan Shira & Associates).<sup>6</sup>

The first results of academic research on the trade war published since the second half of 2018 make efforts at quantifying changes in the level of protectionism of the US-China trade flows, balance of trade, balance of payments, welfare and employment effects. Due to the unpredictable nature of this war, the numbers might be constantly changing; however, the estimations that have been made so far provide a good insight into the magnitudes of these shifts.

Bown (2019a) gives an overview of the measures and quantifies the US imports from China covered by special protection by sector that grew from 10 to about 50 per cent in the past two decades. The US Census Bureau reports deteriorating US trade balance with China for the last two years, despite all American efforts. Amiti et al. (2019) estimate a reduction in US real income of USD 1.4 million per month by the end of 2018, despite omitting the large additional costs resulting from policy uncertainty. Fajgelbaum et al. (2019) estimate that the welfare loss of the total trade war was USD 7.8 billion, emphasizing that tradeable-sector workers in heavily Republican counties were hit significantly harder by the trade war. Flaaen et al. (2019) find significant pass-through effects of tariffs to consumer prices in the case of washing machines, the first product “victim” of the trade war. Finally, Li et al. (2019) find negative manufacturing employment effects in the US and predict even higher losses of jobs as a consequence of retaliatory measures by the partner countries.

On 21 May, 2019 President Xi Jinping called for a symbolic, modern-day “long march” referring to the many thousand miles of journey of the Communist Party forces in 1934 to escape from the Nationalist Army of Chiang Kai-shek (Stevenson, 2019).

On 2 June, 2019 the State Council Information Office of the People’s Republic of China issued a White Paper with the title “China’s Position on the China-US Economic and Trade Consultations”, quantifying the decrease of exports and Foreign Direct Investment of China to the US, stating that the trade war has a significant influence that goes beyond the two countries and affects the whole world economy. The East Asian country expressed its willingness to continue consultations with the US, however, at the same time they communicate not giving up their principles and state that no challenge will hold back China’s development.

Although the above results mostly referred to the losses of the US, obviously China is also losing, as it is a considerably poorer country with a weak institutional system and rule of law. With China being a specific target, its regional competitors might gain enough strength and competitiveness to fight China in its traditional export markets. With the disruption of global value chains extending to the US, investors will find China and its local brands riskier, being afraid of further sanctions from the United States. Naturally, there is also a high probability for a pass-through of retaliatory tariffs to higher domestic prices of imported goods in China (Cowen, 2019).

What are China’s opportunities to shake the burden of the trade war off, or if that is impossible, what other options does it have?

1) Naturally, the ideal case would be a resumption of negotiations with the US and with the most important partners on the reform or revival of the multilateral trading system. At this point very small chances are seen for this scenario. China might also expect increasing disappointment by US consumers and businesses due to higher prices.

China’s retaliation was well targeted: it hit the agriculture (requiring the payment of special subsidies to them in the US) and Republican voters (Bown-Zhang, 2019a).

2) To prepare for a long trade war with the US might possibly push China back to the infamously high levels of the Smoot-Hawley Act of the Great Depression. This scenario is very dangerous, as mentioned above, because the tariffs levied by the Trump administration discriminate China far more than other suppliers (Bown-Zhang, 2019b).

3) A viable Chinese option might be the listing of unreliable American business partners and restraining their market access (see the recent case of FedEx) and giving up buying sophisticated and high-value American technological products in favour of products from Europe or other places (Boeing v. Airbus).

4) Finally, the following short case study of the export of rare earth metals (HS 280530 Rare-earth metals, scandium and yttrium, whether or not intermixed or inter-alloyed) and their compounds (HS 2846 Compounds, inorganic or organic, of rare- earth metals, of yttrium or of scandium or of mixtures of these metals).

#### THE POSSIBLE ROLE OF RARE EARTH METALS AND THEIR COMPOUNDS IN THE US-CHINA TRADE WAR

As one of the possible weapons in the trade war with the US we mentioned China's ability to restrain the exports of rare earth metals and their compounds to the United States. In this section we will give a brief overview of the aforementioned materials, demonstrate their critical importance in modern technology and finally throughout the analysis of their reserves, production, refinement, and trade our aim is to give an assessment about using them as a possible tool in the trade warfare.

There are 15 rare earth elements with atomic number ranges from 57 to 71, known as lanthanides, in some cases yttrium (39) and scandium (21) are added because of their similar characteristics. Due to their special physical and chemical (such as specific optical and magnetic) properties they are essential for modern, high-tech civil and defence products. Their term "rare" does not refer to their abundance in the earth crust, although the concentrated deposits are limited in number. The mining and refining these elements is associated with some health hazards and also with pollution.



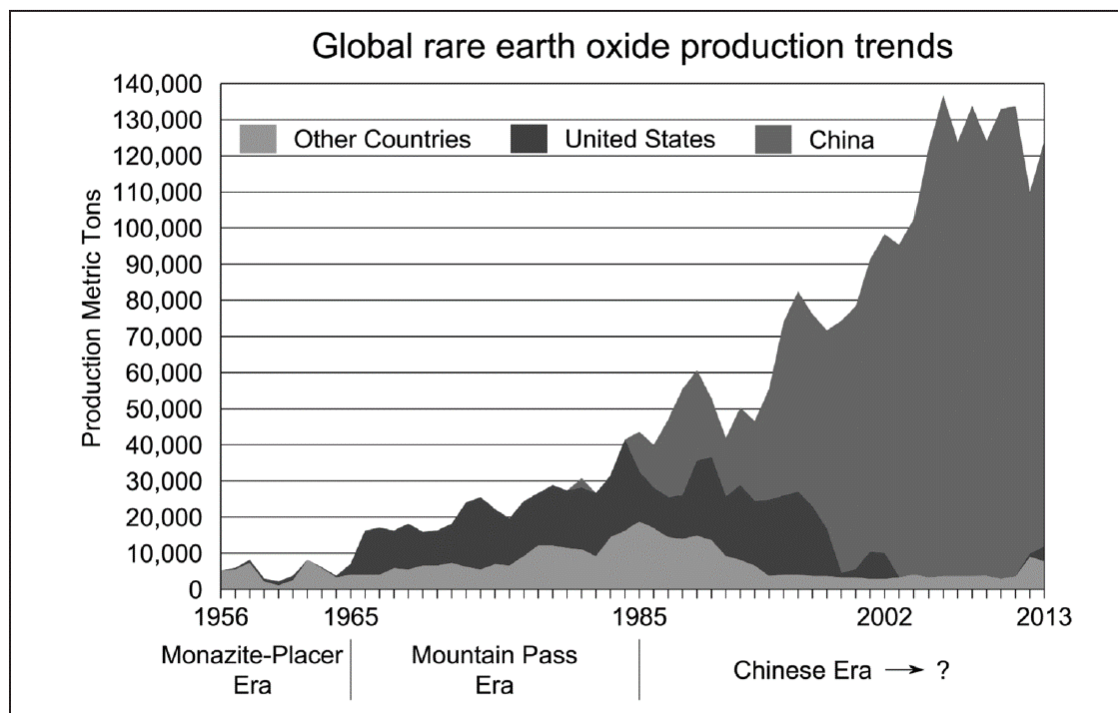
Table 1: Rare earth elements

| Element                          | Symbol | Atomic number | Percentage found in the upper continental crust | Economic Class | Applications   | Defence uses   |
|----------------------------------|--------|---------------|---|----------------|--|--|
| <b>Light rare earth elements</b> |        |               |   |                |  |  |
| Lanthanum                        | La     | 57            | 17.8  | Uncritical     | Optical glass, nickel-metal-hydride batteries, camera lenses and catalysts                       | night-vision goggles   |
| Cerium                           | Ce     | 58            | 38.0  | Excessive      | Coloured glass (flat-panel displays), automobile catalytic converters                            |  |
| Praseodymium                     | Pr     | 59            | 4.2   | Uncritical     | Super-strong magnets, metal alloys, specialty glass, lasers                                      |  |
| Neodymium                        | Nd     | 60            | 15.4  | Critical       | Permanent magnets  | laser range-finders, guidance systems, communications  |
| Promethium                       | Pm     | 61            | 0.1   | Uncritical     | The only naturally radioactive rare earth element. Used in luminous paint and nuclear batteries. |  |
| Samarium                         | Sm     | 62            | 2.7   | Uncritical     | Permanent magnets, nuclear reactor control rods, lasers  | permanent magnets that are stable at high temperature  |
| Europium                         | Eu     | 63            | 0.5   | Critical       | Optical fibres, visual displays, lighting  | fluorescents and phosphors in lamps and monitors, precision-guided weapons, "white noise" production in stealth technology |
| Gadolinium                       | Gd     | 64            | 2.3   | Uncritical     | Shielding in nuclear reactors, X-ray and magnetic resonance imaging scanning systems             |  |
| <b>Heavy rare earth elements</b> |        |               |   |                |  |  |
| Terbium                          | Tb     | 65            | 0.4   | Critical       | Visual displays, fuel cells, lighting  |  |
| Dysprosium                       | Dy     | 66            | 2.1   | Critical       | Permanent magnets, lighting  |  |
| Holmium                          | Ho     | 67            | 0.5   | Excessive      | Lasers, high-strength magnets, glass colouring   |  |
| Erbium                           | Er     | 68            | 1.4   | Critical       | Glass colouring, fibre optic cables  | amplifiers in fibre-optic data transmission  |
| Thulium                          | Tm     | 69            | 0.2   | Excessive      | Lasers, portable X-ray machines  |  |
| Ytterbium                        | Yb     | 70            | 1.3   | Excessive      | Stainless steel, lasers  |  |
| Lutetium                         | Lu     | 71            | 0.2   | Excessive      | Petroleum refining   |  |
| Yttrium                          | Y      | 39            | 13.1  | Critical       | Metal alloys, visual displays, lasers, lighting  |  |

Source: Kruger, 2015; Van Gosen et al., 2019

In terms of production, the US relied on domestic sources, namely on the Mountain Pass mine close to San Bernardino, California for a long time. Due to environmental and regulatory problems, the rare earth element separation plant was closed. Most of the rare earth elements and compounds used in the US are imported from China or from countries that imported their plant feed materials from China. China became highly competitive by the 1990's not only because of its large reserves but also because of its lax environmental and health regulations and lower labour costs (Figure 1).

*Figure 1: Trends in global rare earth oxide production, 1956–2013*



*Source: USGS Mineral Commodity Summaries, prepared by Kruger, 2015:8*

China's role in rare earth elements and compounds is twofold: China has the largest reserves and the highest production, and it is also one of the leading exporters of these commodities. Even in cases when the Chinese product is not exported, it is used for local production for US companies or for directly to the US market.

The question is obvious: Is China able to put any pressure on the US using its weight in rare earth element production and trade? The opportunity might be proven by Xi Jinping's demonstrative and widely announced visit to Guangzhou City to discuss the production, development and operations at JL MAG Rare Earth Co. Ltd. A historical example was also set in 2010, when after a maritime dispute, China stopped rare earth exports to one of the largest importers, Japan. Over the long run, Japan has been able to solve the problem by switching to other sources and replacing rare earth metals with new technologies.

The above events allow two conclusions: China can use its rare earth power in the short run, however, at the same time risking the losing of its positions to Brazil or Vietnam. The unpredictable negotiation style of Donald Trump further increases this risk, as in the previous rounds of meetings he clearly showed that blackmailing is a no-go strategy trying to force him. However, the US high-tech civil and defence industry is highly dependent on rare earth metals and products, and China might use these as a bait to reinstate the broken trade negotiations, while the US should take care about developing independent sources for these commodities.

Table 2: Global production and reserves of rare earth elements (metric tons)

| Country               | Production |         | Reserves    |
|-----------------------|------------|---------|-------------|
|                       | 2017       | 2018    |             |
| United States         | —          | 15,000  | 1,400,000   |
| Australia             | 19,000     | 20,000  | 3,400,000   |
| Brazil                | 1,700      | 1,000   | 22,000,000  |
| Myanmar               | NA         | 5,000   | NA          |
| Burundi               | —          | 1,000   | NA          |
| China                 | 105,000    | 120,000 | 44,000,000  |
| India                 | 1,800      | 1,800   | 6,900,000   |
| Malaysia              | 180        | 200     | 30 000      |
| Russia                | 2,600      | 2,600   | 12,000,000  |
| Thailand              | 1,300      | 1,000   | NA          |
| Vietnam               | 200        | 400     | 22,000,000  |
| Other countries       | —          | —       | 4,400,000   |
| World total (rounded) | 132,000    | 170,000 | 120,000,000 |

Source: USGS

## CONCLUSION

After the fall of the Soviet Union, and thus the bipolar world order, the USA was left as the only superpower by winning the cold war in 1991. However, according to Sir Bernard Cohen, a new world order had evolved. Beside the trade which depends on the oceans (the USA and its allies) and on the continental belt in Eurasia, new zones were born in East Asia and in the Indian Ocean region, dominated by China and India, respectively. These geostrategic regions have been the scenes of rivalry between the USA, Russia, the European Union, China, India, Brazil and Japan since the 1990s (Szilágyi, 2013b). Many authors agree that the current situation in the world and the USA is changing permanently. It cannot be unambiguously concluded whether a new era of US hegemony is coming or the world is getting multipolar. Still any of the two scenarios can supervene. Nevertheless, at the end of the 2010's it seems obvious that the USA can be considered as the only hegemonic power ahead of every other country in the world in military, technology, economic and financial terms. However, some genuine rivals, listed above, have appeared in the battle for world hegemony. Although the dominance of the United States can be questioned mostly by the EU, Russia or China, it cannot be considerably compromised yet.

## Notes

- 1.The State Council Information Office of the People's Republic of China, 2019:3: "China does not want a trade war, but it is not afraid of one and it will fight one if necessary."
- 2.The year of the signature of the Atlantic Charter.
- 3.The terminal decision was made in 1953.
- 4.See Schlesinger, 2018:1.

- 5. “The sale or transfer of American technology to a company or person on the Entity List requires a license issued by BIS, and a license may be denied if the sale or transfer would harm US national security or foreign policy interests. The listing will be effective when published in the Federal Register.” <https://www.commerce.gov/news/press-releases/2019/05/department-commerce-announces-addition-huawei-technologies-co-ltd> (accessed 20 May, 2019).
- 6. <https://www.china-briefing.com/news/the-us-china-trade-war-a-timeline/> ; <https://piie.com/system/files/documents/trump-trade-war-timeline.pdf> ; <https://www.bloomberg.com/news/articles/2019-05-14/u-s-china-tradewar-timeline-what-led-up-to-the-stalemate> (accessed 6 June, 2019).

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