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**DIPARTIMENTO DI POLITICA ECONOMICA**

***Quo Vadis Terra? The future of globalization  
between trade and war***

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Quaderno n. 40/settembre 2024

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## *Abstract*

In this work we discuss how the development of geopolitical confrontation between Eastern and Western blocs will affect globalization after the end of the hyper-globalization era. The debate on these issues is developing by the day and the perspective of an increasingly fragmented world is more and more real. However, global supply chains and global financial markets and flows are not going to disappear overnight. What is developing is a new form of globalization, with also a new set-up in the relationship between the State and large corporations. This work is divided in two parts. The first deals with the trade dimension, where we discuss the changing geometry of international trade and the connection between growth and the balance of payments; then we analyse what are the weak spots of the two blocs and the resulting strategies. The second part deepens the military dimension that is growingly mixed up with economic issues. We discuss some general aspects of military economics, the US military industrial base and their military-entertainment complex; then we discuss the equivalent base in Europe and, finally, how the World War II succeeded in rapidly and totally overhaul US economy as an example for Europe in the next future. In the conclusions, we discuss the main characteristics of the China-United States relationship and the three policies that must be blocked as soon as possible to prevent the sliding towards a new world war.

JEL Classification: F20, F50, H56,

Keywords: globalization, friendshoring, international trade, military expenses

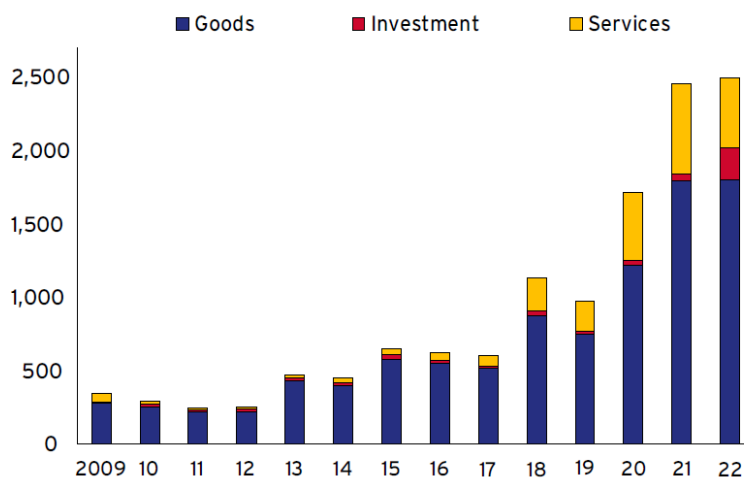
## 1. Introduction: a new era in international relations\*

*All armed prophets have been victorious, and all unarmed prophets have been destroyed -  
Nicolò Machiavelli*

In this work we discuss how the development of geopolitical confrontation between Eastern and Western blocs will affect globalization summing up the main works on international trade and the developments in the military complex. The three major crises of the last fifteen years – the global financial crisis of 2008, the Covid-19 pandemic and the war in Ukraine and the Middle East – have re-ignited the debate on the direction taken by the world economy after the end of the hyper-globalization era. The debate on these issues is developing by the day and the perspective of an increasingly fragmented world is more and more real. However, global supply chains and global financial markets and flows are not going to disappear overnight. What is developing is a new form of globalization, sometimes called *slowbalization* or *newbalization* (Canuto, 2022).

While for decades, the mantra was *laissez faire* and deregulation, i.e. the largest corporations and banks were left free to grow and to enter every market and country, helped by their governments, today the focus has switched to geopolitical priorities, forcing a new balance of forces between the State and large corporations. This new set-up is precarious and unclear, also because firms face very different situations. For instance, there are Western companies that rely heavily on China as market or supplier and will have to pay a heavy price to renounce to it. Others are quite happy for the tariffs on Chinese goods as a way to block competitors. What it is true at industrial level is also true at national level, with, for instance, Germany and Italy traditionally dependent from export and the US or other Western countries much less so. The path towards more trade conflicts was unmistakable even before the war in Ukraine. See, for instance, the following figure:

**FIGURE 2 TRADE RESTRICTIONS**  
(number)



(Figure 1: trade restriction between 2009 and 2022; source, Aiyar and Ilyina, 2023)

MGI (2024) observes: “the number of new global trade restrictions each year has been steadily increasing, from about 650 new restrictions in 2017 to more than 3,000 in 2023”. Nowadays, geopolitical rivalry is even influencing undersea cable-scape that is bifurcating into American and Chinese spheres of influence (Beattie, 2024). These cables are connected to digitalization, and in particular to the rise of the IA, that will also play a role in the re-articulation of international trade. In this context, the pure economic models, for instance based on comparative advantages, will not be useful. We need different analytical approaches based on geopolitics and the economic and financial effects of international flows of goods and capitals to understand where world economy is heading.

\* The views expressed by Lorenzo Esposito do not involve the responsibility of the Bank of Italy.

This work is divided in two parts. The first deals with the trade dimension. We discuss the changing geometry of international trade and the connection between growth and the balance of payments; then we analyse what are the weak spots of the two blocs and the resulting strategies. The second part deepens the military dimension that is growingly mixed up with economic issues. We discuss some general aspects of military economics, the US military industrial base and their military-entertainment complex; then we discuss the equivalent base in Europe and, finally, how the World War II succeeded in rapidly and totally overhaul US economy as an example for Europe in the next future. In the conclusions, we discuss the main characteristics of the China-United States relationship and the three policies that must be blocked as soon as possible to prevent the sliding towards a new world war.

## 2. *The trade dimension*

*War, trade, and piracy together are a trinity not to be severed* – Johann W. von Goethe

### 2.1 The geometry of international trade and the connection between growth and the balance of payments

To deepen the geopolitical dimension and the changing scenarios for globalization, a valuable way is the analysis of the connections among national economies. Particularly useful to this end is a recent study by McKinsey (MGI, 2024) showing trade indicators that, taken together, represent effectively the situation of a country vis à vis its trade partners and hence its position in the new articulation of the world economy. In particular, these indicators represent: i) how much a country's economy is susceptible to international economic shocks; ii) the distance and other physical barriers among nations; iii) the concentration of imports and hence the diversification of a country's suppliers. Moreover, MGI proposes a measure of geopolitical alignment using the voting records at the United Nations General Assembly declared as important by the US State Department between 2005 and 2022. From a country's specific geometry of international trade comes its most effective trade strategy. However, for all the specificities of national situations, importing from politically hostile countries is less and less advisable, even if this makes the development of specific industries costly or too slow. Nowadays, also accepting foreign investment from hostile countries can be dangerous, although this means limiting economic growth and innovation.

The new situation will be also reflected in the balance of payments. As underlined in different contributions by Thirlwall, revenues generated by export are key to economic growth and also allow for more import. Overall, the country's growth relies on its demand elasticity for export and import, and today this elasticity has also a political component. Overall, the balance of payments represents a key constraint for economic growth, especially in a context of growing fragility of world economy, with more volatile trade relations the make this constraint more cogent. This theory is part of the export-led growth literature that has shown that export growth can create a virtuous circle of economic and productivity growth (Thirlwall, 1979 and 2002). From this analysis, Thirlwall can conclude that: "In the long run no country can grow faster than the rate compatible with the balance of payments equilibrium in its current account, unless it can finance ever-increasing deficits, which in general cannot be done" (Thirlwall, 2011, p. 322). This line of thought denies the prevailing view, based on the Say's law, that states that the balance of payments is self-adjusting, and economic growth is determined by technological shocks. Moreover, the international evidence since the Bretton Woods crisis, suggests that exchange rate changes are not sufficient to adjust the balance of payments. In fact, when currencies rapidly appreciate or depreciate, they determine economic and social disorders before achieving balance of payments equilibrium. The exchange rate related income effects can worsen the situation, especially if interest rates have to raise to finance deficits producing capital inflows that are not always benign. If they are short-term, based on a rapid increase of interest rates, they can experience a sudden reversal, leaving the country with no alternative to finance its deficit that increasing interest rates even more or defaulting.

The role of the balance of payments in the process of economic growth has different illustrious ancestors and multiple interpretations, starting from Rosa Luxemburg's analysis of imperialist development of modern capitalism, where a growing part of profits are made through export of goods and capitals. In *The Accumulation of Capital*, Rosa Luxemburg explained how the biggest Western firms took control of the

world by commercial and military means. In this context, loans and bonds were weapons to conquer foreign markets of every major power since the start: “In the sixteenth and seventeenth centuries, the loan transferred capital from the Italian cities to England, in the eighteenth century from Holland to England, in the nineteenth century from England to the American Republics and Australia, from France, Germany and Belgium to Russia, and at the present time [1912] from Germany to Turkey, from England, Germany and France to China, and, via Russia, to Persia” (Luxemburg, [1913] 2003, p. 400). Interestingly, Rosa underlined the contradictory results of this process: “channels for the investment in new spheres of capital accumulated in the old countries, such loans widen the scope for the accumulation of capital; but at the same time they restrict it by creating new competition for the investing countries” (Ivi, p. 401). This is a vivid description of the relation between US and China since the 1980s. Moreover, Rosa explained that the old powers use protective tariffs for the artificial conservation of obsolete productive methods but this goal is specifically connected to war preparation: “The reversion to protective tariffs was carried through in Germany as well as in France, Italy, and Russia, together with, and in the interests of, an expansion of the armed services, as the basis for the European competition in armaments which was developing at that time, first on land, and then also at sea” (Ivi, p. 431). The paradox is that the army and the navy are instrumental to grab foreign markets and creating Western empires, i.e. they are instrumental to defend the free trade, with the subordination of the entire planet to Western accumulation, but when major powers collide, free trade and militarism collide too. This contradictory development of world economy explains the World War I, but the analysis of Rosa Luxemburg was interesting also for more recent times. Discussing the need of the State expenses to ensure capital accumulation, Kowalik confirmed the ideas of Rosa on militarism as a vital part of aggregate demand: “Nowadays, it is widely accepted (both in the bourgeois and the Marxist literature, hence independently of the attitude towards armaments as a social phenomenon), that the post-war economic prosperity in certain capitalist countries, the United States in particular, is explained precisely by the militarization of the capitalist economy, in the development of a powerful armaments production sector” (Kowalik, 2014, p. 112).

In the post-war period, these ideas have been developed especially by the *Monthly Review* school and by the monetary circuit scholars (Graziani, 1996, Bellofiore, 2013) that have analyzed how, in an open economy, export can generate an inflow of currency that can substitute or integrate public deficit funded by the private financial system. Moreover, in the Keynesian and post-Keynesian tradition, the analysis of the balance of payments constrains is linked to Hicks’ idea of the super multiplier, according to which a country’s growth dynamic is governed by its export (McCombie, 2004, pp. 40 and following). Finally, it is worth mentioning the Prebisch-Singer’s hypothesis on the effects of dependence on foreign primary goods (a key topic for the green transition today) that have negative consequences on the country’s growth rate and the analysis made by Verdoorn and Kaldor according to which a higher rate of development driven by exports has positive consequences on the dynamics of productivity, income and wages (McCombie, 2002, pp. 64 and following). In our epoch, where financial markets are by far more developed and interconnected, the possibility of funding a balance of payment deficit is linked to the possibility of tapping international financial markets. In the case of the US, this is easier due to the role of the dollar as world reserve currency but for how long? To analyse possible scenarios, we must first examine fundamental aspects of the geometry of international economic relations.

## 2.2 How the geometry of international trade would change with *Newbalization*

*Globalization is almost dead and free trade is almost dead...I don’t think they will be back* - Morris Chang  
(founder of Taiwan Semiconductor Manufacturing Company)

The post first Cold War globalization, based on the integration of capital markets and the free flows of investment, has led to a re-articulation of the productive processes on a world scale. In this context, Far East, and China in particular, has become the world factory (Baldwin, 2024a), with a share of production double that of the second country (the US), while old Western powers, such as Italy, France and Great Britain, are now significantly behind India or South Korea. Over time, the dependence of the Western countries on the Chinese manufacturing supply chain has increased while Chinese production is less dependent on intermediate goods produced in the Western countries. The presence of strong asymmetries in the dependency of the supply chain between the blocs is of fundamental importance, especially in the context of

potential disruptions in trade relations, together with the huge complexity of supply chains, that has shown its drawbacks during the pandemic.

In this context, the most likely scenario is an increasingly fragmented world in which trade is growingly oriented by geopolitical motivations, a trend that we can see, for example, in a decreasing share of trade between the US and China and between the EU and Russia. This development would imply significant trade frictions between the competing blocs, even if both groups will continue to trade almost without friction with non-aligned economies. In other words, globalization survival is linked to what has been called “geopolitical agnosticism” by out of the blocs’ governments (Beattie, 2024). According to McKinsey, trade between the blocs would decrease by 70% for 2035 (MGI, 2024). This negative dynamic would be only partially compensated by the increase of the inside-blocs trade that would benefit from reshoring. MGI states that even in this scenario, China would still be the world’s largest exporter in 16 out of 43 sectors. Overall, global long-term GDP would be affected negatively even without considering spillover effects, such as reduced technology deployment, investment and competition, and political uncertainty. Inflation could also be affected. For instance, Alfaro and Chor (2023) found that US prices have increased by 9% in sectors that switched from China to alternative suppliers. The results of a global trade slowdown effect in the fragmentation scenario are confirmed by Attinasi et al. (2023) that highlighted the risks of a geopolitical reshaping of global supply chains. Adverse economic effects of the fragmentation of global trade have been measured also in Baqae and Farhi (2024), with a decrease in imports between 12% and 19%. The general conclusion is that the deeper the fragmentation, the higher the costs (Aiyar et al., 2023a) with a reduction in terms of GDP estimated between 7% and 12%.

This general trend does not apply uniformly. In particular, Baldwin (2022a), highlights that services will increase globalization and therefore international trade will be increasingly dominated by “telemigration” trade. In fact, statistics on services show no slowdown, although the global statistics on these industries are poorly disaggregated and make difficult to assess in more depth their evolution. For all their deficiencies, statistics show that “other services to the enterprises” (OCS) trade have been growing faster than trade in goods, and the divergent paths have become more pronounced since the trade collapse of 2008-2009. Although trade in goods recovered in 2010 (Baldwin, 2022b), OCS trade continued to grow rapidly. Between 1990 and 2020, the dynamics of goods trade increased 5 times, that of OCS 11. This different growth is helped by the fact that today’s barriers to services are of technological rather than fiscal or regulatory nature (OECD, 2022). Moreover, much of the regulation concerns final not intermediate services. For example, while there are strict rules for providing accounting services in the United States, there are few rules for supplying the paperwork behind the provision of such accounting services. Secondly, digital technologies are lowering the costs of relocating services activities. This is why, all in all, *newbalization* would be services-driven. This would be a problem for China that is the main global industrial hub. At any rate also a more services-oriented globalization would incur in the protectionist surge (Baldwin and Forslid, 2020) and would need huge investment to face protectionist obstacles (Noris and Sanguineti, 2023a and 2023b).

Another area of increasing tensions is the race for the control of raw materials and metals considered critical, for instance for the green transition. This race will be fierce as will be fierce for the control of the key trade routes and infrastructures that are increasingly vulnerable (Bueger and Liebetrau, 2021). Also the transfer of technologies will face growing obstacles (Crosignani et al., 2024). In the key sector of semiconductors, China is lagging behind and has not yet achieved the objectives set in the production of strategic manufactured products for technological development, as in the case of integrated circuits. However, the share of Chinese self-production records a significant growth. In 2021, 359.4 million integrated circuits were produced in the country, an increase of 33.3% over the previous year; in 2020 its degree of self-sufficiency was estimated at around 30% with a target of reaching 40% as soon as possible (Comito, 2022). In the specific AI sector, export controls already block the transfer of US semiconductor technologies to China, while the new rules on outbound investment aim to cut the flow of US capital and knowledge to Chinese companies. An in-depth picture of the geopolitical strategic choices on the value chains of artificial intelligence can be inferred from a Lazard research (2023), which identifies the key processes for leadership development with the indication of the best positioned countries and companies (cfr. Table 1).



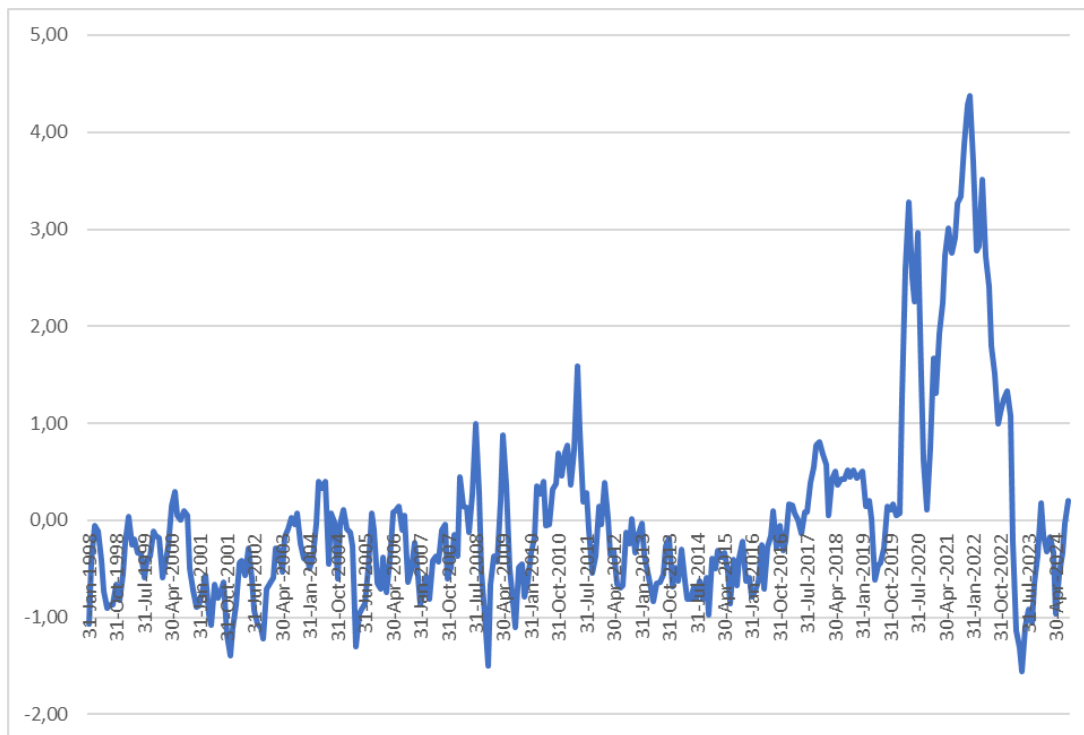
<i>Building Block</i>	<i>Geopolitical Bottlenecks</i>	<i>Leading Countries</i>	<i>Key Firms / Organizations</i>
Computing Power Chips, and the data center infrastructure they are deployed in, are fundamental to powering model training & inference	High	US, Taiwan, Japan, South Korea, Netherlands	Semiconductor players (NVIDIA, TSMC, etc.), cloud computing companies (Amazon Web Services, Azure, Google Cloud).
Talent The limiting factor across all other key building blocks. US, India, and Europe have a meaningful head start, but China is catching up.	High	US, China, Europe, India	Universities and research centers, Google DeepMind, OpenAI, Anthropic, etc.
Data Data is vital to AI, but its advantage is likely to be constrained to narrow applications.	Medium	China, India, US, Indonesia, non-state corporate actors.	Leading global technology players (e.g., Meta, Google, ByteDance, Amazon), financial institutions.
Physical Infrastructure Cheap energy and abundant water resources help determine where data center infrastructure necessary for AI training and inference is built	Low	Indonesia, Brazil	Amazon Web Services, Microsoft Azure, Google Cloud, Alibaba Cloud, IBM, Salesforce.

(Table 1; geopolitical bottlenecks in the AI value chain; source: Lazard, 2023, p. 12)

As indicated by the surveys (Maslej et al., 2023 and Galli et al., 2023), the US are clearly in the leadership, with an increase in AI from less than \$ 15 billion in 2013 to around 200 billion in 2022 (Maslej et al., 2023, p. 184). Around half of the AI companies created since 2016 worldwide have been created in the US, followed by India, the UK, Canada and China with around 5%. The US leadership emerges even more clearly with reference to large companies and large universities from which most of breakthrough initiatives come (Galli et al., 2023). Protectionism will be used to keep this predominance. The other big global trend, green transition, is technologically dominated by China, that is by far the biggest producer of EVs, solar batteries and other goods connected to the transition (Draghi, 2024a, pp. 38 and following). In both cases, Europe is lagging behind.

### 2.3 Weak links of opposing blocs and political strategies

The New York Federal Reserve measures the stress on value chains, through the Global Supply Chain Pressure Index (GSCPI, see following figure).



(Figure 2: Global Supply Chain Pressure Index; source: New York Federal Reserve, <https://www.newyorkfed.org/research/policy/gscpi#/interactive>)

The indicator remained in a fairly neutral position for years, but increased during the pandemic, contributing in the growth of inflation. After a return to some stability, events in the Middle East and the Red Sea in particular led to a renewed rise in tension, which was reflected in the index. Bruni (2024) has proposed the idea of “instability factories” that can weaken supply chains, pushing for their shortening. This is especially true for industrial transformation, while the trade between Russia and Europe is based especially on raw materials, being Russia a “geological miracle”. This is why, even before the war in Ukraine, Russia had a trade balance in surplus, with around 43% of exports consisting of energy resources, 17% of other mineral resources and 8% of agricultural products, until sanctions strongly reduced these connections. It is interesting to point out that, from one side, sanctions hit especially European economies, less able to substitute suppliers, from the other, sanctions reduce world trade overall, accentuating the decline in world trade (Caruso and Cipollina, 2023).

From its part, the European Union does have an advanced economy of industrial transformation, but it is politically weak as it depends on highly conflictual and fragile external areas for the supply of essential raw materials and energy production (Russia, Middle East and Africa) and on Chinese supplies for strategic investments oriented towards energy autonomy and green transition. EU governance is complex and dysfunctional and in the new era of blocs’ confrontation, it has become only a junior partner of the US that military controls Europe through the NATO. Also one of Europe strong point, its current account surplus, is heavily conditioned by the evolution of the international geopolitical context.

Europe would need a huge flow of investment to finance the green transition, as well as the reorganization of its military apparatus. In fact, the environmental, social and technological challenge that Europe should face requires investments in excess of the € 750 billion (Draghi, 2024b). However, due to the financial crises of 2008 ad 2012 and the pandemic, public finances are in bad condition and the new Stability and Growth Pact makes an expansionary economic policy almost impossible. Moreover, Europe would need a by far more cohesive political situation, while the war in Ukraine has distanced EU countries. Needless to say, a fractured Europe cannot intervene in Middle East or elsewhere with any effectiveness. In the new geopolitical situation, the European political weakness makes its financial assets less attractive, thus also making more difficult to compensate with private savings the lack of public investment. In fact, saving flows go from EU to the US and the importance of EU as a financial hub is in decline. As Bini Smaghi (2024) observed: “the financial markets of the 27 countries are shrinking, especially in relative terms, compared to the rest of the world. The number of companies listed in the stock market fell almost everywhere in Europe, on average by 16% between 2012 and 2022, while it increased by 13% in the US”; moreover: “the financial markets of the

27 countries are becoming dominated by non-European (i.e. US) institutions which exercise significant market powers. This is true in practically all sectors of the regulated and unregulated market, from asset management to private equity or depository institution". Europe is no more attractive for manufacturing as well as financial services. This difficult situation for Europe is honestly described in the recent Draghi report on competitiveness (Draghi, 2024a).

In this analysis of the geopolitical fragility of the European Union, a special role should be attributed to Germany. As Celi et al. (2020) reminded us, Germany experienced a boom in its current account together with sustained foreign direct investment and large financial loans, while keeping its domestic demand low. Critical factors for this success were, on the one hand, the extension of the German manufacturing supply chain into Eastern Europe and, on the other hand, the broader placement of machinery and high-tech goods in China, India and emerging countries. This model was based on domestic consumption compression domestically and abroad, due to the ability of Germany to ensure that its Central and Eastern European partners kept wages down to increase export. Russia has been important for the economic growth of the EU, not only because it exports raw materials and energy there, but also because it is the region where the transport networks of the goods that Germany and the European Union trade with China pass through (Pepe, 2019); in fact, China is the country with which Germany has the highest trade interchange (almost \$ 300 billion in 2021). As Tooze (2022) pointed out, China is a vital market for many German industrial exporters. For much of the last decade, Germany has had a trade surplus with China. In this, the German situation is totally different from that of US: for US, decoupling from China raises supply chain issues, but goes hand in hand with the basic protectionist impulse to face the reality of a large trade deficit. For Germany, decoupling from China would mean losing an important driver of its economic growth. Germany's sophisticated manufacturing industrial base has been complementary to China's economic development. Although Germany has suffered a 'China shock' due to cheap imports, it has also gained a countervailing boost from its export to China. As a result, Germany is one of the few Western economies that has recorded a trade surplus with China since 2009. Actually, the situation has been gradually changing for some time: German exports to China provided a substantial boost to demand for German industrial goods from the late 1990s to 2012.

Since then, however, exports to China as a percentage of German GDP have hovered between 2.5% and 2.75%. Although stagnant, if German trade with China were to collapse, the German economy would suffer a severe shock. It is unlikely that other markets would be able to absorb the goods Germany sells to China, and above all, it is not even likely that Germany would be able to find domestic sources for the goods it currently imports from China. Thus, it would suffer bottlenecks in the supply chain and difficulties in resorting to other foreign suppliers on equally favourable or sustainable terms. Especially for Europe, physical international supply chains are crucial for the efficiency and reliability of its international production network. A key role in this respect is played by transport and the possibility to find competitive alternatives to the usual routes to ensure flexibility of global supply chains in responding to external shocks. The key point remains trade. The control of the seas as a way to ensure trade flows goes back at least 3.000 years (Giraud, 2015 and 2017). Free trade can exist only if the most important powers use their military power to allow trade flows. In other words, free trade and a mighty navy is one and the same thing. Reflecting on the first half of the XX century, Hirschman noted: "Although we have seen that free traders have advised statesmen to rely on the supply effect of foreign trade, protectionists have warned them of the dangers of its cessation during war, which, they say, is precisely when it will be most needed. But this danger might be lessened and the supply effect safeguarded: 1) by securing control of the oceanic trade routes; 2) by a policy of extensive preventive accumulation of stock piles in times of peace; 3) by redirecting trade toward those countries from which the danger of being cut off is minimized" (Hirschman, 1945, p. 14). This is exactly what is happening now. Since 1945, US Navy has secured the oceanic trade routes and thus free trade on a world scale. However, "After decades of supporting free trade, in 2018 the U.S. raised import tariffs and major trade partners retaliated" (Fajgelbaum et al., 2020). This turn will affect negatively economic growth. Also supporters of the turn know that decoupling is costly but they think that these costs are dwarfed by the costs of allowing China' SOE to prosper (Scissors, 2020). US will decouple starting with the industries where China is weaker, like semiconductor market that is dominated by US and US allies companies (Riecke, 2020). This has also geopolitical consequences, because it makes more likely the invasion of Taiwan to ensure access to advanced chips (Kennedy, 2020). Some supply chains will decouple rapidly, others gradually as they will need more investment (Capri, 2020). The strong interconnectedness between US and Chinese economies was worrying for both governments. Washington thought that China,

becoming a WTO member, would be more keen to Western values, but it did not work. Already the Obama administration started to distance from China and the analyses of these years considered inevitable more tariffs and a reduction in bilateral trade and investment flows. The China Center of the US Chamber of Commerce noted already in 2021: “Comprehensive decoupling is no longer viewed as impossible: if the current trajectory of U.S. decoupling policies continues, a complete rupture would in fact be the most likely outcome” (US Chamber of Commerce, 2021).

Some authors find no significant differences as far as globalization is concerned (Cevik, 2023). Deglobalization is slow and with highly heterogeneous trends across countries (Goldberg and Reed, 2023). However, others confirm that *slowbalization* rhymes with friendshoring (Aiyar, Malacrinom, and Presbitero, 2023). The supply chains realignment is fast, with China-US supply chains redirected via other Asia-Pacific economies (Qiu et al., 2023). Decoupling is real and it can be seen from the fact that between 2017 and 2022, China’s share of US imports fell from 22 to 16% and, for strategic goods, this decline is even more massive, from 37 to 23% with the biggest gains made by Vietnam and Taiwan (Freund et al., 2023). In this trade fragmentation scenario every country will lose but the largest losses will be for the countries that rely heavily on global supply chains and trade extensively with the other bloc, like Europe (Attinasi et al., 2023). Bolhuis et al. (2023) found permanent losses for the world economy on the order of 2% to 3%, with low-income countries losing more than 4% of GDP (2023, p. 42). For Europe this would imply not only a negative effect on growth with also inflationary effects (Clancy et al., 2024).

To introduce the political dimension of the new trade strategies of the blocs, we can note that trade restrictions were not the result of lobbying efforts by specific industries, they were decided top-down by the US government based on concerns about the increase in China military spending (Goldberg and Reed, 2023). Indeed, data show that the industrial strength of China is already formidable, from IA to drones, from advanced robotics to smart materials<sup>1</sup>. Tariffs alone cannot develop the related domestic sector: long term industrial policies are needed. Now, already after 2008, we have seen the return of industrial policy in the US, the EU and China. Until now, to be successful, industrial policies had to be export-oriented (Cherif and Hasanov, 2024) but this is difficult in the present deglobalizing situation. The US CHIPS and Science Act is an example of the new era industrial policy: from one side it aims at rapidly developing the sector at home, from the other, it tries to hamper the development of the sector in the other bloc. In fact, it is explicitly aimed at attacking China’s economy. The Biden administration itself stated that it will lower costs, create jobs, strengthen supply chains, and counter China<sup>2</sup>. Hence the surge of the ‘plus one’ model of manufacturing, i.e. moving part of the production outside China (Mercurio, 2024), contemplating even a ‘China plus many world’ (Lazard, 2024). The State-led huge investment flow is also worsening the Chinese overcapacity with an increase in the export. For instance, China’s solar panel exports more than doubled from 2019 to 2023 and now have the EU as their main destination market, accounting for over 40% of sales (Bank of Italy, 2024, p. 8). This will push for higher tariffs against Chinese goods everywhere.

In this scenario of a bitter confrontation between blocs, they will try to leverage on their strong points. China has a huge industrial base and no imperialist past. The US has a more advanced financial system and a more politically compact bloc (Wolf, 2023). They will start from there.

### 3. *The military dimension*

*War is nothing but the continuation of policy with other mean – Carl von Clausewitz*

#### 3.1 General aspects of military economics

Economic reflections on military aspects are old as war itself, if any because war is a very expensive business. Economic analyses concern military expenses (just remember the famous 1940 pamphlet by Keynes “How to pay for the war”) as well as motivations behind the conflict (for instance using game theory). Of this wide literature we will discuss topics that are of interest for the present situation.

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<sup>1</sup> See the data at the ASPI website: <https://www.aspi.org.au/report/critical-technology-tracker>.

<sup>2</sup> <https://www.whitehouse.gov/briefing-room/statements-releases/2022/08/09/fact-sheet-chips-and-science-act-will-lower-costs-create-jobs-strengthen-supply-chains-and-counter-china/>.

The first point is the very definition of military expenses. It is obvious that the bigger the national military budget, the mightier is the armed forces of the country. Military budget is a sensible information and this is why military expenses are difficult to define. From one side, countries are not eager to let their rivals know about it, from the other, military expenses boundaries are difficult to define: “There are no clear limits to the functions of the military. Is civil defense such a function? Do pensions to veterans belong here? What is the difference between a well-armed police force and lightly armed infantry? Is it the function of the military to provide for meteorological services, air traffic control, etc. as is the case in many countries? Is disaster relief something military? Is military aid to distant countries helpful for the national military purpose?” (Brzoska, 1995, pp. 49-50). For all these difficulties, general trends are sufficiently clear. The collapse of the Soviet bloc had determined a reduction in military expenses: “In the 1980s, defense spending as a percent of gross domestic product (GDP) was 4.5%; by 2000, it had fallen to 2.5%” (Sandler and Hartley, 2007, p. 609). Only in the last years the trend has been inverted and now the two blocs are rapidly expanding their military expenses and not only in the West. For instance, at the end of 2022, Japan’s government published its first National Security Strategy setting a target of 2% of the GDP on defense expenses (Kavanagh, 2023). This also because, before 2022, the conflicts fought between Western nations and other countries were in the field of so called “asymmetric warfare”, where Western armed forces did not face a traditional armed enemy but terrorist groups, hence efforts in terms of soldiers and resources were limited. On the contrary, the conflict in Ukraine is a classical attrition war, with hundreds of thousands of troops on the ground and a continuous massive destruction of military equipment. For instance, it has been calculated that Russia has lost around 3,000 battle tanks since launching its full-scale war on Ukraine (IISS, 2024, p. 8). The war in Ukraine has totally changed the scale of military equipment industrial base needed, if we think that the US in the last years were only building a dozen of tanks per month. The second point, as far as military expenses are concerned, is that US remains by far on top, having a budget that is bigger than those of the successive 15 countries, maintaining a technological leadership in most fields, although for instance, lagging in the hypersonic technology (Luckenbaugh, 2024). Expanding military investment is good for the economy as far as it allows national firm to keep a technological hedge on their competitors. It is a sector where concentration is very strong and the biggest US firms, such as Boeing, Lockheed Martin and Northrop Grumman, receive huge contracts internally and abroad. The role of the sector in keeping the economy afloat can explain why, after 2022, despite multiple rounds of international sanctions, Russia’s economy proved resilient outperforming expectations. It is also interesting to point out that, sensing the new situation and the possibility of future Ukraine-like conflicts, Moscow also streamlined its industrial military organization, transferring main enterprises and research centers to the Rostec State corporation to drive their modernization (IISS, 2024, p. 176).

The second topic, that is half economic and half political, is recruitment. As the etymology indicates, what soldiers of every epoch have in common is that they must be recruited and paid. However, after the demise of the draft, Western youngster decision to become soldiers was not connected mainly to pay but to more complex motivations, although economic reasons also matter<sup>3</sup>. Low unemployment and disaffection for US foreign policy explain why the Pentagon has been confronting a recruitment crisis. Given the demographic downtrend in countries of both blocs, new technologies are needed to increase military productivity.

The third issue is the economic analysis of the rationality of war. Also this is hardly a new topic. The problem is that war is treated by economists as every other economic issue: a constrained maximization problem. To do so, countries, government, even international alliances are treated as they were individuals. For instance: “Theoretical research in military alliances closely parallels research in the theory of public goods. For over twenty-five years, economists have made significant contributions to our understanding of military alliances by modelling the behavior of individual allies as rational members of a collective that provides a public good” (Murdoch, 1995, p. 106; see also Grossman, 1995 and Sandler and Arce, 2007). Therefore, these models assume that nations or terrorist groups are like individuals as far as the decisions are concerned, i.e. their preferences can be aggregated, while we know, at least since the Arrow Theorem, that this is not the case. For instance, in 1948, Helmer, a logician at the Rand Corporation, observed that it is useless to apply game theory to international relations (a common practice during the Cold War), because United States and USSR were not individuals but a set of very complex institutions, and asked the then researcher Arrow in what sense it could be said that a community had a utility function (Sen, 2002, p. 330).

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<sup>3</sup> <https://www.goarmy.com/explore-the-army/reasons-to-join>.

Ironically, Arrow answered by proposing the use of a social welfare function. He could not foresee that his own theorem would soon disprove this idea. In a nutshell, mainstream economic theory does not find interesting conclusions about why humankind goes to war as economics is based on an individualistic outlook. A more interesting approach is using more radical approach, that, for instance consider wars resulting “from competition between imperialist States for the sharing of foreign markets, in a development stage of capitalism characterized by international flows of capital, because of the fall of the profit rate as well as domestic investment opportunities” (Coulomb and Bellais, 2008). Whatever is the theory used to explain conflicts, the war in Ukraine has shown that even the US need to rapidly and drastically change its military industrial base. We will now discuss this topic.

### 3.2 The US military industrial base and the military-entertainment complex

*War is a racket. It always has been. It is possibly the oldest, easily the most profitable, surely the most vicious – Smedley Butler*

The US military-industrial complex is the biggest and more sophisticated industry worldwide. Since the famous Eisenhower speech at the end of his presidency, it has been a topic also for politics. Since the 1940s it has played a major role in the US economy and in funding new research that has generated completely new technologies. It still makes around 11% of the GDP (Palley, 2024). It has also a political and social key importance to decide priorities in terms of public investment but also domestic and foreign policies of the US and hence of the Western bloc. Problems during World War II, such as the disruption of shipments of critical wartime materials, pushed US government to create a huge defense industrial base (DIB) aptly synthesized as follows “The DIB Sector consists of government and private sector organizations that can support military operations directly; perform R&D; design, manufacture, and integrate systems; and maintain depots and service military weapon systems, subsystems, components, subcomponents, or parts—all of which are intended to satisfy U.S. military national defense requirements” (DoD, 2010). From the legal point of view, the Defense Production Act of 1950 defined the DIB as made only by “domestic sources” (i.e. factories and research centers from the US or Canada). The DIB has contracted significantly after the 1990s, but still in 2023 it employed 1.1 million, around 60,000 firms and had contracts for around 400 billion (Nicastro, 2023).

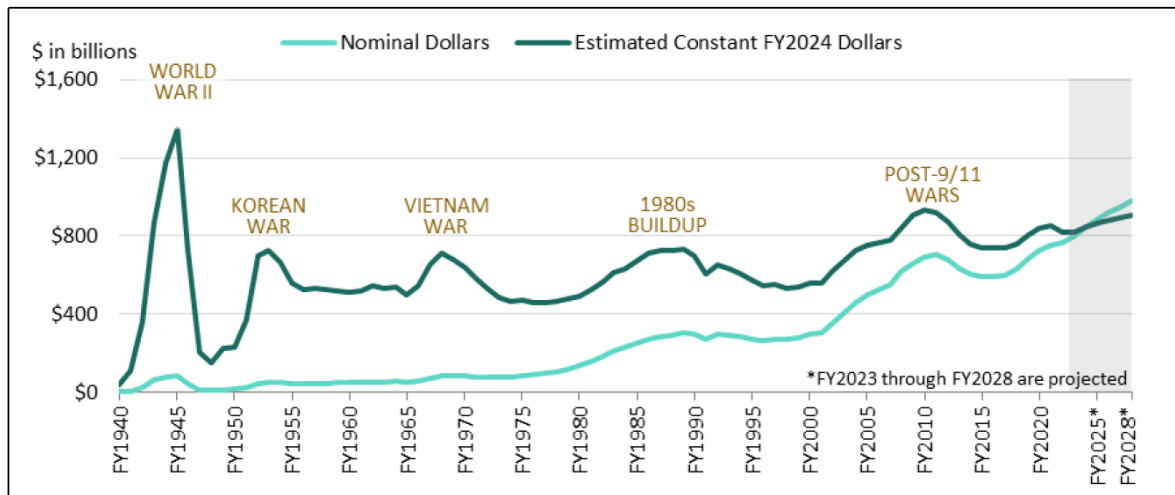
It is interesting to point out that, as with every other public services, the DIB is almost entirely private: “DIB assets are, with few exceptions, owned and operated by the private sector” (DoD, 2007). Moreover, the DIB has been influenced by the main trends of industrial production as a whole, like offshoring, a trend that has now been reversed into friendshoring, a term that can be vague but that in the case of the DIB is clearly defined, because the US has developed a National Technology Industrial Base as the engine for the DIB and the more recent US laws established that this comprises the industrial bases of the United States and three of its closest historical allies, Australia, Canada, and the United Kingdom (Peters and Nicastro, 2023). Already before the war in Ukraine, it was clear that competition with China but also Russia would have to be faced head on. Paradoxically, globalization has been helping the US enemies: “Adversaries and allies have begun to achieve parity in defense capabilities, and in some cases are moving beyond the United States, while the commercial marketplace is leading in innovation in many areas of relevance to national security. The privatization of research and development (R&D) has led to a technological leveling on a global scale” (Greenwalt, 2019). This outcome is the end of a long trajectory. In the 1960s and in the 1970s, US military technology made important step forward, fearing the great advantage of the Warsaw Pact in traditional weapons, such as tanks and artillery. The Reagan “star wars”, more propaganda than actual weapons, were the final act of this era. Then, the Soviet Union collapsed, and military technology stalled. With no serious enemies at the horizon, the military industry developed along the same lines of all the others: expanding its supply chain internationally. The feeling that the end of the Cold War brought to a stagnation in the technological and industrial development of the DIB was widespread. However, in the heyday of globalization, the solution was to be found in a different supply chain management that were strictly controlled by the US with China and other emerging economies as junior partners. Events like the blitzkrieg of Moscow against Georgia, the victory of the Syrian government in the civil war, the growing assertiveness of China in the Pacific Ocean have shown that world was entering a new geopolitical stage even before the war in Ukraine. Now, it is even too clear. Although for some months, Western media had presented the Russian military machine as pathetic and ready to collapse thanks to the sanctions, the situation on the ground has evolved differently. It is now clear that NATO countries are industrially unprepared to back up

Ukraine and they are forced to deplete their arsenal to a minimum only to ensure a tiny hope of survival for Kyiv. The fact that the DIB is heavily dependent on China was already a headache, now it is a nightmare (Williams, 2024). It is clear that the DIB must be reshaped to completely decouple it from the Eastern bloc. As the Pentagon itself noted: “While many practitioners of supply chain management have long understood the global dependencies—and associated risks—of our supply chains, it took a pandemic and the resultant supply disruptions to fully expose the national security implications associated with these supply chain vulnerabilities” (DoD, 2023a). The same document states that US adversaries are using supply chains as a competitive tool against Washington. The paradoxical situation is that, in the last decades, DIB relied and benefited from free trade while now, to defend the role of the US in the world economy, free trade is no more functional and China is accused of manipulating prices, currencies and other conditions of trade (The White House, 2022).

The need for a strong overhaul of the DIB has pushed the Pentagon to prepare the first National Defense Industrial Strategy in 2023. It starts from the recognition that economic security and national security reinforce each other. In other words, the future of the DIB is in peril because of the decay of the manufacturing sector of the country. The document highlights that, since 1985, the DIB has lost almost 2 million of employees (-63.5%) in line with the general reduction of US industrial workers. This means that the Pentagon is forced to tap foreign markets to fill the gap but many critical markets are dominated by China. The DIB needs an alternative that is not there. This is why, if the diagnosis is clear, the prognosis is confused. At any rate, the document concludes for: “a call to both the public and private sectors for focused, dedicated efforts to build and secure the industrial capability and capacity necessary to ensure our military has the materiel available to deter our potential adversaries, and if necessary, defeat them in battle. This call to action may seem a great cost, but the consequences of inaction or failure are far greater” (DoD, 2023b, p. 51). Onshoring and friendshoring are considered the best options.

Reshaping the DIB will be costly. Now the starting point is that military expenses are already very high. If we look at the US defense expenses in real term, they never decreased after the Korean War although with ups and downs:

Figure 1. U.S. Defense Outlays, FY1940-FY2028 (Projected)



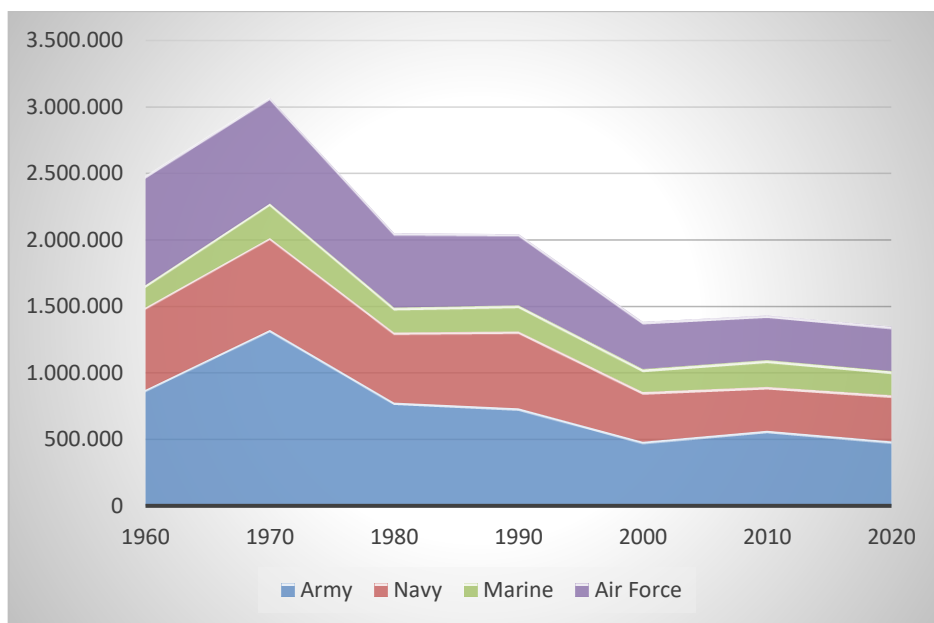
(Figure 3: US military expenses 1940-2028; source: Nicastro, 2023)

After the Cold War, the US government encouraged military suppliers to consolidate<sup>4</sup>. This was meant to produce a small amount of very high tech equipment to fight the “war on terror”. The war in Ukraine as changed all that. Now it is clear that, besides high tech gadgets, armed forces also need huge quantities of old style equipment and the DIB is unprepared for this task. A typical example of the fact that the Pentagon has been taken off guard is given by the counter-insurgency manual prepared in 2006 (Department of the Army, 2006). It was based on the idea that the US had no conventional enemies, and therefore conventional warfare

<sup>4</sup> We do not enter in the quarrel on the fact that big contractors make huge profits on military supplies (for instance, the DOD’s Inspector General has found numerous instances of overcharging: Nicastro, 2023). This is obvious and something that is not specific of the DIB. Always private firms overcharge the State. If any, military suppliers must comply with by far stricter rules.

was not something to invest into, while the focus was asymmetric wars against small rebel forces, while “after the Russian invasion of Ukraine in 2014, it was clear that the U.S. was facing a fundamentally different world, in which the country’s foremost adversaries were not inferior rogue states but major powers fielding formidable military capabilities” (O’Rourke, 2024). China, Russia and Iran are considered the biggest threat and this explains why the NATO has undertaken the biggest reinforcement of its collective defense in a generation (NATO, 2024). The fact that Western bloc cannot rapidly rebalance ordinary weaponry production gives once again importance to atomic weapons. In fact, in the last NATO declaration, the alliance states: “Nuclear deterrence is the cornerstone of Alliance security” (Ibidem).

Besides a huge increase in the army production, the new situation also needs a lot more soldiers. Let’s start with the US situation:



(Figure 4: US armed forces personnel from 1960 to 2020; source: US Department of Defense<sup>5</sup>)

Data show that military personnel have fallen two thirds from their peak during the Vietnam War in 1968; after 2000, troop levels have remained relatively stable, confirming the nature of the wars the US fought at the time. As we noted, since Nixon abolished the draft, the US military has competed with all other employers in the market and typically the ease of recruitment is counter-cyclical, i.e. when unemployment drops, young people tend to avoid the military. However, this is not the only factor that counts. In 2018, for the first time in almost fifteen years, the Pentagon failed its recruitment targets and this has prompted analysts and military leaders to ask themselves some questions. This is striking, given that the salaries of the armed forces are competitive, especially considering that enrolling in the armed forces is the only way for the poor to access health care or college. The causes of the failure, beyond the ups and downs of the labour market, are profound and affect the entire American society. First, there is a problem of physical fitness. One in three American adults and one in six children are obese; if we add those who are simply overweight, they are the majority of the population. Already in 2010, 47% of male candidates and 59% of female candidates failed the physical test to enter the armed forces. Despite this selection, the army now spends billions of dollars each year to treat obesity in its soldiers. Moreover, many young people cannot serve in the army because they have a criminal record, addiction problems or a too low level of education. Putting all these factors together, the Pentagon estimates that almost 80% of young people do not qualify for the armed forces (Novelly, 2022). Like any company, the Pentagon has made every effort to attract potential customers with unprecedented bonuses, to no avail. In recent years, the productivity of the Pentagon recruiters has dropped significantly and this means that the Pentagon must employ thousands of officers to find soldiers instead of preparing and fighting wars. Although technology has helped, with the military now employing dozens of virtual recruiting stations with some success, the problem remains. Youngster from a minority background show a widespread disaffection toward US army for social and political issues (just think at the BLM movement). There is also a family-linked reason. In 1995, 40% of young people had a parent who served in

<sup>5</sup> Data from the website: <https://usafacts.org/articles/how-many-people-are-in-the-us-military-a-demographic-overview/>.



the military, by 2022, just 12% (Vergun, 2023). The situation is serious. In 2023, notwithstanding the coming of the new Cold War, the military services collectively missed recruiting goals by about 41,000 recruits.

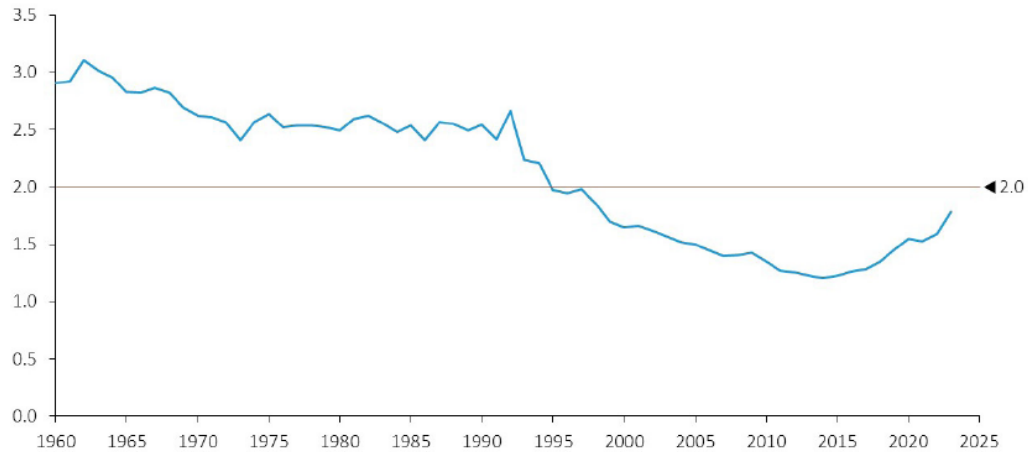
If the situation for the Pentagon is not easy as far as the DIB and new soldiers are concerned, the situation is by far better in the realm of propaganda. In the US, the connection between Hollywood and the armed forces is organic and long-lasting so that it has been called the *military-entertainment complex*, that is added to the traditional military-industrial complex (Lenoir, 2000). The Department of Defense began its collaboration with Hollywood when the film industry was born, initially with the production of documentaries and real war films, and later with a full-scale collaboration on any kind of product. As happened in many fields, it was the World War II that forced the country to professionalize its action. The Office of War Information, which followed everything concerning news about the war, had a unit dedicated to Hollywood (the Bureau of Motion Pictures) that had the task of viewing scripts and filmed material, first of all to avoid giving sensible information to the enemy, secondly to avoid the “wrong” representation of the situation (soldiers who were too aggressive or lazy, citizens that were against the war, etc.). Once the war was over, the need for propaganda became even more pressing, although its objective and methods changed, a subtler and indirect propaganda was needed. It was a good deal for both. War or science fiction films required very specific skills and also enormous production costs that were greatly reduced resorting to the help of the Pentagon. Another piece of the puzzle is made by think tanks. They are funded although not explicitly owned by the defense industry and they play an important role in shaping the public opinion (Palley, 2024). Among all these organizations there is also a continuous revolving doors mechanism that makes their general outlook and aims aligned. The propaganda machine is the US weapon by far more effective and more difficult to replicate. In the modern era, the effectiveness of this machine is assessed especially on the social media and on internet more generally. This has pushed the Pentagon to enter in a strict partnership with big techs (Coveri et al., 2024).

### 3.3 The European military base

European countries have been fighting each other for centuries. The end of World War II was also the end of independent European powers. From 1945 on, European countries can only be allies of world powers, such as US and USSR during the Cold War. This geopolitical reality was at the root of the process of European integration with the strong support of the US. In 1950, with the start of Korean war, Monnet and others proposed the creation of a European army to be placed under a single military and political European authority but France refused (Walton, 1953). No similar plans were proposed afterwards. Only in 2003 a European security and defence policy has been proposed but in the context of a politically weak set-up. In fact, after 70 years, integration has produced results in terms of market integration, especially financial markets, but politically, European countries did not achieve much. European institutions do not have any real political weight globally neither European States show any coordination on their foreign policy. In fact, they sided differently many times even recently, as in Libya and Syria. A European army does not exist and it is not likely to be created any soon. Although they are all NATO members and accommodating US allies, also on Ukraine they had different stances and behaviors. In terms of quantity, EU defense is not bad. There are 1.7 million Europeans in uniform of whom around 200,000 ready to fight. However, the experience on the ground has not been positive. Twenty years ago, it was noted: “For example, the British took 70 days to deploy a force of 46,000 (of which 25,000 were combat troops) to the Gulf and would have difficulty sustaining a peacemaking force of around 15,000 in southern Iraq (current estimate 10,000). Out of a standing force of some 270,000 the German Army is under intense pressure deploying between 7-10,000 troops beyond the German border. France could probably have deployed no more than 15,000 combat troops to the Gulf” (Lindley-French and Algeri, 2004). With the end of the Cold War, European countries considered military expenses a useless legacy of old times (see the following figure).

## EU Member States' defence expenditure

% of GDP



(Figure 5: EU defense expenditure as a percentage of GDP from 1960 to 2025; source: Draghi 2024a, p. 46).

Moreover, the Maastricht Treaty set-up was structurally against public investment, including military expenses. Germany, the economic powerhouse of the Old Continent and its political most influential State, thought that it could manage to navigate among powers, getting oil and gas from Russia, military protection from the US and cheap goods from China. This has worsened the technological European dependency and its political subordination (Cerra and Crespi, 2021).

On the eve of the outbreak of war in Ukraine, the situation of European military base was difficult. Military industry was growing but not in Europe: “The defense industry worldwide has grown at a tremendous pace in recent years, with revenues of the 100 largest firms globally increasing by 36 percent in the five years to 2019... Yet revenues among European defense companies have stagnated over the same period, and the region’s biggest players have lost market share to US and Chinese counterparts” (Wille et al., 2021). The problem was the same faced by European firms in other industries: “The fragmented nature of the industry also weakens the ability of European companies to compete with mega-prime contractors in the US, built up through an ongoing series of mergers in recent decades and supported by substantial increases in US defense spending – while European defense industry revenue is lagging behind: European defense companies’ market share among the top 100 global players declined from around 30 percent in 2002 to less than 20 percent in 2019” (Ibidem). The proposed solution, the creation of pan-European firms, has not worked. We do not have European banks, European airlines, European military suppliers.

The war in Ukraine has shown in all its dire reality the political and military unpreparedness of the European countries. For instance: “78% of the defence acquisitions by EU Member States between the start of Russia’s war of aggression and June 2023 were made from outside the EU, with the US alone representing 63%” (EC, 2024). In other words, the European military industry totally relies on other countries to survive. EU institutions are debating the strengthening of the European defense technological and industrial base but in the best case scenario it will have around 500,000 employees, less than half the US DIB that, according to the Pentagon, is already strongly understaffed. As for investment, to have a significant impact, the European DIB should receive at least 100 billion a year (Barigazzi et al., 2024) but it is not clear where they will come from. Moreover, the EU strategy aims at streamlining the industry and reducing import, but, for now, this is not happening: “Europe has fallen short of producing and delivering the promised one million shells by March. It is estimated that only by 2026 will Europe be able to produce enough ammunition for Ukraine. UK think tank RUSI estimates that Russia has been able to increase its production of shells to over 2 million per year, giving it an advantage for 2024 and possibly 2025... Newer reported NATO intelligence estimates suggest that Russia produces even 3 million shells per year, almost three times as much as the US and Europe combined” (Wolff, 2024). When the EU published its (first) European Defence Industrial Strategy on March 2024, all the experts honestly noted that it is very difficult to implement this strategy because of the lack of funding (Fiott, 2024). This means that even if Brussels aims at reducing its dependency from the US military industry, at least for the coming years more weapons will determine more import from the US (Kayali et al., 2024). The starting point is very unfavorable, given that the EU combined military expenses is

not even a third of the US military budget. Moreover, many EU member States will be forced to cut public investment due to the rules of the Stability and Growth Pact and even if they will receive an exemption for military investment, they will have to make painful cuts in the welfare state, reducing the political appetite for the defense strategy. EU institutions are aware of it and the European Commission, in order to make the strategy work, propose this solution: “To do so, defence considerations need to be mainstreamed in EU policies” (EC, 2024). This will be even more difficult than the industrial side, given that the European military-entertainment complex is simply not there. The tradition of war movies did not take root in Europe, neither the film-makers are so connected to the defense ministers as in the US. After the outbreak of the war in Ukraine, the EU seemed a ship of castaways adrift in the storm of the new global geopolitical situation. A radical change is needed, and we have an example on how to do it.

### 3.4 The example of the World War II

*If the campaign is protracted, the resources of the State will not be equal to the strain – Sun Tzu*

It is painful to realize that the most complex and extraordinary mobilization of the humankind has been a conflict. In fact, the World War II has seen the biggest and fastest effort to channel the whole resources of the entire planet for a single goal, although this goal was the annihilation of other countries. The US economy was rapidly and completely transformed. For instance, in 1939 annual aircraft production for the US military was less than 3,000 planes. By the end of the war US factories had produced 300,000 planes, an increase of production of around twenty times. Before Pearl Harbor, US economy was still very weak due to the 1929 great crisis. In 1939 unemployment rate was above 17% and the US army was outranked even by that of Romania. Then: “America’s response to World War II was the most extraordinary mobilization of an idle economy in the history of the world. During the war 17 million new civilian jobs were created, industrial productivity increased by 96 percent, and corporate profits after taxes doubled. The government expenditures helped bring about the business recovery that had eluded the New Deal. War needs directly consumed over one-third of the output of industry, but the expanded productivity ensured a remarkable supply of consumer goods to the people as well. America was the only that saw an expansion of consumer goods despite wartime rationing” (Goodwin, 1992). It is interesting to note that profits were high, even if the role of the State in the economy was at its peak (the government was buying half of all the goods produced in the country and it imposed wage and price controls, more taxes, good rationing, etc.); at the same time, although profits were high, economic equality was also strong due to the social solidarity made possible by the war itself. US had the best of both world: a remarkable innovative spirit with the combined effort of public and private resources (just think about Manhattan Project) but with equality and solidarity. No unemployment, no inflation, no idle resources. On the contrary, production exploded, thanks to war production: “Manufacturing, mining, and construction industries doubled their production between 1939 and 1944. The overall production capacity of the nation increased by 50 percent, most of it financed by the government” (Morgan, 1994). During the war, almost 20 million of jobs have been created and worker productivity grew by 25 percent while 16 million US citizens were directly fighting the war. A last interesting point is the bureaucratic organization of the war effort, that was huge and complex. To manage the enormous and quick transformation of the US industrial machine for the war, Roosevelt created the War Production Board. In 1942–1945, the Board supervised the production of the equivalent of around 2.5 trillion dollar of today worth of weapons and supplies (PBS, 2024).

The example of the US in the World War II could be useful for the EU today. It is possible to transform the economy, creating new jobs, increasing productivity, unleashing innovation preserving democracy and equality. Since 2017, the EU has created new instruments and mechanisms to manage the development of European defense industry. This plethora of structures and projects have been considered a classical example of a EU bureaucratic monster (Bernardi and Iagulli, 2024). However, the World War II example has shown that even a very complex public structure can deliver if the political will and the public consensus are there. What we do not endorse in the example is the war itself that should be substituted with something more fruitful.

#### *4. Conclusions: intricacies of the China-United States relationship and how to prevent a new world war*

*There are levels of survival that we are prepared to accept. However, the relevant issue is whether or not you are ready to accept the responsibility for the death of every human being in this world – Larry and Andy Wachowski (Matrix Reloaded)*

*Most of the valuable things in life have very little to do with international affairs. But there is one necessary condition for everything good: peace – John M. Keynes*

This paper has investigated the scenarios for globalization in the era of the new Cold War that is reshaping international relations in both trade and geopolitical dimensions. World trade, for decades considered the growth engine, is declining and protectionism is on the rise. The two blocs will try to undermine the other, using tariffs, sanctions and every other measure. The fragmentation of trade will also affect financial markets and currencies. Every bloc will try to weaken the currencies of the other as well as its ability to tap the financial markets to fund its economy, especially its military efforts. The blocs are also recruiting allies or, at least, convincing countries to stay neutral. In this game China can exploit its ability to rapidly build infrastructures and delivering goods; moreover, it enjoys a record of no colonial past. United States has a significant dominance in finance and credit, areas that allow for a significant and growing flow of capital for the development of innovation, technology and productivity. It is difficult to predict which bloc will be able to exploit more effectively its strong points and other's bloc weaknesses. For instance, US public debts has grown immensely in the last years, this could trigger a run to sell US government bonds or a collapse of the dollar. On the other side, in a tenser geopolitical situation, the flight to dollar denominated assets can also happen.

Politically, China has the advantage that big firms are always aligned to the governments goals, while in the Western bloc is normally the reverse, with the government in the pockets of large corporations. However, in the new situation, the relationship between government and big firms will change, and the Western bloc can enjoy a more effective institutional set-up, based on a consolidated liberal democracy, provided that government will succeed in regaining the upper hand. History shows that the war outcome depends on the strength of the productive sector and of the people determination of suffering whatever pain to win a just war. This was the case for democratic countries as well as for more autocratic regimes. Ultimately, the war is won by the country that has the legitimation of its citizens. In the West, societies are more and more unequal and the perception that the State is helping the rich is widespread (UNDP, 2024). In this situation, sending people to the front is tantamount to ask ordinary citizens to die for the profits of ultra-rich, something that will not stand much as a case for a popular war. The Eastern bloc has the political and moral advantage of presenting the war as caused by old colonial powers run by white wealthy elite ready to defend their privileges tooth and nails. The majority of the humankind, made by the masses in low and medium income countries, is likely to be benevolent or at least less unfavorable towards the Eastern bloc narration. For sure the Hollywood propaganda machine will try everything to rebalance the situation.

World is at an historical crossroads. The new Cold War has already started, regional conflicts are punctuating world situation as before 1914, but a new world war is not inevitable. We discuss three measures that can help to prevent the catastrophe, three policies that the blocs should get rid of.

The first one is a trade war. Using tariffs and other measures to prevent the other bloc to export entails a logic of escalation. From one sector to another, from 10 to 20 to 30%, measures will multiply and worsen, and retaliation would be inevitable. It is true that China has a structural large current account surplus; by contrast, US is structurally dependent on foreign trade in its current account balance and constantly needs positive capital flows to compensate for the current account deficit. However, this is not something that can be cured with a decoupling of US and China. US will import from other countries and China will export to other ones. An escalating trade war would put in the foreground technological self-sufficiency and the defense of strategic markets even with military means. Already at the last CCP congress, in October 2022, the party leaders put emphasis on security, not limited to military aspects, but rather to the defense of the economy from geopolitical variables (Bush et al 2022; Nouwens and Tong, 2022). Closing Western markets to China would force Beijing to sell more to other countries that are important markets for Western economies too. This would bring to a reenactment of the colonial wars but in the epoch of nuclear weapons.

The situation of the US is different. The US trade balance deficit is linked to the use of the dollar as an international reserve currency and to capital flows (Siripurapu and Berman, 2023). The exorbitant privilege of the dollar (Eichengreen, 2011) cannot last forever also because the weaponization of the dollar will make its use more controversial, making inevitable a stronger use of other currencies (Lew, 2016; Farrell and Newman, 2019). Moreover, the role of the dollar also imposes considerable obligations for the US (Gourinchas and Rey, 2010), whose institutions must act, in time of crisis, as the global lender of last resort and must keep its markets always open for business (Gopinath and Stein, 2021). The US cannot play this role anymore. All in all, China and US have complementary problems and putting these problems on the other bloc's shoulder would worsen trade wars and all kind of conflicts. The effective alternative would be for the US, China and other major world economies to organize a new global trade and capital regime, based on ideas similar to those originally proposed by Keynes at Bretton Woods, i.e. an architecture of international relations designed to absorb global imbalances and distribute their consequences among the major economies, a framework fair to everyone. The cure to the growing conflict is not escalating a trade war but a gradual rebalancing, based on higher wages in China and a weaker dollar. China invests too much, US and EU invest too little. Competition should not aim at reducing trade and investment flows but at fostering technological innovation. Cold War or not, the world needs a transition towards a carbon neutral economy. Finding ways to ensure this key target with new technologies, a new organization of the industries, new consumption styles and so on is the competition both blocs would need. Trade politics should be based on the need for a carbon neutral future. Just to make an example, goods that embody technologies able to reduce pollution, could be granted an exemption from trade tariff and taxes, wherever is located their producer. The war against climate change should become our last world war.

The second one is blocking military provocations. The World War I shows that even an historical accident can trigger a global conflict if the situation is tense enough. The problem is not only a direct confrontation between US and China or Russia, the problem is that a conflict can arise indirectly. For instance, in Africa the Sahel alliance, made by Mali, Niger and Burkina Faso, is substituting French military advisors with Russian ones, with inevitable retaliation by Western countries. By the same token, the conflict between Israel and Iran can escalate to a regional war where the two blocs would participate not only indirectly. In this epoch, local wars can easily become the first step towards a wider conflict. The blocs must prevent any provocation and force their allies to do the same. For instance, US could force Israel to pull out from Gaza threatening to stop military helps to Tel Aviv. Russia could do the same to restrain Iran.

The third and final is blocking propaganda that is a key component of the war effort. A State wins a war relying on a stronger military and industrial power, better organization, and higher morale among its troops. Even more important is the morale of its people. No government can win a war that its population does not accept at least passively. For this reason, war propaganda is as old as war itself and has evolved with human society. Works such as Bayeux tapestry, an account of the Norman victories in England, or the bas-reliefs of Behistun that exalt the deeds of the Persian king Darius, besides being immortal works of art, are equally immortal forms of propaganda. In the XX century propaganda became industrialized and marketed as any other commodity. In this, as in many other fields, the World War I changed the landscape. The conflict saw an uninterrupted series of battles lasting months or years, with daily carnage on a scale without historical precedent. Not only did industrial production, especially war production, went from craftsmanship to large-scale modern industry, but every other activity connected to war events conformed to the new era, including propaganda. Propaganda apparatuses structured as army divisions or industrial departments began to prepare large-scale programs. An entire scientific and technological industry was developed to modernize propaganda. The outcome was so effective that American big capitalists, with world-wide production scales already in mind, seized the opportunity to make it a central element of the modern economic landscape. If young people could be convinced to go and be killed by the Germans, thousands of miles from home, they could be convinced to buy a car or a tv-set. This was the origin of modern advertising and marketing.

Now, the main goal of propaganda, or public relationship, as it was called after the World War II, when propaganda became a term too connected to authoritarian regimes, is not spreading information, it is aimed at making sense of the life of the customer, to whom is suggested that he/she cannot do without that particular product, being it a smartphone or a war. Hence the focus on emotional and non-informative aspects to influence choices, based on the assumption that, as a famous expert on the issue said, "you can't assume that people know what they want" (Packard, 1957, p. 14). To this we should add the need of Western powers to justify their empires using racist ideologies. After all, what was the justification of having

colonized Africa or Asia? To have enslaved millions of people, stealing their land and natural resources? Lacking any justification, the solution the Western élite found was racism: African or Asian people, just like the pre-Columbian people, were genetically inferior. Scientific proofs were used to demonstrate these ideologies, for instance using the IQ tests (on all this issue, see Gould, 1996). Even progressive politicians could not conceive that all human beings are equal. Racism, the idea that a particular ethnic group is inferior/superior to others, was indeed the norm in the Western world even among progressive leaders. Lincoln himself, the US president who courageously decided to fight a civil war to abolish slavery, wrote in 1859: “Negro equality! Fudge! How long, in the Government of a God great enough to make and rule the universe, shall there continue knaves to vend, and fools to quip, so low a piece of demagogism as this” (cit. in Gould, 1996, p. 66). Racist ideas mixed with similar ideas towards workers and women. Few intellectuals before World War I (Bertrand Russell and the Marxists were exceptions) thought that workers, or women or colonial people were capable of performing demanding social or political roles that were the prerogative of the upper classes (Flynn, 2019, p. 958).

Racism, in all its variants, was an arsenal ready to be used for propaganda depending on the circumstances. If the relation with a country became to worsen, propaganda was immediately put to work to represent it as inhabited by sub-human barbarians, a threat to human civilization. If, after some years, alliances were changed, old allies were presented as the actual barbarians and vice versa (Orwell’s *1984* is an excellent description of these practices). All these facts are well known in their horrible outcome. We can see propaganda methods resurfacing in the XXI century. The “war on terror” has been based on the idea that Muslims were a threat to the West. After 2022, the new threat to the West is the Eastern bloc. China, Russia, as before Iran, are presented as led by irrational and paranoid politicians, their armed forces are presented as inept and corrupt, their people as ignorant and manipulated and so on, something that was replicated in the Eastern bloc already before the war (GEC, 2020). The pervasiveness of propaganda is in itself a sign of fact that the blocs are preparing for an all-out confrontation. This is a dangerous path and must be stopped. After the World War I, Germans and their allies were presented as inherently violent and aggressive, their civilization based on war and plunder since the start.



(a British World War I poster against Germany)

Keynes, in *The Economic Consequence of the Peace*, a pamphlet written to criticize the Versailles Treaty, was an example of a British important intellectual ready to put aside his national hate for the Germans to present a more balanced assessment of the situation. He wrote: “Moved by insane delusion and reckless self-regard, the German people overturned the foundations on which we all lived and built. But the spokesmen of the French and British peoples have run the risk of completing the ruin which Germany began, by a peace which, if it is carried into effect, must impair yet further, when it might have restored, the delicate, complicated organisation, already shaken and broken by war, through which alone the European peoples can employ themselves and live” (Keynes, 1919, p. 1). World War II was the result of Western leaders refusing to accept, as Keynes did, that all countries should come together to discuss the future of their relationship on an equal foot.

Nowadays, Russian, Chinese or Iranian governments have their legitimate motivations and goals. They are no more rational or irrational than Western ones, neither their people are better or worse than we are. They have goals, projects and aspirations as we do. We inhabit the same planet and this will not change any soon. A rational and structured discussion on diverging goals of the blocs is the way forward, not hammering the idea that destiny has assigned the planet to a specific people and this destiny must be fulfilled at any cost. To propaganda we should apply the Arabic proverb: “the tree of silence bears the fruit of peace”.

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