

War and Peace. Economic analyses.

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The concepts of conflict and economic warfare have become prevalent in 21st-century news, following Fukuyama¹ announced in 1990 the advent of happy globalization, the rise of democracy, and the gradual end of wars between states. The question of the obsolescence was even raised at the end of the 20th century². However, the thesis of the "end of history" was short-lived, with the permanence of militarism, the power of the military serving particular interests, the endless territorial wars, latent international terrorism, and looming ecological crises. This thesis did not last a single decade, even though neoclassical thinking sought to maintain its relevance in it within a more distant time frame.

Throughout the history of economic thought, very few formalized analyses have incorporated the issue of armed conflicts between states, except when armed conflicts erupt in the news, periods during which economists measure the short-, medium-, and long-term costs of an armed conflict or economic war³. Broadly speaking, there are three main economic conceptions of war among economists. While mercantilists emphasize the state's pursuit of power, thus referring to the opportunities presented by economic and military wars, liberal thinking views the market economy as a factor for peace (echoing Montesquieu's famous phrase that "the natural effect of commerce is to bring about peace"), while Marxist analysis accuses capitalism of developing class struggle and leading, particularly through colonization, to imperialism⁴, a source of armed conflicts and exploitation of the proletariat.

¹ Fukuyama F. (1993) *The end of history and the last man*, London, Penguin, 1993

² Kaysen, C. (1990), Is war obsolete? *International Security*, Vol.14, n°4

³ Fontanel, J., Tinbergen, J. (1993). *Economistes de la paix*. Presses universitaires de Grenoble. Fontanel, J., Arrow, K., Klein, L., & Sen, A. (2003). *Civilisations, globalisation et guerre*. PUG, Presses Universitaires de Grenoble, Grenoble. Mannergren, J., Björkdahl, A., Buckley-Zistel, S., Kappler, S., Williams, T. (2024) *Peace and the politics of memory*, Manchester University Press.

⁴ Lénine V. (1971), *L'impérialisme, stade suprême du capitalisme*, Editions Sociales, 1971.

Today, a new school of economic thought, deeply concerned with climate change and ecology, questions the capacity of a capitalism, focused solely on individual interest, to take into account the long-term survival of humanity⁵. While the liberal school defends the thesis of lasting peace through free trade and even the end of history, Marxist theorists and alarmist economists predict major international conflicts between and within capitalist countries, which could lead to the collapse of the current free-trade system, but also to very difficult physical, economic, and social conditions for humanity as a whole. The questions that arise today concern:

- First, the pacifist or belligerent power of the market economy;
- Second, the rejection of the theory of the "end of history" and therefore the end of wars;
- Finally, the rise of power struggles between democracies, plutocracies, and autocracies in a globalized market economy in crisis.

1) The market economy: a factor of peace or war?

Today, capitalism shapes the global economy, and its very existence is often presented, following Adam Smith, as a factor of peace. These analyses are often repeated today, without caution, to validate the pacifist effect of an increasingly unequal capitalism. According to 17th- and 19th-century "classical" economists, this implies the condemnation of monopolies, slavery, and colonization for Adam Smith⁶, but also a reference to Ricardo's steady state theory, according to which the Earth's resources will be depleted as a result of their massive use, and to Malthus's law of population for future economic and military conflicts. Today, Adam Smith's famous "invisible hand" has become increasingly visible, as monopolies and oligopolies dominate international trade, democracies are themselves often run by wealthy rulers protecting the financial advantages of their counterparts, and autocracies are proving corrupt, and "power corrupts", but corruption also enables one to seize power. In the United States, leaders have often challenged the "castrating" and "unproductive" role of the state, proposing financial deregulation, privatization of profitable aspects of state services, and a firm stance against a public order that protects their moral and financial "values"⁷,

⁵ Dupuy, J-P. (2004), *Pour un catastrophisme éclairé*, Le Seuil. Lange, G-M, Wodon, Q., Carey, K. (2018) *The Changing Wealth of Nations 2018 ; Building a Sustainable Future*, World Bank, Washington. Brunat, E., Fontanel, J. (2025) *The failure of the theory of "happy globalization" and the return to a mercantilist race for global economic, technological, and civilizational leadership*, "Regional Science Association, India September, hal-05285821

⁶ Smith A. (1776). *An Inquiry into the Nature and Causes of the Wealth of Nations*. London, 1776. London, Methuen and Co., Ltd., ed. Edwin Cannan, Fifth édition, 1904.

⁷ Friedman, D. (1973), *The Machinery of Freedom: A Guide to a Radical Capitalism*, Harper Colophon, New York. Boaz, D. (2025) *The Libertarian Mind. A manifesto for freedom*, Simon & Schuster, February. Thiel, P., Masters, B. (2014), *Zero to one. Notes on startups, or how to build the future*, Virgin Books.

thereby neglecting the collective dimension of humanity in motion⁸. Yet, capitalism generates conflict between economic actors, with the inexorable increase in economic inequalities of income and wealth, even as the Earth as a whole suffers from global warming, an ocean of plastics, and pollution affecting all natural resources.

Capitalism's resilience to wars and economic crises demonstrates its capacity for adaptation, while international finance and the pursuit of maximum profit transform the system of wealth production and generate inequalities that are conducive to conflict, revolution, and war⁹. While the economic system has regularly undergone significant epistemological leaps—with industrialization, electricity, national and international regulation, the rise of the internet, and now artificial intelligence—it also faces the establishment of collective interests today and tomorrow. Thus, the modern way of life is leading to global warming, the gradual depletion of natural resources, and undoubtedly a secular recession for which modern man is unprepared. Territorial wars, conflicts linked to actual or deliberate shortages in the global value chain, emergencies such as pandemics, and “ecological” disputes are to be feared¹⁰. While the market economy has now spread throughout the world, despite a World Trade Organization in crisis and virtually inoperative, it is unable to avoid the vital conflicts of interest that will quickly arise in the world in the face of resistance from those who profit from the system without regard for the future of future generations. Wars, in all their forms (civil, economic, interstate, global), will play a decisive role in the future of humanity, unless the current system is given back a public regulatory framework capable of controlling the potential aggressiveness of secular or religious autocracies, fighting endemic poverty, combating global warming, and preventing the abusive exploitation of scarce non-renewable resources.

De facto monopolies are developing in today's world, and the so-called "Global South" countries have yet to find a collective policy for reparations for colonialism and slavery. In a century, the population has increased by nearly four times, leading to a surge in collective and individual needs and a rise in pollution. The question of unlimited, but gradual, economic development is now being

⁸ Slobodian, Q. (2023), *Le capitalisme de l'Apocalypse, ou le rêve d'un monde sans démocratie*, Le Seuil, Paris.

⁹ Coulomb F., Fontanel J., (2006), Mondialisation, guerre économique et souveraineté nationale.” *La question politique en économie internationale*, La Découverte. 2006. Coulomb, F., Fontanel, J. (2012). War and Capitalism. *The marketing of war in the age of neo-militarism*, 59, Routledge

¹⁰ Fontanel J. (2005). *La globalisation en analyse*. Paris, L'Harmattan. Paris. Brunat, E., Fontanel, J. (2023), *When Mercantilism Upsets Neo-Classical Liberal Thinking, the Pandemic Covid-19 as a Revelation*. Disaster Management. Global pandemic. Jan 2023. Binghamton, USA. hal-03999929. Fontanel, J. (2025a), L'apocalypse de la démocratie ou le capitalisme de l'Apocalypse, *Pax Economica*, hal-05062831 Fontanel, J. (2023a), The rise of insecurity in international exchanges and the imminence of ecological and environmental wars, Blog “Economist in Peace”. <http://visionofhumanity.org/category/economists-on-peace/> . Fontanel, J. (2023b) . The Covid-19 and the war in Ukraine. International Conference Disaster Management: Global Pandemic and Its Impact, University of Binghamton, Jan 2023, hal-03963350

raised in the context of the fight against climate change. For Malthus, war and insecurity are primarily consequences of overpopulation, and population control is a prerequisite for peace. This theory contradicts the optimism of all idealists who see humanity progressing inexorably toward peace and economic prosperity. Population pressure leads to a scarcity of natural resources, which can provoke civil conflicts due to the resulting social tensions that exacerbate religious, ethnic, or social divisions. Furthermore, the Malthusian issue of birth control has resurfaced (Table 1), with a significant gap in birth rates between developed and developing countries. This leads to numerous migrations, which can contribute to international conflicts, as well as intergenerational crises regarding wealth redistribution, fueled by the ever-present security fear of the "great replacement."

Table 1. Population Estimates Over Time (in billions of people)

| Years | Population | Notes |
|-------|------------|--------------------------------------------------|
| 0 | 300 | Of which 45 for the Roman Empire |
| 1750 | 800 | 5 inhabitants per square kilometer |
| 1850 | 1.270 | |
| 1900 | 1.660 | |
| 1950 | 3.400 | Doubling in 50 years, despite the two world wars |
| 2000 | 6.000 | |
| 2025 | 8.100 | 53 inhabitants per square kilometer |
| 2050* | 9.600 | 106 billion people born worldwide since Genesis |

The idea that global growth is unsustainable is contested by those who believe that humanity can adapt to resource scarcity through technological progress. The mercantilist principle that "there is no wealth but people" is resurfacing in state policies. Beijing, for example, is proposing a new population policy after having pursued a strict Malthusian policy, particularly during the Maoist period. It is true that its neighbor, India, is now more populous than the Middle Kingdom, with 1.46 billion and 1.41 billion inhabitants, respectively. The relative power of states remains a political objective of the major powers, even if the concept of population, considered globally, presents different economic realities depending on the age pyramid, which also defines the number of young people or retirees who must be supported by the working population of the national community, thus opening or closing the door to immigration.

For the neoclassical school, the market economy inevitably leads to peace, a result of the free operation of markets and competition. Furthermore, war is costly in the short term and entails long-term public debt, which reduces the growth potential of private enterprises. War is perceived as a predatory system. In a context of economic globalization, this predatory behavior is assumed to be difficult to implement, as every country, every company, and every citizen needs

the production (in the case of imports) or consumption (in the case of exports) of other countries. Self-sufficiency is no longer possible because modern technologies require the use of non-renewable energy sources that are very unevenly distributed in the world's subsoil, are protected by patents and industrial property rights, and are dependent on the productive skills of mass production in a Ricardian competitive framework of comparative costs¹¹. In this context, preparing for war becomes prohibitively expensive. Yet, Keynesian policies of increasing public spending (including security spending) can provide a temporary boost to the national economy, and military expenditures on research and development sometimes yield new technologies that can later be applied in the civilian sector¹². However, other forms of public spending (education, healthcare, justice, policing) are often considered more socially beneficial, with positive long-term economic effects. Finally, wars are costly and counterproductive due to the loss of human capital, the destruction of assets and accumulated wealth, the disruption of trade, and the increase in public debt.

Marxist analysis, inspired by the pessimistic school of thought of British "classical" economists, highlighted both the internal system of exploitation of man by man within the capitalist economy and the rise of imperialism (Lenin, 1917) in interstate relations. However, the capitalist economic system, with its tendency toward falling profit rates and increasing surplus value (an indicator of the extent of proletarian exploitation), is destined to collapse in the long term, but it can still prolong its reign through imperialism, particularly through colonial wars. In this context, the proletariat must launch a revolution, "the great evening," to establish egalitarian socialism and avoid the inevitable wars necessary to maintain an economic system that is all the more violent because it is doomed to disappear.

However, a country's economy alone cannot impose peace between nations. Other factors can influence the international balance in favor of peace or conflict. These factors include philosophical, nationalist, racist, or religious questions, the pursuit of national power, and the historical and often hysterical taste for violence based on feelings of social inequality or historical power imbalances. Even in "modern societies," bellicose tendencies rooted in the collective unconscious are liable to resurface at any moment, leading to the rise of leaders who favor armed conflict. In this context, the assumption of rational behavior preceding economic action becomes inappropriate. Reasoning takes root in an environment that

¹¹ Schindler, S., Alami, I., DiCarlon J., Jepson, N., Rolf, S., Bayirbag, M-K (2023) *The Second Cold War: US-China Competition for Centrality in Infrastructure, Digital, Production and Finance Networks*. Malkin, A., Tian He (2023), the geoeconomics of global semiconductor value chains; extraterritoriality and the US-China technology rivalry, *Review of International Political Economy*, August. Fontanel, J. (2025b), Géoéconomie des semi-conducteurs, de la lutte pour le leadership mondial, le recours au techno-nationalisme et la crainte du technocolonialisme, Workshop Grenoble Alpes Cybersecurity Institute, June 2025. hal-05120915

¹² Keynes, J.M. (1939) "Will Rearmament Cure Unemployment?" *The Listener* (1 June 1939). Seiglie Carlos (2010), Les dépenses militaires en économie ouverte, in *Economie politique de la sécurité internationale*, L'Harmattan, Paris,

challenges the dominant principles of economics¹³, whose formalized analyses then become undeniably disconnected from immediate social behavior, thus giving greater prominence to political economy, the kind celebrated by mercantilism. The functioning of political systems, from autocracies to democracies, leads to conflicts, often initially economic or political (the pursuit of power), which subsequently escalate into wars of destruction and domination.

Pure capitalism does not exist. Today, mercantilist behavior is becoming commonplace, with initial freedoms having been hijacked by powerful economic forces whose pursuit of privatized profit is, at least in part, detrimental to the growing need for public goods. Information warfare is changing citizens' strategies and codes of conduct. Its purpose is to anticipate the opponent's strategies and exploit their knowledge in order to influence the economic, political, and strategic environment to one's advantage¹⁴. Cyberwarfare is a field of confrontation in cyberspace, waged through propaganda in favor of one country, disinformation against enemy nations, interference in the decisions of democratic institutions, sabotage of strategic instruments, or digital attacks against "critical" infrastructure. Its objective is to influence and shape the mental images of citizens, but also of consumers. The goal is to weaken a country, destabilize it, and prevent it from exercising its sovereignty. This warfare can also be internal to a country. The state can then be directed or sponsored by private interest groups and lobbyists, capable of waging private "economic wars" under the guise of public action.

Competition is not always the optimal operating mode for a society as a whole, as game theory demonstrates, unless we consider that citizens' satisfaction also lies in the social representation of each individual's power and wealth. Social inequalities become an argument for "self-worth" for multimillionaires whose sole ambition is to become billionaires. Wealth also grants the power to enjoy what is forbidden to others, with all consumption becoming a social marker of belonging to a privileged group. In this context, man remains "a wolf to man," which, on a global scale, creates feelings of profound frustration, a factor in conflict and war. The collapse of the Soviet Union led to the humiliation of Russian citizens, which partially explains Vladimir Putin's aggressive and

¹³ Reveuny Rafael (2002). « Economic growth, environmental scarcity, and conflict », *Global Environmental Politics*, 2; 1. Smith, R., & Fontanel, J. (2008). International security, defence economics and the powers of nations. In *War, peace and security*. London: Emerald.

¹⁴ Colon, D. (2024) *La Guerre de l'information. Les États à la conquête de nos esprits*, Paris, Tallandier, coll. Essais, 2023. Harbulot, C., Baumard, P. (2017), La guerre économique, in Ramel, F., Jeangène Vilmer J-B, Durieux B. (2017), *Dictionnaire de la guerre et de la paix*. Presses Universitaires de France, Paris. Seiglie, C., Coissard, S., Echinard, Y. (2008), Economic intelligence and national security, in « War, Peace and Security, Emerald. Coissard, S., Seiglie, C. (2013), Penser la sécurité économique en termes de business model. Liber Amicorum J. Fontanel, hal-03300170.

belligerent policies, supported by the Orthodox Church clergy. The ruling autocracy rebels against the perceived “violence” of Western ambitions to conquer its own sphere of influence, particularly through NATO expansion, which is primarily aimed at reducing Russia's scope of action and its civilizational influence on the countries of the former USSR.

However, the war in Ukraine is the consequence of several phenomena, in particular:

- the crisis of economic globalization and the liberal economy,
- the potential return of scarcity, given the negative impact of global warming on a significant proportion of economic growth,
- growing inequalities in development,
- power relations between states, with economic sanctions,
- financial speculation coupled with rising public deficits and debts,
- the rise of autocracy and hubris on the part of rulers in a fragmented world, the establishment of de facto plutocracies in most major powers seeking global and even civilizational leadership, and religious arguments.

In this context, there are enough opportunities for conflict and war in the world and between the major powers that wars of attrition will soon be accompanied or reinforced by new armed confrontations that are particularly dangerous for the future of humanity. It is the end of the “end of history” fiction.

2) How to analyze the end of the “end of history”

The question is to understand the economic and philosophical reasons for state violence, in order to determine whether it depends on one or more specific political and economic systems, or whether war is definitively inscribed in the very fibers of the human soul. For Hegel, the violence of revolutions and wars is a necessary stage in any process of social transformation. Karl Marx addressed the cosmopolitanism of the classical school, which he considered particularly detrimental to the interests of the proletariat, as it delays the exacerbation of capitalism's internal contradictions. In a situation of exploitation of man by man, peace has no value. Under these conditions, revolutions and wars remain important possibilities in any human life, when the violence of labor and the imperialism of a country are directed against those who have only their labor to survive

The German historical school highlighted the economic utility of war when it is necessary to strengthen national power on the world stage, or to liberate citizens from the specific interests of foreign agents in a country's political and economic life. Today, this interpretation would lead Europe to challenge the

power that the GAFAM companies wield over its economy and its citizens, even going so far as to take legal action against these multinational firms, which could lead to a conflict with the United States. Economic nationalism did not disappear with the development of capitalism and remains strong enough to reject unlimited and borderless economic freedom. Capitalism has never been "peaceful," even in the absence of military war. Analyses of the link between war and capitalism vary greatly depending on the theoretical perspective adopted. For Fukuyama, successful globalization brings with it the democratic momentum of states, a political system that gives rise to heterogeneous interpretations and practices in space and time, unless we consider Western democracy to be a model, even though its practices and functioning are themselves heterogeneous.

Since the beginning of the 21st century, Western democracy has not spread widely throughout the world. Furthermore, this system gives the impression that every citizen enjoys equality before the law, when in reality economic rights are unequal. Many states are governed by democracies with autocratic tendencies and structures, and Western-style democracies are themselves undermined by power struggles that favor those who control the media and maintain close ties with public authorities, which are themselves indirectly influenced or directly corrupted by commercial and electoral lobbying. As early as 1915, Veblen¹⁵ highlighted the heterogeneous developments of capitalist societies. He noted that the Anglo-Saxon model was essentially pacifist, given the predominance of commercial interests over dynastic interests, while Germany and Japan still retained the customs of the feudal era, which were mercantilist in nature and oriented toward the pursuit of power through military conflict and mercantilist policies, if necessary. Ultimately, the history of nations, with their victories and humiliations, cannot be erased by the pursuit of perpetual economic competition, the results of which are constantly re-evaluated in the short, medium, and long term, relentlessly demanding increased productivity, the objective of which ultimately alienates citizens and workers.

According to liberal thinking, economic globalization inevitably leads to an optimal situation if states limit themselves to exercising their sovereign rights (principle of minimal government), organizing optimal conditions for free trade, and remaining neutral in their actions within the economy. The economic system is satisfactory for all social classes. Thus, the "trickle-down theory" justifies short-term social inequalities, as these make it possible to increase supply, which stimulates the purchasing power of each citizen in the long term. Indeed, if all states in the world pursued this type of policy, peace would become inevitable in the long term. For a democratic and liberal country, war is only possible because of the existence of illiberal and anti-capitalist societies ruled by autocrats. The

¹⁵ Veblen T. (1915). *Imperial Germany and the industrial revolution*, New York, Augustus M. Kelley, 1964.

solution to conflicts and wars lies in the expansion of market globalization, which leads economic actors to become sufficiently interdependent to have common interests stronger than their potential disagreements. Within this framework, multilateral organizations define the rules necessary for the proper functioning of globalization and reject the illegitimate demands of states or multinational corporations, regardless of their respective powers.

Thus, the presentation of a situation of "pax democratica," a more cosmetic concept than that of "pax america," according to which democracy will spread throughout the world through a contagion effect initiated by the actions of a hegemonic American power, has often been presented to the general public. American military force is supposed to fulfill the role of international policeman, at least within the realm of democratic states, in the face of autocratic states, even if the situation seems to be changing under the presidency of Donald Trump. The United States spends a total of \$1 trillion in public funds on its defense, bearing in mind that the military budget itself, as proposed to the US Congress, does not include all expenditures intended for this purpose, particularly in the nuclear field. This is a considerable expense (37% of global military spending, 55% if NATO military spending is included). The importance of military spending in the growing US debt is not insignificant, but this force of protection and deterrence allows Washington to obtain economic advantages and "soft power" that far exceed the benefits of US arms sales abroad, given the expectations of its partners who base their own security needs on the "strategic umbrella, particularly nuclear," provided by Washington.

However, the idea of pacifism being inextricably linked to democracy stems more from a political imperative than from a geo-economic reality. Control of public actions is not always ensured by the population, but by the ruling classes, who can use control of national information or argue about external threats to "monopolise" state power. Lobbyists place their representatives in the inner circles of political power, and the military-industrial complex inscribes its strength and influence on national economic development, particularly in the field of research and development. A significant portion of military production relies on dual-use technologies, partly civilian, partly military. The idea that capitalism leads to peace is therefore questionable, as it generates inequalities, struggles for the distribution of value in global production chains, and also mercantilist-type opposition between a state intent on imposing its hegemony and those committed to preventing or combating this¹⁶. Under these conditions, capitalism does not guarantee peace, but neither does it call for war. Keynes challenged the idea that economic liberalism was synonymous with international peace, particularly in times of economic crisis, because the national economy then becomes dependent

¹⁶ Fontanel J., Hébert, J-P., Samson, I. (2008) "The Birth of the Political Economy or the Economy in the Heart of Politics : Mercantilism", *Defence and Peace Economics*, 19; 5.

on the policies of other states, inevitably leading to conflicts of interest whose proposed solutions sometimes result in armed conflict. "The Usefulness of Wars," with a preface by J.K. Galbraith¹⁷, "The Usefulness of Wars," with a preface by J.K. Galbraith, argued that systemic confrontation (cold war) and the fear of threats from potential enemies gave the American economy the opportunity to develop through the exercise of internal and external power dynamics favorable to the entire national economy of the United States.

More resolutely, Jean Jaurès¹⁸ believed that capitalism carries war within it like a cloud carries a storm. Capitalism creates social classes, leading the oppressed to revolt. Furthermore, it establishes competition among the major world powers to limit, at the national level, the detrimental effects of this worker exploitation on the wealthy. It partially adopts the Marxist analysis, according to which an imperialist war is an opportunity for the "bourgeoisie" to increase the degree of exploitation of national workers and to avoid a national conflict of civil war within the framework of a revolution. Capitalism produces recurring economic crises due in particular to overproduction and growing inequalities. Today, the issue of natural resource shortages arises, exacerbating international tensions. The internal contradictions of the capitalist mode of production (overproduction and the tendency for profit rates to fall) first lead to imperialism (notably through territorial or economic colonization, but also through domination of global economic flows), then to war due to power struggles over the distribution of value in global production chains and the management of rare earths. The main issues therefore concern technological monopolies or oligopolies, particularly digital ones, the opening of borders between the various imperialist powers, access to protected spheres of investment capital, and the availability of raw material sources.

The Marxist theory of underconsumption has been one of the modern cornerstones of militarism analysis. For Paul Baran and Paul Sweezy¹⁹, military spending serves to absorb the economic surplus created by monopoly capitalism. The arms race is therefore part of the logic of capitalism, which seeks to maintain a balance between production and effective demand through unproductive spending. The surplus is then effectively absorbed by military spending. Baran and Sweezy thus echo Kondratiev's analysis²⁰, according to which phases of economic expansion in advanced capitalist countries lead to an increase in demand for raw materials and new markets, with an intensification of international tensions. At the national level, this economic growth also exacerbates the internal economic contradictions of the capitalist system, creating

¹⁷ Galbraith J.K. (1967), *La paix indésirable ? Rapport sur l'utilité des guerres*, Paris, Calmann Levy, 1984.

¹⁸ Jaurès, J. (1895) Discours, Assemblée Nationale, Paris, 7 mars.

¹⁹ Baran, P., Sweezy P. (1968). *Le capitalisme monopoliste*, Maspero, Paris, 1968

²⁰ Kondratiev N.D. (1935) "The long waves in economic life", *The Review of Economic Statistics* (17 Nov).

the conditions for political instability that could lead to a world war with devastating effects. In 1995, the World Trade Organization²¹ was created to monitor the proper functioning of international markets, but since Donald Trump's return to the White House in Washington, it no longer plays a central role in the growth of the global economy. WTO members are stunned by this about-face by the US, which is protecting its economy with tariffs, the very same tariffs that Washington had fought against within the WTO in favor of globalization that was supposed to be “happy. There is a new generalized economic war”.

The war may initially be the result of the exhaustion of the economic model of extreme globalization, but it may also be the result of extreme climate change, which leads to conflicts between polluters and those affected by pollution, initially in the form of a latent war and then, potentially, a major military conflict.

3) Capitalism in Crisis: Power Relations Between States and Multinational Corporations

Wars and crises have punctuated the history of capitalism since its origins. Economic interdependence is not a guarantee of world peace. Wars did not disappear with the expansion of capitalism worldwide; the struggle for hegemony among great powers has clearly become a mode of governance once again, and the growing tensions over natural resources are becoming more threatening every day. Is global capitalism in the downward phase of a long cycle, requiring new rules and institutions, while the ever-increasing power of major nations and multinational corporations hinders the emergence of new modes of economic organization? These questions are often asked today.

The current economic crisis raises numerous questions about the sustainability of enormous structural imbalances (public debt of Northern governments, trade surpluses of emerging countries, degradation of the Earth's natural resources, and excessively speculative and therefore increasingly vulnerable global finance). The end of the Cold War brought civil conflicts back to the forefront of geopolitical concerns. From a Malthusian perspective, excessive population growth has often been considered a risk factor in certain regions. Environmental concerns have thus become central, and the scarcity of natural resources constitutes a decisive obstacle to capitalist peace. Countries of the Global South are resolutely moving towards other forms of governance, mostly autocratic. They demand a better distribution of global wealth (without being overly concerned about national inequalities) and want the colonial and

²¹ Krugman, P., Obstfeld, M., Melitz, M (2022) *Economie internationale*, Pearson. Fontanel, J. (1995), *Organisations Economiques Internationales*, Masson, Paris.

slave-owning countries of past centuries to finally settle their enormous debt, which the military force of European countries historically incurred.

The unequal power system inherited from colonization has been exacerbated because the rules established by the World Trade Organization remain still more favorable to the richest countries and multinational corporations. Free trade is not as free as its name might suggest, given the quasi-monopolies on high-tech products, the heterogeneous situation of essential raw materials, and crucial energy issues in terms of pollution. In this context, quasi-monopolies or oligopolies exercise excessive power over their potential buyers, particularly when the latter have no other sources of supply. Oil is not a free market, nor is the high-tech information economy. In this context, economic conflicts and wars between states remain omnipresent, thus rejecting the Kantian idea that humanity is inexorably progressing toward the pacification of international relations.

Today, a complete overhaul of the capitalist system should be on the agenda. Capitalism is not synonymous with liberalism; it can adapt to state control when the state resolutely defends its own values, particularly when a facade of democracy masks a de facto plutocracy, desired and defended notably by libertarians. Capitalism's resilience to wars and economic crises demonstrates the adaptability of this system, which is fundamentally neither warlike nor peaceful, when scarcity is not the norm in society. However, dominant actors maintain the power conferred upon them by this very market economy based on individual interest and profit. Given the assumptions made by liberal economists, many wealth-related variables have been disregarded, and today the issue of global pollution is still not adequately addressed. To initiate a process against climate change, prioritizing individual interest and profit alone clashes with collective action, which must challenge the notion that all Earth's resources are free, as the scarcity of clean air and water is becoming a pressing issue in many countries. The war for scarce resources could turn violent, especially since pollution is a global issue in the context of climate change. Energy decarbonization cannot be achieved without challenging the considerable financial interests and the quality of life of polluters, whether they are multinational corporations, states, or billionaires.

Faced with the need to question a production system that consumes enormous quantities of resources that were once free but are now so scarce that they can no longer be considered natural, such as drinking water and air, the question of degrowth arises. Furthermore, economic variables cannot encompass all dimensions of social life, as they omit individuals' quality of life, their alienation through work, the unequal satisfaction of their basic needs, and financial speculation. Thus, the creation and definition of gross domestic product (GDP) has been useful in measuring the economic growth of nations, but its

analysis, which has become a measure of economic development, the efficiency of the national economy, and the competence of the state, does not take into account the destruction of these free goods, which are becoming scarce, deteriorating, and then entering the market system²². This is not the objective of GDP, whose information is certainly of interest to public authorities, but its use by economists and governments as the fundamental indicator justifying (or not) state policies is clearly unjustified, even unjustifiable. Given the considerable increase in the world's population, which is leading to the overexploitation of Earth's resources, the question now arises for new generations: how to define new indicators to complement or replace GDP? Population pressure is causing a shortage of natural resources, which can lead to civil conflicts due to the resulting social tensions that exacerbate religious, ethnic, or social divisions. The idea that global growth is unsustainable is challenged by those who believe that humanity can adapt to resource scarcity through technological progress. But the most "outlandish" billionaires in our society already believe that Earth is doomed and that exploring other planets will be necessary for humanity's survival.

The use of economic weapons aims to exert coercive pressure against one or more states. Several dominant weapons or power dynamics exist, such as embargoes, boycotts, blockades, asset and investment freezes, secondary sanctions (notably the extraterritorial application of sanctions imposed by the United States), and cyberattacks, which disrupt a country's economy all the more when that country is involved in a broad process of globalization²³. "Oblique" weapons have become essential in demonstrating the political, economic, and humanitarian power of states²⁴. States declare their commitment to coercive economic procedures in order to compel the target country to abandon a political or military action deemed unacceptable. Several strategies can be implemented, ranging from impoverishment through efforts to prepare for violent war, to strategies of international rupture or punishment, or even external domination and internal control. For example, rare earth elements enable the production of clean electricity and are essential for new information and communication technologies. However, they present three drawbacks: first, they are available in limited quantities relative to potential demand; second, their extraction is both costly and highly polluting; and finally, most of these metals are unevenly distributed globally, to the great benefit of China, which is able to exploit them extensively, at least potentially.

²² Guilhaudis, J-F., Fontanel, J. (2019), Les effets pervers de l'usage du PIB pour la décision politique et les relations internationales. *Annuaire Français des Relations internationales*,

²³ Baldwin, D.A. (1985), *Economic Statecraft*, Princeton, Princeton University Press. Coulomb, F., Bensahel, L., Fontanel, J. (2005), The concepts of economic war and economic conflicts in a global market economy. *Arms, War, and Terrorism in the Global Economy Today* 13, LIT Verlag,

²⁴ Fontanel, J. (2019), Différends, conflits et guerres économiques. PSEI, *Paix et Sécurité Européenne et Internationale*, n° 11

The idea of restricting the pace of global economic growth to reduce the depletion of natural resources is rejected by international institutions such as the IMF, the World Bank, and the OECD, which have challenged the long-standing but still relevant conclusions of the Club of Rome²⁵ on the limits to growth. The idea of slowing economic growth in developed countries to compensate for the demand for natural resources linked to the accelerated growth of emerging economies is almost never considered. Economic and energy shortages are strategic issues that significantly influence the likelihood of war. Sanctions and economic wars target countries that do not meet international standards or those set by the Hegemon, thus turning economic actions into weapons of war²⁶.

3) War, new scarcities, and the possibility of ecological wars

Global warming poses a threat to human life, but states cannot combat this scourge without the support of other states. It is therefore necessary to limit fossil fuel consumption and consumerist behavior. However, states and lobbies remain fundamentally focused on their power and immediate profits. No international authority has the power to convince states to avert the impending catastrophe. In environmental matters, borders do not exist, and the efforts of one group, company, or state can be thwarted by the petty and greedy interests of other actors. The transformation process leads to conflicts of interest. At the national level, less developed countries are reluctant to have standards imposed on them that developed countries have not had to meet in their own development. Carbon dioxide emission taxes, as an effective means of reducing CO₂ emissions, directly affect consumers, particularly the less fortunate. It follows that these environmental actions cannot be taken on a case-by-case basis; they require social policies to support disadvantaged groups through just environmental decisions. Competing private actors cannot easily accept national discrimination in light of the considerable environmental requirements that vary from one country to another. The “invisible hand of the market,” if it existed, would certainly not apply equally to all territories or communities.

To combat climate change, it is necessary to drastically reduce our reliance on oil and gas. While the present value of solar and wind power installations is still higher than that of fossil fuels, we must prioritize nature over short-term economic considerations, accepting a significant reduction in economic growth.

²⁵ Meadows, D., Meadows, D., Randers, J. (1972), *Les limites à la croissance*, Club de Rome. Réimprimé Ed. Ecosociété, 2013.

²⁶ Coulomb, F., Bensahel, L., Fontanel, J. (2007) *The concepts of economic war and economic conflicts in a global market economy in « Arms, War, and Terrorism in the global economy today*, Ed. Wolfram Elsner, Ed. LIT Verlag Fontanel, J., Bensahel, L. (1993), *La guerre économique*, Arès, vol. 13, no 4, hal-02927223.

Under these conditions, oil-exporting nations would bear the burden of their tied-up assets, the potential use of which in the future can only be considered if a scientific solution to decarbonization is found. Institutional investors could already be in a position to withdraw their funds and invest in green energy. Rapid change is only possible if the interests of citizens today and tomorrow prevail over those of large multinational corporations. We need to build a new society that consumes less energy, pollutes less, and is based less on ownership and more on access to services within a circular and collaborative economy, with the implementation of smart networks that have a low environmental cost²⁷.

However, with the "trickle-down theory," opposition to climate change policies continues to be voiced, fueled by fears of degrowth and mass unemployment. The gradual dismantling of blocked infrastructure could give rise to significant social disputes, a shift in the sources of wealth, and changes in the balance of political and economic power, which could foster widespread social movements and tensions between states, potentially leading to revolutions, but also to economic or armed wars. China aims to maintain its role as a world leader in renewable energy; it already issues "green bonds" in support of an "ecological civilization" and controls numerous "rare earth elements" so vital to modern technologies. In this context, the United States and China, the two most polluting countries in the world, can dictate the pace of this energy transition, driven by short-term economic interests.

In today's climate emergency, it is necessary to develop the new infrastructure for a third industrial revolution based on the digital economy. However, this economy also presents dangers regarding the neutrality of its economic, political, and philosophical contributions. It can give rise to new forms of insecurity caused by data monopolization, the rise of cybercrime, cyberterrorism, and cyberwarfare. The United Nations Environment Programme (UNEP) has proposed a new "ecological deal" to relaunch the global economy towards new forms of growth less harmful to life on Earth, but it raises the question of the sustainability and stability of such a system in the face of today's production processes, which are efficient in the short term but potentially generate inevitable and costly natural disasters in the long run²⁸. Globalization creates increasingly fragile interconnected networks dependent on private operators, with little interest in the collective good, and on autocratic or plutocratic states.

Technological change will depreciate the value of existing assets. The short-term cost is enormous. This third revolution would lead to \$100 trillion in oil and gas assets being tied up. These "locked-up assets" will pose immense problems

²⁷ Rifkin, Jeremy (2019), *Le New Deal Vert Mondial*, Editions « Les Liens qui libèrent »

²⁸ Lange, G-M, Wodon, Q., Carey, K. (2018) *The Changing Wealth of Nations 2018 ; Building a Sustainable Future*, World Bank, Washington

for the companies that hold them, as they constitute a key element of their wealth and revenue. Investments in gas pipelines risk becoming locked-up assets given their long-term cost and environmental opposition. In the United States, pension funds hold at least 20% of the equity and 40% of the shares of American companies. The younger generation, aware of the dangers of climate change, wants to know where investments are being made, in the face of the reluctance of fund managers who prefer quick returns on investment to socially responsible investments that are not profitable in the immediate future. However, technological improvements can be a significant solution²⁹.

In this context, an information war is constantly being waged by public and private producers of carbon-based energy. Megaprojects are still being planned by states and multinational corporations in non-renewable energy (particularly investments in gas pipelines and shale gas), when it would be more necessary to limit their production. To avoid the conflicts of economic warfare, renewable energies must quickly become more economically viable, despite the unfair competition from non-renewable energy extraction systems that do not compensate for their polluting effects on the entire planet. Socially responsible investments (SRI) are not yet a priority in the minds and interests of economic actors, because it remains difficult, in terms of competition, to commit to Benjamin Franklin's famous "Doing Well by Doing Good."

The imminence of climate change will have considerable effects on the global economic and financial sector. The primary objective, however, should be to "save life on Earth." The goal of survival is not really to reduce polluting emissions; it is to eliminate them. "The terrible thing about catastrophe is that not only do we not believe it will happen, but once it has occurred, it appears to be part of the normal order of things"³⁰. To achieve the objectives of survival, global common goods must be placed above all private accumulation and short-term state interests. Since the great British classics, economics, as it has been conceived over the last 200 years, has never really taken into account the constraints associated with the Earth's limited resources³¹.

The reasons for modern wars will undoubtedly focus on the relative scarcity of essential goods or those necessary for modern technologies, but also on polluting emissions and their social and international acceptance. The optimistic

²⁹ For instance, on average, in the United States, 86% of the energy from the second industrial revolution was lost during transmission. Modern technologies significantly reduce these losses. Rifkin, Jeremy (2019), *Le New Deal Vert Mondial*, Editions « Les Liens qui libèrent ».

³⁰ Dupuy, J-P. (2004), *Pour un catastrophisme éclairé*, Le Seuil.

³¹ Brunat, E., Fontanel, J. (2021) La science économique comme idéologie. La science de gestion comme viatique de l'actionnaire, *Marché et Organisations* Fontanel, J. (2023a), The rise of insecurity in international exchanges and the imminence of ecological and environmental wars, Blog "Economist in Peace". <http://visiono6umanity.org/category/economists-on-peace/>. Fontanel, J. (2025a), L'apocalypse de la démocratie ou le capitalisme de l'Apocalypse, *Pax Economica*, hal-05062831

philosophy based on the capacity of technological progress and innovation to solve all of humanity's future problems leads to the assumption that each generation uses the Earth's economic potential as it sees fit, without questioning the legacy left to future generations, who will have to find their own solutions for survival. However, the fundamental problem lies in the economic, ecological, and political crises that will follow one another and fuel conflicts between individuals and between nations. "Environmental" wars are not yet a reality, but they could quickly become a reality before the end of this century.

All economic analyses predicted the end of the war, highlighting the conditions necessary for peace³². For liberals, the "end of history" for the market economy and democracy was predetermined with the collapse of the Soviet Union. For Marxists, the end of the exploitation of man by man and of class struggle constituted an opening to a peaceful world. For liberal democrats, the market, even when controlled in its excesses (inequality of income and wealth, overconsumption of the Earth's resources, the arms race), leads both to economic development and to the pacification of national and international social relations. Meanwhile, war against autocracies or plutocracies is still considered acceptable in order to meet the conditions for liberal or socialist peace. Some propose a peace that suits them, whereas the main priority should be to choose a peace that brings everyone together. War is thus waged in the name of peace.

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³² Larrouy, P. (2025), Projet de paix pour économie de guerre, *Revue politique et parlementaire*, <https://www.revuepolitique.fr/projet-de-paix-pour-economie-de-guerre/>. Brunat, E., Fontanel, J. (2025) *The failure of the theory of "happy globalization" and the return to a mercantilist race for global economic, technological, and civilizational leadership*, "Regional Science Association, India September, hal-05285821

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