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**War and economic intelligence in contemporary French
strategic reflection**

Economic war and competition in the contemporary world

The existence of economic warfare was perceived as early as in the 19th century by intellectuals of the caliber of Victor Hugo and academicians from diverse fields as the ineluctable evolution of the logic of conflict, which, from material war waged on battlegrounds by soldiers with arms, would be transformed into a “softer” form of encounter between nations in the international marketplace, and subsequently into a free exchange of ideas among free spirits.

However, the international scenario in the last twenty years has certainly not offered less bitter conflicts than when bombs and ordinance exploded over Europe: harmony among nations has not even been reached in the West between the United States and the European Union. In fact, much less it has been reached in the rest of the world, where democracy remains a dream for billions despite the significant steps taken in this direction on all five continents. Above and beyond the widespread disappointment with the real extent of such progress whose ideal has distinctively defined our concept of modernity, the conviction persists that conventional war can break out naturally in the economy through “economic warfare”, which was defined for the first time during the First World War as a component of the idea of total warfare dear to the German General Erich Ludendorff. It is a fact that, at this point, economy is not exclusively what is at stake in conventional warfare.

The concept of economic warfare seems to have become a “fashionable” topic of late, not only in strategic study rooms but also and more generally in the context of a certain geopolitical debate which, in the wake of the disappearance of the Cold War that for four decades had polarized all attention and quelled all possible hopes for “happy globalization” and for the ultimate victory of multilateralism during the Nineties, was required to promptly offer a key to the interpretation of relations on the global chessboard. In this view, the 21st century will witness the return of international politics dominated by nation states in full possession of their sovereignty committed to ensuring the perpetuation of their power in a complex game of alliances and mistrust. It is also true that, as often happens, a definition’s success, in the media and elsewhere, is a source of much misunderstanding, imprecise interpretations, and an overall trivialization of the terms of the question. The scope of this article is therefore to precisely delineate this new subject of theory and practice, assessing its real importance and the instruments by which it works as an interpretative concept that provides an idea that comes closer to historical reality and avoids simplistic schematization that makes no contribution to the real understanding of phenomena.

The nature and scope of economic warfare

One of the first to refer to economic warfare in today’s sense was former Advisor to French President Georges Pompidou, Bernard Esambert, who paradoxically, at the start of that decade of relative peace in international relations following the dismemberment of the USSR in 1991 and before the New York Twin Towers attack, published a work that ran against the day’s current thinking. From its very first pages, *La Guerre Economique Mondiale* dispelled the myth then being formulated of a multilateral, peaceful world under the aegis of the UN. In the context of the globalized economy that appeared imminent in the wake of the fall of communism and the resultant entry of a consistent number of national economies in the global market, the previous territorial colonialism would be transformed into the conquest of the most advanced technologies and profitable markets. The violence of arms would be replaced by a battle of products and services where exports would be the primary means available to each nation in its attempt to win this new type of war where companies take the place of armies and the victims are the unemployed. The

origin of this war must be sought in the confluence of three revolutions whose chronology will be re-described below.

As we have seen, the concept of economic warfare is nothing recent. Its contemporary form may be traced back to immediately after the Second World War, and more precisely to the GATT Agreements signed in 1947, an event that established the basis (and regulations) of multilateral commerce and competition with the objective of promoting the liberalization of world trade. The original accord was limited in scope, given that both the primary and the tertiary sectors were excluded and were brought into discussion and negotiations only between the end of the 20th century and the start of the 21st. Furthermore, the Cold War's logic of power blocs and general geopolitical context limited economic rivalries and placed more emphasis on the need for internal solidarity among the various national economics than on assuming positions in defense of single products and/or industrial sectors.

This situation of relative equilibrium was shaken up in 1991 by the fall of the communist bloc, which gave way to the capitalist model (in its neo-liberal form, in particular) as the only economic system functioning at worldwide level. Not only were the former communist countries gradually integrated into the world economy (China entered the WTO, the institution created by the GATT accord, in 2001; Russia in 2011), also the so-called Third World nations demanded access to the world markets: this was the triumph of the globalization begun in the Seventies with the first deregulation measures and the new political-economic scenario of a world no longer split in two. What seemed to be a finally peaceful unification of all the nations under the banner of free exchange was instead nothing but an excuse for the start of a new war, this time with the cards finally on the table and no longer masked by the military stand-off between Cold War blocs: in other words, economic warfare. As many analysts have emphasized, power politics have shifted from the military and geopolitical terrain, where they were previously manifested in the form of clashes between blocs and peripheral conflicts, to economic and commercial terrain, where the nations fight for control of resources and markets. Under these circumstances, commercial exchange is nothing but another way of waging war in which another nation's armed front is weakened; for such reason, investments, government subsidies, and foreign market penetration amount to practically the same thing as allocations for armaments, technological progress in munitions, and military advance on foreign soil. We are clearly far from the visions of Illuminist and 19th century intellectuals who hoped for a "softening" of international relations through the free circulation of goods and ideas. In any case, it would have been reductive to believe that geo-economics was capable of cancelling geopolitics. Among the various experts concerned, Christian Harbulot insisted on the fact that there are various chessboards, and they intersect one another only partially: harmonious exchange, economic warfare and geopolitical ends can coexist and even interact because they take place in worlds that have autonomous logic but are inevitably linked together.

It was during the Nineties that what might be defined as an authentic Copernican revolution occurred in international relations and marked the shift from the classical geopolitics of nation states fighting for control of territories to a world economy (or economic warfare), in which nations clash for the control of the global economy. This is not an exclusively intellectual idea developed by experts in the field but instead an observation, by now within the reach of public opinion, to the extent that it has even made its way into advertising slogans, like the one coined by a European consumer electronics manufacturer at the height of the First Gulf War: "the Third World War will be an economic war: choose your weapons here now". The position taken by the United States in this new era is very clear: national security depends on economic power. First of all, as the

superpower of the bloc that emerged victorious from the Cold War, it was in a privileged position to understand the change in act before any other nation, also thanks to the investments it had made in previous decades in the form of subsidies granted for research and development in order to better equip its companies for the international competition looming on the horizon. Secondly, newly-elected President Bill Clinton immediately implemented the “doctrine” that national security depended on the economy by setting up a “War room” connected directly to the Department of Commerce as a privileged communication channel between the State and nation’s companies in order to provide the latter with support in world competition. At the same time, Secretary of State Warren Christopher officially stated that “economic security” needed to be raised to top priority status in US foreign policy. This may be considered an authentic declaration of economic war to the rest of the world by its leading economic power, even if camouflaged as the defense of national interests in an original and audacious mingling of liberalist and mercantilist principles.

In the contest of this new geo-economics with its high rate of competition, characterized over the last three decades by phenomena like deregulation, technological revolution, and the globalization of finance, the arrival of new players in the market mixed the cards on the table and upset the relative order that had been established. These were mostly nations which, on the strength of a new autonomy and independence, not only of political nature, wanted to take part in the division of the wealth and the dynamics of enrichment that until then had been the exclusive realm of the world’s North. It is thanks to their voice that the reality behind poverty was made clear to that 2% of the world that benefitted from 50% of its total wealth. Even though it is constantly decreasing, poverty remains alarming today: 2.8 billion people survive on less than 2 dollars a day. In a world like today’s, characterized by the immediacy of information and, consequently, by the fact that public opinion now has a greater and greater grasp of international dynamics, there is even more reason for poverty to be considered intolerable. In this struggle for the division of the spoils, the new emerging nations (first of all Brazil, Russia, India, and China, followed by Southeast Asia and many African nations) can also learn from the experience of their predecessors like Japan and the Asian Tigers whose integration in international exchange brought them wealth and power. At any rate, the stake represented by resources is characterized by a scarcity (absolute for some, relative for others) so high that exchanges have been transformed into competition, or in other words, economic warfare. In this scenario, liberalist thought on the weakening of the State must necessarily be questioned because these recent changes demand not only a transformation of the role the State plays in the economy but also a change in the nature of the State itself.

The change in the nature of the State originates, above all, from a transformation of the concept of power, which may initially be divided into hard power and soft power, or rather, the use of either force or influence. In a context in which nations resort less and less to the former than before because it is costlier in terms of various aspects and even less effective, the use of influence gains importance and is manifested in the form of economic warfare (even if the latter would dissolve the distinction between hard and soft power). Therefore, a nation’s economic situation has become more and more important while its military spending has progressively decreased in significance. Today’s power politics will take the form of providing subsidies to businesses that allow them to operate from a position of strength in the international markets, providing support for employment so that delocalization does not penalize the domestic market, and economic diplomacy oriented to procuring scarce resources. Translated in terms of economic warfare, these power politics imply the following things for a State: ensuring independence in terms of resources, capacity for self-defense against the commercial or financial threat posed by other nations, and an aptitude for intelligence, an indispensable resource in today’s communication society. By another definition, it is nothing

else but one nation's ability to impose its will over others before they can impose theirs, whenever this is possible in a world where dependence is more and more fragmented and dispersed. The real revolution is therefore merely the transformation of political power into economic power, or in other words, the dependence of the former on the latter: nations attempt to modify the terms of competition and to transform relations based on economic power not only with the objective of maintaining jobs but also and above all of ensuring their dominance in terms of technology, commerce, economics, and therefore their political domination.

Analyzing the single objectives of economic warfare in greater detail, at least as far as Western nations are concerned, it emerges that the first is defensive in nature: preserving industrial employment in the face of the widespread outsourcing that has occurred in companies in the sector. There is a strong but hidden link between the second and the tertiary sectors that Bernard Esambert defines as "industry-services symbiosis", that consists in the fact that more jobs in the secondary sector produce a corresponding increase in the jobs in the services sector, while the need for the greater specialization of workers in high-tech industries feeds the demand for training and consultancy services. Defensive action that maintains employment in industry is required to avoid economic recession and contain as much as possible unemployment and underemployment – two elements whose high social destabilization effects pose a threat to all democracies. In this regard, the leading cause of loss of jobs is not as much "delocalization" in the strictest sense, but "non-localization", when companies open branches abroad instead of in the nation where they are established, even when the domestic market is the destination for the goods produced. The speeches of George W. Bush in his first presidential campaign (but also of many Democrat leaders in the same terms), in which NAFTA (the North American Free Trade Agreement) was indicated as the cause of a hemorrhage of jobs to the benefit of Mexico, were emblematic of the importance of preserving jobs. Other tangible examples include the commitment of the French government to save the ArcelorMittal Group's Gandrange productive unit, despite the considerable economic drain on the State's coffers, or, more recently, the agreement with Electrolux in Italy. While the reason behind such decision is obviously electoral in nature, it also reveals another aspect: no nation can afford to lose its productive capacity upon pain of becoming dependent on others. Delocalization is also a hard thing to swallow for any electorate, and for such reason always occupies a central position in the political debate, given that the consequences of unemployment, underemployment, wage pressure, balance of payments, and the contraction of consumer spending would undermine the pillars on which our consumer society stands – even if the option naturally has its defenders, such as the IMF, which tends to focus on the advantages in terms of output generated instead. Power politics are nowadays developed also through industrial policies intended to maintain a certain type of territorial "control" by the State.

Economic warfare's second objective instead is offensive in nature and regards the conquest of markets, and above all, limited resources: the so-called "scramble for raw materials". Secure and uninterrupted raw material procurement is, in fact, the only way to guarantee the continuation and, auspiciously, the growth of a nation's economic level. In what is nothing less than a war for resources, the most coveted are energy sources (oil, natural gas, coal, uranium to produce nuclear energy, bodies of water for hydroelectric power production), the demand for which is directly linked to economic development and the objects to be contended. Foodstuffs such as corn, rice, soya, and wheat also have a certain relevance in the dynamics of power in financial markets. Wheat, in particular, is subjected to every form of speculation and contention, and dictates relationships of power between the producers and the needy, and in extreme cases, can be used to every sense and effect as a weapon.

It is by now commonly accepted that oil gives rise to extremely harsh economic conflicts if not authentic armed conflict. This scarce resource alone accounts for over 35% of the world's total energy consumption, principally by the nations in Asia (30% of the world's consumption), North America (above 28%), and the European Union (over 17%). The extent of the economic warfare now in progress is amply illustrated by the twofold tension between producer/consumer nations, on one hand, and between nations whose demand has stabilized/nations whose demand is rising, on the other. This tension conceals the prospect of future conflicts, even armed conflicts (i.e. the previous two Gulf Wars). The ferocious struggle that pits the United States against China for Africa's oil and other underground resources (assorted rare metals and gemstones) provides another example of this economic war. Although China began investing in sub-Saharan Africa only at the end of the Cold War, it has by now become the continent's third trading partner after the United States and France, even if it is not always viewed positively by local governments due to its predatory attitude that recalls the former Western Colonial powers. The Chinese colossus is a good example of the inversion in power relations currently in progress between the Western nations and the developing nations, first of which, the BRIC group. Once exclusively producers and suppliers of the raw materials required by the industrialized North, these nations are now rising in the world's ranking of importance thanks to the increased control (also internal) of their production.

This awakening of the world's South has completely upset the global balance, also because it is manifested in the control of not only natural resources but also entire companies that were once exclusively Western-owned, but which now consist more and more of Arab and Asian capitals. Sovereign wealth funds dominate this area, especially the Chinese and Singaporean funds which, aided by the economic crisis that has struck the more mature European and North American economies, now hold significant shares of highly important companies such as Morgan Stanley and Merrill Lynch. These examples show that both the public debt of the Capitalist nations and a good part of their GDP is now in the hands of these so-called developing nations through their control of company capital or – as in the case of Saudi Arabia – through the wealth created using Arab oil. As may be logically inferred, the strategic advantage imparted to these nations is considerable. Lastly, another resource has become crucial, and its control is determinant in a context of economic warfare: knowledge of the current level of technology, the reference market, partners and competitors; in a nutshell, knowledge of economic business strategy, and “enemy” nations, that is to say intelligence. Despite being relatively new, this resource has now become fundamentally important for the technological progress of past decades and is now just as important as the financial capital necessary for the start-up and continuation of companies, raw materials for production, and the human resources required. Economic intelligence programs managed and coordinated by the State have therefore become indispensable to avoid inadmissible delays in a framework becoming more and more fiercely competitive.

The third revolution that has engendered the current scenario of economic warfare where nations constantly compete for resources of every kind (therefore not only raw materials) is theoretical, if not ideological in nature. We may refer to a return to Mercantilism, obviously of modern interpretation, in the degree that power is expressed primarily in the form of exports. In the words of Bernard Esambert, “export is the objective of economic warfare and its industrial component” because it “means employment, stimulation, and growth. The prize at stake is the conquest of the highest possible number [of world markets]”. The close connection between volume of exports and economic power in the ranking of the world's leading exporters is not hard to see, with Germany (responsible for 9.5% of the world's exports alone) at the top followed by China and the United States, and then the leading G7 powers (Japan, France, Italy, United Kingdom, and Canada) and

various developing nations (South Korea, Russia, Hong Kong, and Singapore) among the top fifteen. The same leaders of the world's economy are also its biggest importers, such as the United States, Germany, China, Japan, the United Kingdom, France, Italy, Canada, Spain, Hong Kong, South Korea, and Singapore, in demonstration of the fundamental role exchange plays in terms of economic power.

This neo-Mercantile tendency, in addition to partially refuting the idea of the progressive and inevitable weakening of sovereign states in this era of globalization, represents a new triumph for such nations and makes them the protagonists of international relations. The political analyst Edward N. Luttwak expresses the concept well with the affirmation that in the arena of international exchange, where Americans, Europeans, Japanese, and representatives of other developed nations all cooperate and compete against one another at the same time, the rules of the game have changed. Regardless of the nature or justification of national identity, international politics remains dominated by nations (or associations of nations such as the European Community) based on the principle of "us" against the wide aggregate of "them". Nations are territorial entities delineated and protected by jealously claimed borders, many of which are often still under surveillance. Even if they may not think to rival one another militarily, and even if they cooperate daily in dozens of organizations of international or entirely other nature, nations remain fundamentally antagonistic to one another.

As illustrated above, the end of the Cold War was the turning point that returned single nations to the center stage of international relations, even if the apparent victory of multilateralism during the Nineties seemed to suggest the opposite would be true. Precisely when the impulse for the creation of a World Trade Organization oriented to free exchange and the guarantee of fair and equal relations between nations at commercial level arose on one hand, the bonds of solidarity that unified the members of the Western bloc were weakened or even voided of meaning, on the other, and nations that were once allies now become competitors. This reading is interpreted by certain critics of the theory of "economic warfare" as the result of society's lack of economic culture that encourages the identification of enemies and malicious third parties as being responsible for the more or less sudden oscillations in domestic economy. In fact, this vision stems from a renewed desire for a stronger State and is a purely irrational expression and does not coincide exactly with general interest.

The change in interpretation that has emerged in concomitance with this historical conjuncture is closely linked to the publication of a number of works by economists and political analysts of particular stature, the first of which is entitled *Head to Head: The Coming Battle among America, Japan and Europe* (1992) by the recently departed Lester Thurow, an esteemed scholar of the consequences of globalization whose work has been taken into consideration by the US government since the Sixties. The United States Secretary of Labor under President Bill Clinton, Robert Reich, is instead the author of *The Work of Nations* (1993), an analysis of the competition between nations, while right from the title, *A Cold Peace: America, Japan, Germany and the Struggle for the Supremacy* (1992) by Jeffrey Garten, is at the same level, and its author became a member of the first Clinton administration as Undersecretary of State for Foreign Trade. All these works written by statesmen and political decision-makers who imposed, among other things, the Clinton era's "diplomacy by business" helped mold today's concept of economic warfare thanks to their description of the world's economy in terms of conflicts between nations. On the other hand, this was a particularly pressing need for these latter, and the only way to reassert their supremacy, with particular regard to the multinationals, who appeared to be the sole masters and lords of the world's economy. Once again it was Luttwak who suggested an interpretation of this sudden conversion of

the elite to the dogma of economic warfare, suggesting to the European, Japanese, and American bureaucrats the idea that geo-economics is the only possible substitute for the diplomatic and military roles of the past, and that it is only by invoking geo-economics' imperatives that national administrations can lay claim to their authority over simple businessmen and fellow citizens in general.

Subjects and types of economic warfare

After describing the three revolutions of geopolitics, the idea of power, and the theory of commerce, the protagonists and the forms assumed by geo-economic conflicts deserve to be scrutinized in detail.

The new centrality of the State in international relations, especially those of economic nature, is useful in delineating the concept of "economic warfare", which may be defined as the clash of nations by means and for the purposes of their economies, and not merely as economic competition alone, which more closely regards companies.

The renewed central role of the State in the economy is a recent tendency that emerged with the arrival of the Third Millennium and to even greater degree in the wake of the recession caused by the financial crisis of August 2007, whereas, during the Eighties and Nineties, the neo-liberalism in fashion viewed the State exclusively as a hindrance to economic development, financial globalization, the trans-nationalization of businesses, and the intensification of international exchange (in this regard, President Reagan's words: "government is the problem" have gone down in history). The State, with prerogatives also in the economic field, has survived this slight, and by continuing to promote the development of its companies by constructing an adequate juridical, fiscal, and infrastructural framework has laid a solid basis for the role it has assumed today almost as some resolute "military chief" familiar with the "the Profession of the Arms", restituting morale and stimulus to the conquest of the economy and guiding its troops to victory in the markets and procurement of resources. Examples of government administrations that have embodied this role or continue to do so are provided by the Japanese Ministry for Industry and International Trade, an emblem of Japanese economic power, and in France, the Union of the Presidency of the Republic, the Presidency of the Government, and the Ministry of Finance. The ground forces, instead, are nothing but the private sector companies themselves, even if critics of economic warfare theory insist on affirming that such hierarchy of roles would be impossible to establish, given that the State's logic of power and the companies' logic of profit do not coincide. Such criticism may be discarded, however, when considering that what really happens is not a direct alliance between the State and Big Business as much as an indirect repercussion of the latter's power over the nation in which these companies have established themselves. We refer here especially to the large multinationals: a glance at the nations of origin of the world's top 1,000 manufacturing companies in 2007 illustrates rather clearly if not over-emphatically the dynamics described above. The United States and Japan, vaunting 305 and 209 multinational companies respectively, are far ahead of both the other Western nations in this ranking (France, Germany, The United Kingdom, Canada, Switzerland, Italy, Finland, Sweden, the Netherlands, Spain, Norway, and Luxembourg) and the developing nations (South Korea, Taiwan, China, Brazil, India, and Russia); these latter have evidently higher growth rates, however, and could rise rapidly in the scale in the coming years. This is, naturally enough, a strategy system that works against the multilateral institutions developed above all in the Nineties, and one in which today's Western nations prefer bilateral agreements that leave the field more receptive to dynamics of alliances and relationships of power, in the opinion of Bernard Nadoulek. What has happened, in fact, is that the State has appropriated for itself the three revolutions indicated above to push transition from Cold War logic to Economy

Warfare logic rather than merely assuming the role of guaranteeing the rules of the game, monitoring fair play, and bailing out the losers. This is because the State possesses prerogatives not within the reach of businesses – for as big as they might be – especially in terms of long-term funding and farsighted investment in costly technologies and avant-garde sectors. Not only funding, but also long-term planning lies in the domain of the State more than the companies, such as the Commissioner’s Office for Economic Planning that existed from 1946 until 2006 in France, and at European level, the two 10-year Lisbon strategies, the first adopted in 2000 by European Union members with the objective of making the EU “the leading knowledge economy” and the second, “Europe 2020” for inclusive, sustainable, and intelligent growth, not to mention the heads of state that personally embodied roles inspired by their economic outlook, such as the charismatic personalities, Margaret Thatcher and Bill Clinton, both personally committed particularly with Saudi Arabia for the stipulation of supply contracts, and the decidedly harsher figure of Vladimir Putin, who deliberately wielded Russian gas simultaneously as a weapon of dissuasion/persuasion. The role to be played by companies in this context of economic warfare would therefore be that of serving as “the troops”: on the frontline, when they export consistently, in the rearguard, when they are able to keep a solid hold on domestic market niches, and as the spearhead, if they conduct a good part of their activities on foreign soil. The latter case regards above all the large multinational industries whose economic importance is measured not in terms of their annual turnover as much as in their degree of globalization, or in other words, their capacity to conquer foreign markets. Such capacity can be measured by considering the values implied in a company’s transnationality index, the assets it holds outside its parent company’s home nation, the percentage of its sales it makes abroad, and the number of its employees who work abroad. There are certain elements that do not make this military-type identification as automatic as it might seem. First is the question of the nationality of a company, especially that of a multinational: analyzing the stock market indices of the Western powers, what immediately captures the eye is the quantity of capital held by foreign residents, which very often exceeds half of the total of all the companies listed in these stock markets themselves; in cases like these, ascribing just one nationality to such corporations is clearly controversial. Yet the concept of nationality is fundamental in defining economic warfare because this latter ceases to exist if there is no need to defend property inside the nation itself either directly – by the State’s possession of shares, for example – or indirectly by guaranteeing independence in regard to foreign companies. In this case as well, the United States confirms its position on the frontline in defending its own interests as demonstrated by the two interventions of the Bush administration in 2005 and 2006 to prevent the purchase of Unocal (a leading oil company) by the China National Offshore Corporation and to oblige Dubai Port World to sell the management of six large US ports to AIG International, a financial services and insurance company. On the other hand, there are at least three factors that permit companies that are based on international capital to be considered a nation’s own companies: first of all, the territory in which the company was originally founded and where it developed its activity by constructing bonds with suppliers and clients and operating on the basis of the unwritten practices derived from a determined nation’s culture; secondly, the standards and institutional relations that enabled the company’s development that also depend on the nation in which the company has its headquarters; and thirdly, the location of the decision-making center, the business culture, and the nationality of the owners of the capital. The second element that makes problematic the automatic identification of companies as “the troops” of economic warfare is the convergence of the State’s and the companies’ interests. As mentioned above, the State’s logic of power does not coincide with the logic of profit applied by the companies, which often show themselves indifferent to the nation’s best interests. However, the

economy is perhaps the chief worry of both the State and its operators today, who, by conquering segments of the market that purchase their products, guarantee adequate employment levels and constant and secure tax revenues for the State, in this way contributing to the management of social balance and the funding of public services (healthcare, education, justice, defense, etc.). However, the fact that some companies create jobs and pay taxes in foreign nations contributes, at least indirectly, to the control of a foreign market by interests that are nationally held and instrumental in the power politics of the State. This convergence of interests explains why States try to promote and consolidate the national and international leaders in various sectors. The United States confirms its position at the top of various standings, such as in the aerospace and defense industries (Boeing Co.), pharmaceuticals, chain stores (with Walmart being regularly confirmed as the world's biggest multinational in terms of sales for years now) and as the nation with the highest number of spearhead multinationals, followed by Germany, which is the world leader in automobiles (Volkswagen) and chemicals (BASF), and then China, whose state-owned companies are reaching particular domination in the oil industry (with Sinopec Group and China National Petroleum Corporation); Italy, thanks to the primacy of Exor, occupies a significant position in the financial services sector.

It is clear in the eyes of increasingly better informed public opinion that the opening of branches abroad by multinationals or the delocalization of production – even by companies of smaller size – due to the lower costs enabled does not help domestic occupation, which is an indicator of economic power (and also social control) beloved by nations. With this affirmation in mind, nations have developed two types of approach: the most widely-adopted are attempts to motivate foreign companies to invest in their territory by offering tax breaks and more advantageous regulations – an area in which Italy ranks last among Western nations owing to the inefficiency of its bureaucracy, revenue agency, and civil justice system. The second approach is the one pioneered, once again in the United States, by President Clinton's proposal to support all countries operating on US soil regardless of nationality in order to create jobs and maintain the national employment rate.

The conclusion that may be drawn from the analysis above is that, although companies and nations moving the arena of economic competition may not work closely together (also because it would be naïve to think they would) in certain cases they may indirectly promote each other's intervention strategies by using their respective arms and playing their winning cards. Considering the role that the State is required to play more and more in the context of international economic relations, destabilizing the neo-liberalist system still prevailing at global level today, it is easy to imagine a day when nations and their companies are compelled to put their heads together in the planning of an equilibrium that takes the needs of both into account.

Owing to its exceptional seriousness affecting every nation on earth and the fact that it is impossible to imagine any one country from emerging as the absolute winner over all others, the great recession triggered by the financial crisis in August 2007 works to the benefit of a dialectic in international relations in which the multilateral logic of the large organizations, foremost of which the IMF and the European Union, but also the WTO and the UN regain central importance. The nations in the G20 Group, which will gradually replace the G8 as the leading economic forum of the most developed nations officially maintain dialogue as the method of choice in regulating economic difficulties, also because the urgency of the economic situation appears to demand a collective response to save world finance and avoid contractions in exchange without, however, creating the short-circuit in the economic system generated during the Thirties that led to the events in the history of the world and Europe in particular that are too well known to require description.

The contradiction is right around the corner, however: if this is the official line maintained by the States, reality demonstrates that the need to conserve the portions of the market acquired is more important than the imperative for solidarity in the financial sector, heightening tensions that are already high due to the crisis. Although viewed exclusively negatively by most, an economic crisis often provides big opportunities to the companies that survive, which have better chances of winning new “territories” where previous suppliers have succumbed (in France, these companies are supported in this type of activity by Ubifrance, the French International Business Development Agency whose Italian equivalent is the ICE – Agency for International promotion and Internationalization). This marks the return of the logic of economic warfare, and once again it helps us comprehend attitudes that may appear discordant, if not schizophrenic, and which must be read instead as the evolution of post-Cold War relationships where alliances that are no longer military in nature allow nations to not feel bound to their partners at the cost of their own lives, and even to consider them commercial competitors and treat them accordingly. The post-bipolar world no longer consists of just one chessboard where only two adversaries move their pieces but instead numerous boards and players that overlap, where a match played on one often affects outcomes on the others.

We might say that the concept of a multipolar world adopted to define international relations after the end of the Cold War remains valid, provided it is not interpreted in an idyllic sense or as the backdrop to definitive harmony among peoples and rather instead in the sense of economic warfare where the roles assumed by the nations/players shift back and forth ambivalently between partner/competitor and resemble less and less those of ally/adversary, excluding each other whenever possible. In this interpretation, the Cold War’s two power blocks become three: the first is the realm of power still theoretically occupied by Western block but gradually eroding, with the possible exception of the United States; the second is the ample space for maneuver continuously opening up to the emerging powers (even if it has appears to have slowed down recently) and their expansion also in terms of number of nations; the third block is the space left for the survival of the nations not included in the two blocks above, a new hypothetical Third World. The analysis that the two experts Christian Harbulot and Didier Lucas make of power strategies until 2020 confirm the general crisis of multilateralism and the reaffirmation of nation states’ sovereignty and power. It is important to recall that the alliances inside the three new power blocks presented above lack the necessary character vaunted by alliances of the past, and that there are even very close connections between nations at the helm of different blocks. It is sufficient to consider the complexity of US-China relations, for example: in sub-Saharan Africa they are rivals in a no-holds barred battle for resources, yet both are linked to a certain extent by China’s funding of the US foreign debt through its purchase of US savings, on one hand, and by the consistent direct investments abroad on which the Asian giant’s growth depends, on the other. The analyses here are conflicting: some experts believe that China will not be content to play a secondary role in world affairs for much longer, and even now through the weapons of economic dependency and technology transfer China is demonstrating the offensive measures it will be able to take in the future and the probable war in the Pacific; others are more concerned about the strategic alliance China is making with India on high-technology that might place Western powers lacking such a weapon in checkmate. Despite it all however, even bearing in mind these scenarios in which the developing nations finally gain the upper hand over the Old World, the United States remains the uncontested leader of globalization, also by virtue of the skillful defense of their national interests.

Economic warfare as a means in service of nations’ power strategies, regardless of whether they are of geopolitical or geo-economic nature, may be of three different types: economic warfare with

economic ends; economic warfare with political-strategic ends; and economic warfare with military ends.

The first form, that is the subject of the entire discussion thus far to be considered in greater detail in the following section, is the weakening of a nation's adversaries in the international markets through the expansion of its own economic power. The second form is primarily expressed through sanctions that damage another nation's economy to oblige it to change policy. This is an ancient arm of economic warfare that can be seen in many recent examples: the economic sanctions imposed on Italy by the League of Nations after the war in Ethiopia, those imposed on South Africa in the days of apartheid, and more recently and still in force, the "restrictive measures", as they are defined in EU jargon, levied on Russia in response to the crisis in the Ukraine: measures of diplomatic (suspension of the G8 meeting), financial (freezing of assets and restrictions on travel) and more specifically, economic nature (embargoes against imports and exports in given sectors). The third form of economic warfare takes the form of the second but differs precisely in its goal. Examples here include the economic sanctions against Saddam Hussein's Iraq in the Nineties (after the First Gulf War but suspended by UN Security Council Resolution No. 1483 in 2003), the embargo on arms sales imposed on all the territories of former Yugoslavia a few months after war broke out in Croatia (which was determinant in the outcome of the war in Bosnia-Herzegovina), and the current embargo on sales of arms to Syria following the violent repression of the government in 2011 that sparked the civil war still in progress.

One would like to think, as some theoreticians claim, that the first form of economic warfare has succeeded in eliminating nearly all direct armed conflicts, at least those between the planet's larger powers. At any rate, so-called traditional warfare has not been replaced by its less virulent (and certainly less bloody) form, as liberals have been hoping for the last two centuries by now. The scenarios of a number of important conflicts in the last twenty years demonstrate instead that what has happened is both a substantial overlapping and an intermingling of classical and economic warfare. This observation can be verified on practically every continent: in Africa, for example, the wars that claim so many lives in the Great Lakes region are being fought for the conquest of power and the control of natural resources at the same time. The conflict in the Democratic Republic of the Congo is emblematic, where in the aftermath of the genocide in Rwanda in 1994 the regions of North and South Kivu have been the theater of permanent atrocities triggered by ethnic conflict (the centuries-old clash between Nilotic peoples and Bantus that was exacerbated but kept under control during the Colonial era and then exploded when the area's nations achieved independence) linked to territorial questions (some tribes claim the lands of great landholders who are members of other tribes) and economic reasons (control over the areas where copper, cobalt, diamonds, gold, zinc, and other basic metals are mined). In Europe, the political motives behind the above-mentioned Ukraine crisis (Russia's opposition to the European Union Association Agreement, the annexation of Crimea, and the pro-Russia demonstrations in the other regions of west Ukraine) are linked on two levels to more or less evident economic motives such as Russia's need to maintain control over the port of Sebastopol (which is fundamental to its trade), the importance of Kiev in the international cereal market (the world's second largest exporter in 2014) and her strategic location along the corridor of major gas pipelines headed to Europe. Lastly, the case of Syria exemplifies the importance of economic considerations linked primarily to energy resources in Middle Eastern geopolitics: the reason that the Western powers have refrained from intervening in a war raging for five years now is the relative paucity of oil and natural gas in the reserves under the control of Damascus that the West – still under the effect of the economic crisis – does not consider worth the substantial costs of fighting for.

Economic warfare and its armaments

This section provides a detailed analysis of the armaments nations use in economic warfare to win the war and assert their power. The first arms to be considered are those of indirect type that work in the background of a “covert war”.

In this highly particular aggregate of economic warfare weapons, the one with the greatest influence on all the others is undoubtedly training, which is wielded principally by the industrialized nations and has contributed in large measure to their economic success. In this regard, it is sufficient to recall the importance granted to this factor by the European Union, to the extent that two out of the eight objectives of Europe 2020 strategy for intelligent, sustainable and inclusive growth regard education (reducing the rate of early school leaving to lower than 10% and increasing the number of 30-34-year olds with university degrees to 40%). Checking the ratio between training and economic development, examples like Germany, whose educational and training system is acknowledged as being one of the world’s best, or Japan, where the high school graduation rate is around 95%, confirm the affirmation above, especially when considering the ways in which these two nations address international markets. Naturally, this does not involve only basic training, as important as it is in laying the foundations and outlining a certain path to progress also in economic field, but particularly regards the ongoing education that endows participants with the necessary qualities of versatility and the multiple skills required to stay constantly up to date and never unready for change. In this regard, another good example is provided by the French business schools, the most prestigious of which can be ranked among Europe’s best and whose success is derived in large part from a national model that envisions two years of basic training in general fields ranging from the scientific to the humanistic prior to subsequent specialization. One special characteristic of the elite trained in this type of modern school is its international dimension, an aspect that differs significantly from the markedly chauvinistic character of the military preparation that was provided in previous centuries which, if the concept of economic warfare as the modern version of traditional wars is accepted, should be the natural continuation of the latter.

Concluding the aspect of initial training, the role played by specialized training and research that are so crucial to the affirmation of economic power must necessarily be mentioned. It is not by chance, we repeat, that the European Union has been affirming that it wants to become the “leading knowledge economy” since the start of the millennium and that France alone, for example, vaunts 160,000 researchers, a number that has more than doubled in the last seventy years. Knowledge, in fact, has become economic warfare’s supreme weapon, and the potential represented by research is the driving force behind the transformations of our times. Therefore, emerging nations like China and India, which have perfectly understood the crucial challenge involved in producing knowledge – be it basic or applied – are anything but far behind in this “race to knowledge”. If statements from leaders like Prime Minister Wen Jiabao, who went so far in 2005 as to proclaim the 21st century as “the Asian century of high technology” arrive loud and clear from Beijing, prestigious technological institutes built on the model of MIT in the Sixties turn out an army of 170,000 graduates on the Indian sub-continent every year. In the field of research, cooperation between universities, schools, and the private sector is essential because the latter awaits specific and timely returns on the work of the researchers, a form of cooperation that today takes the form of “clusters” or “poles of competitiveness” where research institutes, engineering schools, and high-tech companies coexist as extraordinary innovative incubators of avant-garde economic power. In this regard, France has been promoting this type of reality, which represents highly attractive elements for the territories in which they are located, with absolutely avant-garde training activities since 2005.

At any rate, there are enormous differences between nations in their policies in favor of research, even among the leaders: it is unfortunately a cliché to refer to Italy in this regard, where although the fundamental importance of solid research in order to provide companies with high-performing technologies that allow them to become competitive in international markets is acknowledged in words and even funded by the private sector, the number of research workers employed by companies is five times lower than that of the United States, Japan, and Sweden, not to mention the so-called “brain drain” or, in other words, the researchers who leave Italy in search of better work opportunities, higher salaries, and more recognition of real merit and skills instead of the favoritism, bureaucracy and scarce generational turnover, so common in their native land. For every “Italian brain that goes down the drain” there is another nation happy to welcome researchers, and some even use the attracting and recruiting of highly-qualified, specialized personnel as a weapon in economic warfare: one of these is the United States, which on various occasions during the 20th century set out a welcome mat for the planet’s finest minds, starting from the Jewish elite in flight from Nazi-Fascist Europe and continuing with the dozens of physicists and mathematicians fleeing the former Soviet Union in the Nineties, and in more recent times as US universities throng with Indian and Chinese engineers and economists. The fact that three-quarters of these end up staying in the US after they finish their studies makes the advantage to the US economy easy to see. Directly linked to research and innovation, a driver of fundamental importance for companies and one in which the State has every interest in investing, the example offered by patents shows the degree to which collaboration between research and the State may be advantageous. The world’s top-ranking nation in terms of patents filed is China, whose patent office has been the world’s leader since 2013 and home to one-fourth of all the patent applications filed on earth. China is followed by the US, whereas Europe is gradually losing ground to an increasingly massive Asian presence, given that the next positions are held by Japan, South Korea, and India. Most of the world’s patent applications are filed by private companies (Matsushita, Philips, Siemens, Huawei, Bosch, Toyota, Microsoft, to name a few) but without help from the State – especially in previous eras (we refer to the decisive role in terms of research and development played by the US military command or the Japanese MITI) – they would never have been able to accomplish such results. These States also created a sufficiently protected and favorable regulatory framework, for which reason research for patent applications can be considered to be in the best national interest, a guarantee of productivity, or in other words, a decisive arm in the commercial clash between nations.

Passing from the wide field of the management of various forms of knowledge as a weapon for use in economic warfare to the field of competitiveness, we might say that this is a terrain on which the State can play all its cards to best advantage. It is in the State’s own interest, in fact, that its companies are as well-equipped as possible to face the competition in internal and external markets. In this particular historical moment in which momentous changes are taking place in the world’s power positions, we observe that while certain nations make impressive advances in international markets (China’s percentage of the world’s global exchange has risen from 2% to 9% in little more than twenty years), other nations with solid historical performance in the field fall behind (such as France, for example, which during the same period of time dropped from 6% to around 4%) while others maintain their positions (Germany provides a notable example of continuity by remaining at the top with around 10%). In this context, the State plays the role of coordinator and supplier of instruments for the reading, understanding, and interpretation of the “battlefield” of international exchange thanks to the extent and diversity of the range of knowledge that at least some of its functionaries should have of foreign nations. Taking France as example, this role is played largely

by the Secretary of State for Foreign Trade, which has been working in these years of economic crisis primarily to contain the erosion of France's share of world markets, which despite being ascribable to changes that are mostly inevitable and affect all the Western powers, remains a source of concern for the nation's economic balance. As remedy, Ubifrance, the French International Business Development assigned to promote exports by French companies through its knowledge and expertise, has been recently reformed. The institution with practically the same functions in Italy is the ICE Agency for the facilitation, development, and promotion of Italy's economic and commercial relations abroad, especially those involving small-medium businesses, which works to stimulate the internationalization of Italian companies and the marketing of nationally-produced goods and services in markets around the world. The active role of the State in negotiating large production contracts is another element in the more general promotion of competitiveness and provides a tangible form of cooperation with companies that is so often invoked but so difficult to effectively implement: the partnership between the United States and its weapons and aeronautics industries offers a good example.

Degree of competitiveness is a useful indicator applicable to companies; attractiveness instead applies to territories: attracting foreign investment means creating jobs at home and benefitting from tax revenues. Fiscal policy, control over the territory and culture are important components. As regards fiscal policy, we have seen this to be a sore point of Italy's attractiveness, even if the other European nations, Belgium and France in particular, have similar corporate tax rates. Ireland, on the contrary, provides an example of how "lightweight" corporate tax policy can provide strong incentive for direct foreign investment: by applying a rate of around 15%, which is hotly contested by the EU, however, the "Celtic Tiger" has succeeded in attracting foreign companies primarily in the high-tech and IT sectors (from Adobe to eBay and Yahoo!) that were largely responsible for its economic growth. China, on the other hand, has developed a policy of establishing special economic areas in the provinces of Guangdong, Fujian, and Hainan and created particularly attractive tax regimes in such areas for foreign companies that choose to set up business there. Control over the territory as intended here indicates the level of development of the infrastructure that companies require to procure their raw materials, take the results of their production to the four corners of the globe, and communicate with one another: air connections, high-speed trains, roads and ports, not to mention coverage for mobile telephones, which by now have replaced fixed telephone networks nearly everywhere, and in some parts of the world, such as sub-Saharan Africa, for example, the extension of fixed phone lines even appears unnecessary. Culture, which may appear to be the least tangible element, is far from being the least exploitable component of soft power, as defined by Joseph Nye. Unlike the many other elements analyzed, culture is undeniably a characteristic that Italy has in abundance and from which it can draw profit, as the nation's Prime Minister continuously repeats and promotes, and as the nation itself proved capable of demonstrating on the occasion of Expo 2015, where the "Italian way of life" based on wellbeing established on the combination of taste and beauty did not fail in attracting a vast audience of potential investors.

The last strategic weapon to be taken into consideration here in the context of covert war is economic intelligence, which the High Commissioner at the General Secretariat of the French Ministry of Defense Alain Juillet defines as a method of governance focused on the control of strategic information that aims at the competitiveness and the security of both the nation's economy and its companies. Another two renowned experts on economic welfare, Christian Harbulot and Éric Delbecq, proposed their definitions of economic intelligence. The former defined it as the constant search for and interpretation of the information accessible to everyone with the intention of

deciphering the intentions and hypothesizing the capacities of the protagonists. The latter expert instead defined economic intelligence as the culture of economic battle, and therefore both the expertise – intended as the aggregate of methods and instruments of surveillance, security, and influence – and the public policy aimed at increasing power through the drafting and implementation of geo-economic strategies and actions in favor of the collective control of strategic information. Intelligence is naturally intended here in its original Anglo-Saxon meaning, or rather, the gathering of information required to calculate how to move best over any terrain necessary, and not as much in the exaggerated aspects of Cold War spying and secret agents that emphasized a culture of information as the realm of only a few obscure experts with scarce regard for the unlawfulness of the means employed (transfers of technology, thefts of computerized material, the dismissal of strategic frameworks, etc.) When analyzing what economic intelligence consists of in greater detail or the concrete application of what is sometimes erroneously termed “information warfare”, three fields of action may be distinguished: vigilance, the protection information, and the creation of lobbies. The first of these takes form in the surveillance of the economic area in question to identify with a certain quickness any threats for which protection must be provided and any opportunities to be seized. Vigilance can be divided into its seven types: competitive, commercial, technological, geographical, geopolitical, legislative, and corporate, and anything that serves the accretion of the influence and therefore the power of nations capable of putting it into action. The point of view being proposed here, in fact, places priority on the ability of a nation to use this strategic weapon rather than that of single companies that employ it for the purposes of increasing their total sales and profits. An offensive and defensive weapon at the same time, as when it is used to prevent competitors from allying or to spread disinformation, economic intelligence is the flagship of economic warfare policies due to the importance intelligence assumes in modern economies. It is in this field, moreover, that close collaboration between the State and its companies becomes even more necessary, such as in accordance with the model developed in Japan immediately after the Second World War when the foundation of the Japan External Trade Organization complemented the efforts of the above-mentioned MITI. The intensification of commercial bonds with other nations was therefore supported by the ample powers assigned to this latter in a context that was not only economic but also cultural and in which the participation in the effort of making one’s nation great through achievements in terms of technological innovation and commercial projection was every citizen’s moral obligation. It is no coincidence that of the entire national budget allocated to research and development, Japan dedicates a sum equal to between 10 and 15% to scientific and technical information. Something similar takes place in the United States, even if it is formally masked by the official reference to lawful competition. The US administration in fact set up a “counter-intelligence” service derived from an extension of the prerogatives of the CIA, which in this way plays an active role in industrial espionage for the purpose of providing the nation’s companies with secret information on their foreign competitors.

After amply analyzing the arms used in covert economic warfare (training managers, implementing policies of competitiveness and attractiveness, channeling economic intelligence) a review the various offensive and defensive arms available to nations can now be provided.

While sanctions have already been mentioned above as a form of economic warfare conducted with political-strategic ends, an instrument that is even more suffocating for the adversary is a boycott, which can even be extended to an even wider ban on sales: examples are provided by the weapon wielded by President Carter in 1979 to freeze the sale of cereals to the USSR following the Red Army’s invasion of Afghanistan, Russia’s current threat to close the taps on the natural gas pipelines to Europe, and China’s boycott of French products in 2008 in revenge for the support

Paris had given Tibet, an issue that reached prominence again on the eve of the opening of the Beijing Olympic Games also in many other Western nations following China's repression of the rebellion by Tibetan monks. Another measure that might be interpreted as retaliation is the imposition of import restrictions, a practice that if prohibited in the European Union is instead widely used by the United States in the most various sectors, ranging from cheeses to automobiles and aimed at protecting the large US producers at the expense of Japanese products, in response to which Tokyo preferred to negotiate rather than risk even more severe restrictions. There are also peak tariffs, in other words, customs duties of higher than 100% often applied to agricultural products coming from determined nations (see for example the terms for inclusion in the WTO imposed on Afghanistan in 2014 at the end of negotiations).

As will be seen below, these directly offensive weapons are matched with the other indirectly offensive weapons of open economic warfare. The first is the so-called "business diplomacy", which, despite being a practice with a long tradition, was perfected by the Clinton administration. It consists of a sort of massive assault by a nation's companies on foreign markets supported by a careful preparation of the terrain (liberalization of exchange with the nation involved), detailed knowledge of the field of encounter (industrial and commercial information), and skillful directing by the State (in the United States in the Nineties, the Advocacy Center informally known as the "War room" entrusted to constantly monitoring the world's industrial markets). If the first of these elements – the liberalization of exchange – is considered in closer detail, it is easy to see how it has been used as nothing less than a real weapon, especially by the United States. The free trade agreements this nation has signed have always revealed their offensive power as instruments of unequal relations between a strong nation on one side and a weak one on the other, an asymmetry that has always naturally penalized the latter. One example is provided by the commercial relations maintained with the Central American nations (almost all of which signed similar agreements with Washington): in what is nothing less than the post-Cold War evolution of the ideas of Manifest Destiny, the Monroe Doctrine and the Roosevelt Corollary. These agreements are often much more intransigent than the standards of the WTO to which all the nations belong: the supremacy of the United States is always necessarily affirmed by its importance for these nations' balance of trade, given that it is their leading trading partner, and permits the unilateral imposition of provisions solely in favor of the US, such as those covering patents (the prolongation of patent protection rights or a loosening of the terms of patentability that permits patents to be registered for products already in the market), in this way maintaining US leadership. The United States need not crush its adversaries by force, but the rules of the game must to a certain extent be defined in its favor. The latest evolution in terms of offensive arms in economic warfare regards the sovereign wealth funds that have burst into the world's financial scenario in the last twenty years with an impact on the international economy that makes them comparable to veritable weapons of mass destruction. Owing to their enormous sums (over 16 trillion dollars are estimated for Eastern Asian nations' funds alone) that prevent them from being easily deposited in classic banking circuits, these international investment funds set up to invest a nation's savings are directly controlled by nations or central banks. They were originally devised as financial instruments capable of enriching a significant block of the State's capital for the benefit of its future generations (as is the case of the Norwegian sovereign fund). Most of these funds were set up by oil exporting nations or Eastern Asia nations with current account surpluses of around 6.5% of their GDP for the purpose of investing their trade surpluses and have been configured as a powerful means of intervention on the world's economic equilibrium, especially in the wake of the subprime crisis when a certain number of such funds made substantial contributions to the capital of prestigious groups (Citigroup, Merrill

Lynch, Morgan Stanley) with the objective of saving them through injections of liquidity. Citigroup provides a significant example: it was the world's first financial group until 2007 when – in the clutches of liquidity problems brought on by its speculation in subprime mortgages – it appealed to various funds including those of Singapore, Kuwait, and Abu Dhabi. Citigroup was effectively bailed out, but obviously under the terms dictated by these new investors: elevated guaranteed yields on shares (from 9 to 11% per year), guaranteed minimum prices in the event of collapse of stock prices, and the transfer of decision-making power from the parent company's headquarters in the United States to the palace of one of the emirs with a substantial shareholding in the fund. Despite being a purely symbolic territorial element, the latter eloquently indicates the nation that is now in command. It is therefore evident that such a massive intervention is by no means impartial and consequently represents to every effect a form of control by the nation that set up the fund. Doubts arise that, thanks also to not exactly transparent policies and management, the funds serve developing nations' political and geopolitical interests, and for such reason are perceived as major economic threats by Western countries. It is sufficient to recall that the Abu Dhabi Fund alone would have had the power – prior to the crisis – to purchase the top nine companies listed in the most important stock exchange in Paris, and that China Investment Company, founded in 2007, already occupies the 6th place in the world in terms of quantity of capital possessed. The best proof that these funds are perceived as threats is the recent adoption of measures designed to limit their purchasing power. This action vaunts a certain tradition in the United States, where the Committee on Foreign Investments can advise the President to reject an offer of foreign investment that might pose a threat to a US company deemed to vaunt strategic interest.

Alongside arms, there are protection and defensive measures. Offense and defense are obviously used together in the definition of the same strategy and for such reason bear equal importance in economic warfare. Free trade is all very well and good, provided that a nation can adequately safeguard its industrial tissue and every repercussion such protection has on its political and social dimensions. If the various theories developed by the specialists are incapable of satisfying this principle of pragmatism, nations have no problem ignoring them and taking the protective actions described above. This is why it should come as no surprise that certain defense mechanisms presented here have already been numbered in the above-mentioned category of weapons: the same instruments of economic warfare can be proven to be powerful methods of attack and sturdy shields at the same times depending on the context. The measures of protection and defense to be examined below include: currency, unfair trade, customs and tariff barriers, quotas on imports, subsidized exports, economic patriotism in the form of patriotic consumption, and soft power of regulatory nature.

As regards currency, devaluation is a powerful way to stimulate exports during periods of economic recession, as illustrated by the actions of the Bank of England between 2008 and 2009 with the Pound against the Euro and the devaluation of both the Yen and the Yuan. Currency plays a dual role, defensive by decreasing the adversary's competitiveness, and offensive by making penetration of foreign markets easier.

The question of unfair trade regards a law passed by the United States in 1962, No. 301, with the purpose of levying sanctions on nations and companies included in the latter's power block deemed guilty of unfair trade, which practically amounted to those doing business with the USSR or Cuba, and authorized the President in person to respond to "unjustifiable", "unmotivated" or "discriminatory" acts of this kind. If this is easy to understand in a Cold War context where international relations are rather strictly regulated by political-strategic alliances, it is perhaps harder to accept in today's context of distension and multilateralism, yet this attitude is hardly

unusual. During the Nineties, President Clinton, who demonstrated fervent belief in the logic of economic warfare on numerous occasions, renewed a so-called “super-Law 301” issued in 1984 with the purpose of identifying the barriers raised against obstacles to US imports by other nations and combating them with retaliatory measures. The case cited above, which regarded boycotting and the measures adopted by the US to protect its auto manufacturers against their Japanese rivals, was accepted by Tokyo in order to the latter’s attempt to avoid being slapped with even more severe restrictions, and arose precisely as a result of the US threat to resort to the “super-Law 301” and a surtax on auto imports that could even go as high as 100%. The institution of the WTO and its respective arbitration body, something of a legal arena where powers battle for their rights, should prevent resort to measures of this kind. The operation of the Dispute Settlement Body is based on precise rules and a series of specific deadlines for each case. The entire procedure lasts a maximum 15 months (only 12 months in the absence of appeal): the initial decisions are taken by a special group after first consulting with both parties, who will then be presented with the final report (within six months) and approved or rejected by the plenary session of the members of the WTO. More than the issue of a sentence, the objective of the Dispute Settlement Body is, of course, settling controversies through consensual negotiation between the two disputing parties; one exception to this function, which normally works smoothly in reality, was the so-called “Banana war” that pitted the ACP states against the Latin American countries. The Dispute Settlement Body registered an increase in the number of appeals – which was interpreted by its functionaries as a sign of the nations’ trust in its procedures and decisions. In the current context of increasingly ferocious globalization, however, it could prove to be one of the many means used by nations to win the economic battles against them, and for such reason, a particularly paradigmatic indicator of the state of economic warfare in the era of globalization.

As regards customs barriers or peak tariffs, these are the oldest defensive measures States have to protect themselves against the offensive strategies developed by their adversaries. This type of measure is implemented primarily by developing nations as self-defense against imports from industrialized nations (the German economist proposes the definition “educational protectionism” in this case). The Western nations use the same measures to protect their industrial employment levels, which even if they have elevated costs in economic terms they are politically essential in maintaining social equilibrium. On the other hand, it is worth recalling that since the end of the Second World War customs tariffs have been constantly lowered from the 44% of the cost of the goods levied during the Thirties to the current value of less than 5%.

We have already mentioned import restrictions, which are closely related to import quotas as being the most important form of barrier unrelated to price. Directly limiting the quantity of products of a certain type that can be imported, this measure is used to protect determined sectors of a nation’s production or to adjust its balance of payments. Here again, the United States provides a good example with the limits it places on sugar imports: thanks to precise limits on the quantities of sugar imported and the resultant increase in the price of the final product sold to consumers, the US sugar production sector, which is rather small in terms of employees, has never known a crisis. The quotas are set by the political choice of maintaining employment levels in determined sectors: liberal economic thinking would demand the suppression of quotas in order to lower the price of the final product and diversify consumption, but during economic warfare any theory that is not instrumental in furthering the logic of power and independence proves to be practically inapplicable.

Not manifested only in imports, this form of “new protectionism” is also applied in exports in the form of public subsidies provide to determined companies or sectors of production. Known also as

dumping and officially illegal (see the provisions of EC Regulation 1225/2009 of the EU Council), dumping is often implemented indirectly. Agricultural subsidies assume importance in this sense: both the European Union and the United States provide their farmers with consistent aid at the expense of all those nations (especially in Africa) whose economies depend on the primary sector of the economy but who have no power on the international economic chessboard and are therefore so severely penalized that they cannot even access the world's foodstuffs market. It must be noted that, at least officially, both the EU and the US have agreed to review their CAP (Common Agricultural Policy) and various Farm Bills, but, because no deadlines have been set for doing so, the process has not yet even begun.

Whenever the subject of economic patriotism is discussed, the famous speech by French Prime Minister Dominique de Villepin in 2005 is recalled: it affirmed the State's obligation to defend the nation's strategic national industries, especially in cutting-edge fields or those considered as being part of the nation's industrial heritage. This concept had first been presented in the Nineties, however, and once again on French soil during the post-Cold War phase and the maximum expansion of globalization, which represented a potential threat to companies with fragile capitalization. The definition used by Villepin was instead derived from a report entitled "Economic Intelligence, Competitiveness and Social Cohesion" presented in 2003 by MP Bernard Carayon of seesawing fortune (it was convincing for politicians and entrepreneurs but deemed insufficient in its analysis by many economists) in which the need to give a more patriotic connotation to French economic policy was amply illustrated and demonstrated and a complete series of objectives to be achieved was defined in this regard: the definition of the common interests of the States and the private sector, the safeguarding of these interests as a measure of legitimate defense against control being gained by foreign capital, the subsequent conquest of parts of the world market, the promotion of excellence in certain fields, and the increase of competitiveness. The decree issued on December 31, 2005, desired by Villepin in the protection of production in sectors such as defense, information technology, private security and information interception systems was based on the ideas illustrated in this report. On the other hand, France is not the only nation to resort to this defensive measure in economic warfare: the European Union itself, with the institution in 2004 of the legal form of "European company", clearly pursues the objective of consolidating the European dimension of these companies against the possibility of their takeover by foreign entities, not to mention the United States – where the Committee on Foreign Investment has the right to veto the purchase of US companies by foreign companies – or Germany, where in 2010, Chancellor Merkel's government prevented the acquisition of Opel by Fiat-Chrysler.

As regards soft regulatory power, the example most worthy of consideration is multilateral commercial negotiation. The WTO has become the theater of conflict between parties intent on promoting and further expanding free trade, on one hand, and others more interested in protecting the technological advantage held by the industrialized nations, on the other. It is obvious that the developing nations are those most disadvantaged because the failure to liberalize determined patents in the medical field, for example, prevents these nations from producing medicaments at low cost. This WTO held hostage by the Western nations, which among other things led to the failure of the Doha Round in 2011 after ten years of negotiation, is nothing less than a measure of defense against the developing nations – India, first of all, which with all its potential in the production of biotechnologies might aspire not only to economic independence in determined sectors but even attain the position of leader in international markets. Another area in which an important contest around soft power is currently in progress is undoubtedly the Transatlantic Trade and Investment Partnership (TTIP): it is not just any simple free trade agreement for the unimpeded

circulation of services and goods but also a regulatory agreement aimed at removing the many differences in technical regulations, standards, and homologation procedures, and the standards applied to products and safety/hygiene rules between the European Union and the United States, which have still a few cards to play in this game. This partnership, should it become valid, would create the largest free trade area on the planet, equivalent to around half the GDP and one-third of the world's commercial exchange: the entire planet would benefit, and the path of multilateralism in commercial liberalization currently stalled despite the desire to unify world trade might theoretically be resumed. The current juridical fragmentation, in fact, favors the construction of a theater of economic warfare where the strongest prevail over any other rational logic.

Last among the measures of protection and defense mentioned at the start of this section comes patriotic consumption, which consists simply in giving preference to the purchase of products made at home over those made abroad in a wide range of sectors. Whether encouraged by the State or not, in both cases it provides an effective defense against economic warfare attacks. The first case is represented by the United States, where a protectionist measure adopted at the height of the Great Depression, the Buy American Act promoted by President Roosevelt, and approved in 1933 as one of the measures aimed at lifting the nation out of the economic recession, is still in force in justification of a policy that officially grants preference to US companies. The conflict between Boeing and Airbus for the supply of an order by the US Air Force, for example, may be seen in this context: the European company had initially been selected on grounds of better performance, but the Pentagon decided to cancel the offer and return it to the decision of the first Obama administration the day after the new President's inauguration, in such way implicitly favoring Boeing in this contest. In Japan, instead, patriotic consumption is implemented in entirely different ways: the State has no responsibility at all, and consumers buy local products by a vast majority. Examples are provided by the automobile market, where Japanese control 95% of the market or the recent block on the sale of Samsung electronic products in the Land of the Rising Sun that made penetrating the Japanese market extremely difficult and the Korean company with a paltry 1% share of Japan's entire electronics market.

Historical Origins of the French School of Economic Warfare

Historically speaking, the promotion of intelligence culture in France has been required to clash with both a problematical and controversial linguistic orientation and a much deeper and more influential attitude: France's inability or unwillingness to reason in terms of power, and therefore take a position on economic warfare one way or another.

This reticence may be explained by the fact that on more than one occasion in its relatively recent past France has had to ally with its enemy, in this way stripping the word "patriotism" of its meaning. Every time a group committed to the conquest of power allied with the enemy, the French lost faith in patriotic ideals. This happened with the succession of Louis XVIII after Napoleon in 1815, with the support given to Bismarck against the Commune Uprising in 1870, and with the collaboration with Nazi Germany during the Second World War. Also the Colonial Wars and the Cold War contributed to creating a certain disillusionment with patriotism, while the concept of power came to be considered purely as an act of domination at the same time. In any case, not betraying the ideals that lie at the basis of the history of the French Republic – from those underlying the French Revolution of 1789 to those of the Nazi-Fascist Resistance of 1945 (these latter inspired by an economic system of Keynesian inspiration), and not forgetting the spirit and dedication of men who, like General De Gaulle, interpreted national power as autonomy while providing prospects for the economy as well – means empowering a nation that is both strategic and a partner to the nation's most vital parts at the same time. This is what the experts and supporters of business intelligence in France have been trying to accomplish for the last forty years.

The '70s: reticence and defensive action

It is not easy to determine the real date of birth of the tradition of French economic warfare. Even if today it might be ranked among the most prominent on the European continent, in fact, the negative connotations attributed by French culture to intelligence operations, which are unjustly associated with spying, the violation of privacy, and deceitful campaigns, conditioned it and limited its development for a long time. The comparison with the public information policies – defined as a "body of laws, regulations, directives, interpretations and sentences of law that direct and orient the information lifecycle, [which] includes the planning and creation, production, collection, distribution, and disclosure of information" – enacted by the United States government after the Second World War undoubtedly provided an important incentive for French public authorities, which towards the end of the '70s began to understand the need to fill the gap that risked seriously penalizing France in terms of national (political) independence and strategic autonomy (in the

economic field). It would take more than a decade, however, in order for the imperative of competitiveness in global markets, necessary at corporate level, to be fully comprehended also by the public administration and to take form in an evident expansion of the range of action of government intervention. If up until that moment the management of information throughout its entire lifecycle had been finalized exclusively for the internal purposes of the various institutions, starting from the end of the '80s it began assuming central importance in defining the government's economic policy and creating a fundamental "alliance" between the public and private sectors. The first to realize the importance of the advantage held by the United States in the management of information for social and economic development, around the end of the 70s, were Serge Cacaly, on one hand, and Simon Nora and Alain Minc, on the other. The former, an information and communication science researcher, published two studies in 1977. One, emblematically entitled *Le révolution documentaire aux États-Unis*, emphasized the importance of recognizing information as the driving force behind progress as closely linked to extraordinary developments in computer science and its increasing advances in qualitatively and quantitatively analyzing documents on the other side of the Atlantic. Information, even if still masked by the skirmishes of the Cold War that preceded military and space research, was becoming the one most important sector on which world supremacy could be based.

In the wake of these studies, in 1978 the high functionary Nora and the younger political advisor Minc presented the President of the French Republic with the report entitled *L'informatisation de la société*, which for the first time, together with the acknowledgement of the United States' ambition for world supremacy in science and technology based on information management, revealed the French fear of such domination and its potential impact on society and the control of power. It is symptomatic that this attitude transpires from a document of political orientation and here lies the origin of the French government action to stimulate the activities of collecting, processing, and distributing information. Nora and Minc, in fact, repeatedly emphasized the government's role as the holder of a power of influence derived directly from the social contract and national unity based on guarantees, a power that must be applied also to the new technologies and the control of the same. Public intervention in the information field is therefore not only fundamental but even necessary for society in order to avoid the risk of domination concretely posed by US supremacy in the field of information. The words that the two authors used to express this concept are strong indeed: "[...] it is the entire future of the French-speaking world and the identity of France that is being placed at risk". On the other hand, these considerations were supported by constant reference to real data: the number of computers imported (more than 80% of the entire fleet of French information technology equipment was produced by the USA), but above all the control of the reference databases (seven out of eleven databases controlled by the United States). This latter element, in particular, is crucially important as databases are essential in economic, technical, scientific, and academic activities, because they are sites of conservation of information that can be accessed only under determined conditions and enable research also from far away. Real power does not come from merely knowing data and information but controlling it, with the possibility to manipulate and decide who else can do this as well. The fact that such power was left nearly exclusively in the hands of foreign powers was therefore deemed a highly alarming loss of sovereignty by Nora and Minc. Hence, these two authors proposed that the government take action and develop a vigorous policy in supporting research, forming a national industry in the information field, and developing telecommunications infrastructure, stimulating these activities from both the juridical and financial points of view.

Analyzing the government's real situation in the moment that these proposals were made, or in other words, which public institutions were effectively involved in managing information, a fairly varied panorama is revealed. First of all, we see the INSEE (National Statistics and Economic Studies Institute), the nearly exclusive producer and distributor of statistical and economic data and the direct heir to a concept that stood at the origin of the modern state itself, when back in the 17th century, "statistics", in other words "whatever regards the state", began supplying an indispensable tool for the exercise of government. As regards instead the management of information on the international situation, every single government department handles the task by itself: the Defense Ministry's Evaluation and Forecast Center, the Foreign Affairs Ministry's Analysis and Forecast Center, the Ministry of Industry's Observatory on Industrial Strategy, the General Commission on the Plan, International Information and Forecast Study Center, and the Ministry of the Economy's Forecast Directorate. In any case, this picture only confirms what had already been confirmed above: a similar structure was destined exclusively to responding to the needs for information and analysis inside the administration. The comparison with the United States, where the distribution of the information collected by public and private organisms working in the sector in favor of the nation's economic operators was a well-consolidated practice instead, and economic crises such as the oil crisis of the '70s would emphasize the need for imperative of competitiveness that the French government would no longer be able to ignore and that would bring it to modify its structures and methods of action in the information field. Information policy, which was still uncertain, consisted of a system that tended to privilege defensive actions more often than offensive actions, even if performed in the logic of national independence and strategic autonomy. The imperative need for competitiveness clearly revealed all the limits of an approach such as this one.

The '80s: the first change

The first attempts at a change of direction in government action were made in the '80s in the system of aids given to companies: instead of interventions that privileged direct subsidies, a system of indirect aid based more on supporting innovation was adopted. Furthermore, whereas previously government aid was concentrated on the larger industrial groups, the new system was characterized by the shifting of importance to small-and-medium sized companies. These new methods of government intervention associated with the introduction in France of new business strategy tools destined to anticipate the changes in the environments finally succeeded in launching the diffusion of information culture, particularly in regard to scientific and technical information, which in the time of a decade would lead to the effective adoption of a business intelligence policy.

The French Ministry's Evaluation and Forecast Center may be considered the party most responsible for this new partnership between the government and the nation's businesses and the important stimulus given to information culture. Envisioned at the start of the 80s by the current Minister of Technology and Research on the model of the above-mentioned Defense Ministry's Evaluation and Forecast Center and initially directed by Thierry Gaudin and Marcel Bayen, the CPE was dedicated to evaluating research, industrial strategies, and forecasts but above all to so-called "technological monitoring". This term was rendered popular by Jacques Morin, a technology transfer consultant, to indicate a company function in support of real business activities that represented "[...] the testimony of the determination to supervise the technological business environment for strategic purposes and to identify the threats which – if intelligently anticipated – might even be transformed into opportunities for innovation. It also implies that an internal system of appropriate information exists for the exploitation of the results".

Comparison with the United States, but also with Japan, where the culture of adapting company behavior to changes imposed from the outside is an integral part of the managerial mentality, continued to be in France's disfavor. The nation's delay was once again made clear, especially in regard to its scarce use of databases, which were considered merely as archives and not as active instruments of the monitoring function. Hope arose for the assignment of such function to highly specialized managers capable of developing a strategy, at the very least, as well as substantial information science development in the field of documentation. The environmental monitoring approach had already been anticipated by Humbert Lesca . It consisted in a systematic approach to the company's openness to the regional, national, and international environment with the explicit intention, from the organization's bottom to its top, of not being caught off guard by change and evolving along with it or even before it in the implementation of a structured device finalized to receiving the signals coming from outside. The monitoring, according to the definition provided by Lesca, would therefore be a "system by means of which the company scrutinizes its own 'external' surroundings and anticipates the changes, as far as possible, [transforming] the raw information it has on its environment into a form of business intelligence serving its own future."

The Evaluation and Forecast Center was therefore actively committed to monitoring activity at national level and gathering information on the international scene regarding questions of scientific and technical interest, technological innovation, and the multinationals. The beneficiaries of this activity were, above all, a number of sectors deemed strategic, such as materials development, information technology, and biotechnologies. In addition to the development of these skills by itself and directly at the service of the Ministry of Research and Technology, this Center was also involved in distributing its studies and analyses in the private sector, especially to the advantage of consulting companies and other public actors. Its objective was to achieve independence, once again, from the US power that appeared threatening also in the context of strategic studies and monitoring operations, thanks to the spread and activities of its own consultancy companies. The institution halfway through the '80s of the Aditech Association, the nerve center in the development of business intelligence in France, was the work of the Center's directors for the purpose of facilitating this activity of external diffusion and the signing of contracts with companies in the private sector.

The famous Study No. 100 written by two experts, Bernard Nadoulek and Christian Harbulot, who made important contributions to the business intelligence in France, was published as part of Aditech research activity. The former was a professor of the French Karate Federation who had begun teaching martial arts at Club Montagne Sainte Geneviève in 1971, in addition to being acclaimed for publishing articles and books about the struggle against power and strategy (a subject on which he became a consultant in 1986), such as *Du karaté à l'autonomie politique* or *Désobéissance civile et luttes autonomes*. The latter was a close associate of his, a former Maoist militant and member of the same karate club with whom he signed articles entitled *Le Conflit gradué* and *Affrontements de théâtre et verrou panaméricain*. In particular, Christian Harbulot, who would fill the role of aggregating the three prevailing models of intelligence at the time – military, diplomatic, and police – establishing the unity of economic patriotism and society's revolution through the notion of economic warfare for which business intelligence would serve as a vector. On the other hand, the term "economic warfare" is an expression that was often and willingly used also outside the restricted specialized field of business intelligence in those years, particularly by politicians. One example, *Lettre à tous les français* written by President François Mitterrand in 1988, even contains a section entitled "Le guerre économique mondiale" in which he emphasized the ferocity of competition between companies in the international market.

It is therefore L' intelligence stratégique that marked the real change of pace, at least in intentions, in the context of business intelligence in France, given that the instruments proposed by its two authors referred entirely to military strategy and ideological warfare. A change in terminology was suggested in order for the strategic actions of the companies and the state to be able to finally shift from a defensive position to authentic offensive action thanks to a new approach to competition based on the study of the dynamics of competitive behavior upon which to establish principles of action for company managers. Practically speaking, this study provided a key to interpretation and a functional method for the development of business strategy devised around three matrices directly inspired by combat techniques . The latter were: direct action on the situation and relationships of force, short-term business plan strategy; indirect action on the system, the protagonists, and relations, mid-term strategy that acts on the scenario in which the company seeks partnerships and alliances but also diversification in regard to competitors; taking anticipatory action on the context, on the rules of the game, and on the forces, and long-term strategy that is merely the business plan. The '90s: the definitive consecration

The second half of the '80s had already given significant propulsion to the development of business intelligence in France thanks to the re-launching of a national policy in favor of the aforementioned scientific and technical information, which was further increased by the activity of its leading competitor nations: the United States and Japan. It was, however, the radical change of the international scenario , with the fall of communism, the end of the Cold War and the dynamics of the face-off between the two power blocks that had characterized the international – also economic – relations of the past forty years and the consequent dominance of the mechanics of globalization with its questioning of the autonomy and power of the national state, that led to the definitive consecration of business intelligence in France. The Martre Report, drafted by Philippe Baumard, Philippe Clerc and Christian Harbulot, among others, was the milestone. Published in February 1994, the report from the General Commission on the Plan defined business intelligence as follows: “the aggregate of the coordinated actions of research, processing, and distribution of information useful to economic operators for the purpose of capitalizing on the same. These various actions are conducted legally with all the guarantees of protection necessary for the conservation of the nation's business heritage, in the best conditions of quality, time, and cost. Useful information is deemed that which requires various decision-making levels of in the company and the community for the development and coherent implementation of the strategy and tactics necessary to achieve determined objectives with the purpose of improving their positions in the context of the surrounding competition [...]. The notion of business intelligence implies transcending the single actions designated with the terms of documentation, monitoring [...], and the defense of the nation's competitive heritage and influence [...]” . In other words, business intelligence was defined as the chain of operations that range from the collection of useful information from open sources to the transmission of material to the governmental decision-makers assigned to the formulation of strategies for national defense and the reinforcement of the nation as a system, actively involving the private sector. Before presenting the tangible processes to be marshaled by the protagonists of business intelligence in France (the state, banks, companies, and other local agencies), the report summarized a number of previous studies that made comparisons with the business intelligence systems of other nations considered as models and that should inspire in certain ways the future French development in this sense. The United Kingdom and Sweden represented the two precursor nations. The former was the home of intelligence also from the lexical point of view, and there it is immediately understandable and its integration in any system political decision-making is natural. The latter, instead, was strong on the basis of a collective effort at national level and favored by its

cultural homogeneity, for the construction of strategic information engineering in which public (university) and private (companies) institutions work together.

As regards Germany, Japan, and the United States, while the institution in the modern sense of business intelligence in the first two nations was traced back to the '30s and the presentation of the same reflected the content in large measure of the two works cited in the footnote, in the latter the more recent developments after the fall of communism and fervently desired by the Clinton administration were emphasized, and fervently desired by the Clinton administration, which by that point had made such an investment in economic security as to create an organization dedicated expressly to the purpose, the National Economic Council. France now has nothing to envy to these nations in terms of business intelligence, which in its own way benefits from a certain tradition and history. What has been lacking, however, is the passage to a collective and national information system. This has been hindered primarily by two factors mentioned previously but clearly and incontrovertibly illustrated in the report: firstly, the barrier existing between the administration and the companies, and secondly, a certain passivity in the actions of these latter, which were too often limited to technological monitoring in a defensive and protective sense.

The vocabulary adopted by the authors of the report addresses this second point in a decisive way. Based largely on the works of Christian Harbulot, the use of terms such as "offensive action", "competitive aggression", and "power relations", indicates the hoped for and necessary evolution in the context of French business intelligence while shunning the use of the term "renseignement" due to its negative connotation that nearly always evokes dirty police practices. It is however restricted by the use of the concept of monitoring, which evokes an approach that is insufficiently dynamic that for as much as it is indispensable should also be supplemented by offensive actions in the field. As regards an action intended to overcome the limit represented by the first point, the authors themselves contributed to the construction of business intelligence and the formulation of these new elements of language and disclosed them to the public. One important example is a serious discussion dedicated to the theme "Business intelligence: information at the service of competitiveness" organized in Parliament in June, 1994, by ADIT with the presence of various representatives of the group of the General Commission on the Plan responsible for the drafting of the Martre Report, including Henri Martre himself, Jacques Villain, François Jakobiak, and Bruno Martinet .

A fundamental role was also played by the work begun at the end of 1994 by Philippe Caduc at ADIT and Rémy Pautrat at the SGDN (National Defense Secretary General) with the idea of transforming business intelligence into an object of public intervention. Pautrat, in particular, a former director of the Directorate of Territorial Monitoring and Prefect, attempted to effectively implement his vision of an administration at the service of the companies, given that his objective to create a National coordination structure was inspired by the model of operation of the United States National Economic Council. In the opinion of Pautrat, the efficiency of the state as the producer of data, analyses, and strategies depends on the depth of its awareness of the needs of its industries. For such purpose, together with the ADIT Director, he drafted an action plan composed of ten priority actions, ten new proposals to be added to the four made by the General Commission on the Plan , taking into consideration the international scenario and the development of Internet with greater awareness. In addition to re-appropriating a national approach that for various reasons had been neglected, the other actions proposed by the two experts regarded education and training. These included the institution of organizations ad hoc; the already repeatedly invoked creation of national databases to be marshaled against those managed by competitor nations in order to provide French companies with real knowledge of the sectors in which they operate and information on

their competitiveness in foreign markets; and the development of skill centers specialized in Internet technologies, in light of its growing importance. They also included the presence of France in the international moments of standardization in this field, with a similar presence through key roles at the most important international organizations and two research efforts – one that recognized the sources available and their methods of diffusion in the United States and Japan, the other a list of foreign experts in the subject who had lived in France – both innovative and strategic in the sense of possibly anticipating the moves of competitor nations, and consequently, offensive and not merely defensive actions. The coordination of this action plan was entrusted to the CCSE (Committee for Economic Security and Competitiveness), an inter-ministerial structure open to qualified external experts so fervently desired by Pautrat and set up with an agreement signed on February 1st, 1995.

It is above all in the world of education and training, a fundamental field of action indicated in both the Martre Report and the CCSE action plan that concrete developments were made in the second half of the 90s. In order to respond to the new need for specialists capable of integrating business intelligence into company administration processes, thus enabling the challenges posed by global competition and the information society to be faced as protagonists, following a period of support provided from training centers more specialized in the organization of seminars, conferences, and specialization courses, as of 1995 many faculties of economy and commerce and polytechnic schools began providing specialization courses in “business intelligence” and graduate courses in Business Economics and Company Administration. One example is the CESD (Strategic Defense Studies Center) instituted at the University of Marne-la-Vallée for the purpose of promoting the study and research in business intelligence and creating a crucible of ideas regarding defense and security in modern society.

This process led to the establishment of a School of Economic Warfare at the Higher School of Applied Business Sciences in Paris by Christian Harbulot and the former director of EIREL (the Inter-force School of Intelligence and Linguistic Studies) in Strasburg, general Jean Pichot-Duclos, in 1997. For Harbulot, the creation of this school filled two specific needs: the study in greater detail and depth of the dynamics underlying the relationships between economic forces, and the civil applications of information warfare, given that the latter notion was absent from the strategic planning of the companies, administrations and local authorities. The people trained by this school, approximately seven-hundred students since its creation, would become “experts in the management of information and power relations”. Parallel to this development in the educational world and as a direct consequence of the same, publications and research on the subject have increased in the last twenty years. In the world of publication, two aspects were manifested at nearly the same time: a notable increase in the production of French business intelligence as of 1995, with the creation of ad hoc series by the nation’s leading publishers (such as the “Culture du renseignement” series published since 1999 by Harmattan) and a decline in the publication of books written by foreigners on the subject. From the academic point of view, in the past twenty years many Master’s/PhD degree theses have been dedicated to a topic that is interdisciplinary by nature because it embraces subjects that range from history to political science, from law to economic science, and naturally, to information technology and communication. The analysis of this academic production reveals the progress of what might be considered, and what we have tried to represent with this contribution, as a truly and specifically French school of business intelligence.

Economic intelligence culture in France

The tensions underlying international exchange are indicative of the importance of cultural factors in economic warfare and oblige companies to be aware of the scientific progress if they intend to continue developing.

It took France a long time to define a culture of its own in the field of intelligence, and until the previous century, the French word *renseignement* had a negative connotation. The political elite considered this activity to be degrading and comparable to dirty police work.

The French government felt the need to launch certain reforms in both its external and internal services only after the First Gulf War, thanks also to constructive political consensus. This reform process focused on security that did not give due consideration to the decisive role that finance and markets have come to assume today in determining a people's and a nation's future, in an offensive context in which Western countries are not the only protagonists.

The main concerns of the French political elite regarded the use of *renseignement* in increasing the nation's power and the ways that the offensive practices, typical of the information warfare, could be used while maintaining respect for the rules of democracy.

The management of conflicts linked to information has now become more complex due to the lack of strategies capable of managing and controlling virtual markets, the immaterial world represented by Internet, and the presence of new weapons capable of influencing public opinion.

With his interdisciplinary point of view, Christian Harbulot offers a reflection to understand the nature of the relations of power existing between national economies by juxtaposing strictly economic factors with historical, geopolitical, or cultural factors that affect economic warfare.

The reason why the elite were so unable to formulate a clear doctrine in this regard is perhaps due to previous historical factors. For three times in little less than a century – in 1815 with the succession of King Louis the 18th to Napoleon, in 1870, with the support of Bismarck against the Paris Commune, and in 1940, with the collaboration between Pétain and Nazi Germany – a national force interested in taking power created an alliance with a country that had defeated France on the military level. This contributed to the beginning of a certain wariness in public opinion of patriotism, which became devoid of substance when the enemy was presented as an indispensable ally. The Colonial Wars and the Cold War, with their ideological view of power as an act of domination and the substitution of national idealism by solidarity for struggling peoples, reduced the dimensions of patriotism to a minimum. The Cold War imposed ideology as the dominant key to the reading of events and the unity of the Western world assumed top priority against the threat

from the Soviets, thus re-dimensioning the balance of power between the economies of the Western nations.

Only the arrival of General De Gaulle at the head of the fifth Republic produced an attempt at redefining the challenge posed by relations based on power in an economic perspective.

General De Gaulle tried to ensure a homogenous approach to the strategy of power and a better positioning of France on the international scene in 1958, but encountered great difficulty in having this approach accepted by civil society. He proposed an alternative to the Cold War based on an equilibrium between East and West and a conciliation between the world's North and South, but this attempt at compromise failed, due to the lack of international support (the United States opposed this pursuit of strategic autonomy) and also the scarce interest shown by the French elite. De Gaulle had a wide and articulated vision of France's power also on the economic level, with its positive foreign trade balance; on the military level, with the advantages derived from the growth of its power; on the diplomatic level, with a permanent seat on the UN Security Council. The main concern in managing the territory was the modernization of the infrastructure to attract foreign investment.

This one-way vision did not permit the assessment of the intentions of these foreign investors or the drawing of a balance of failures or unfair business practices.

If the existence of the USSR served the purpose of uniting the Western world, its demise as an ideological empire and potential nemesis restored the previous relations of power between nations – in other words, the pursuit of supremacy over markets and resources and the creation of long-lasting relationships of dependence.

The evolution of the international situation continued demonstrating the exacerbation of the balance of economic power between the dominant nations on the international scene and in the areas contested for energy and mining resources.

After De Gaulle, no reflection on the growth of power ever completed the defensive approach conceived in the wake of the Second World War.

History shows, however, that up until the Restoration, the elite had had a clear perception of the contribution made by the economy in the growth of a nation's power, the symbol of which was the model of development based on trade adopted by the United Kingdom. The clarity of French vision about the reality of the relationships between economic forces faded after 1815 when the resistance structure applied by Napoleon to contrast Britain's commercial offensive was dismantled. London's strategy of influence based on the propaganda of free trade bore fruits with the rise to power of the future Napoleon the 3rd.; he would sign the free trade agreement with England in 1860 despite opposition from French industrialists. Liberalism as the fundamental basis of the market economy came to replace a realistic vision of the balance of economic power for nearly a century afterwards. This tendency for the conceptualization of economic warfare during peacetime has legitimized the numerous works created since 1997 by the Paris School of Economic War. Furthermore, by the end of 1988, the continuing lack of competence in the matter of France led Thierry Gaudin, Director of the Ministry of Research's Prospects and Evaluation (CPE) and Jean-Pierre Quignaux, Secretary General of the Association for the Diffusion of Technological Information (ADITECH) to fund a study on economic warfare at a time when the international economic situation fully warranted its legitimacy.

Harbulot decided to publish *Techniques offensives et guerre économique* for the first time at the end of 1988, when all the international analyses existed in the conceptual shelter of the Berlin Wall, and talking about economic warfare seemed like an abuse of language. The Wall that had delayed the spread of new technology in the industrial fabric succeeded in disguising the history of certain

peoples, the rootedness of their cultures and their national peculiarities for more than thirty years. With the fall of the Berlin Wall, the binocular vision of our world was abruptly clouded over. Its geopolitics and the analysis of its economic clashes had to be reconsidered, and it is from this point of view that the retrospective assessment of Christian Harbulot assumes particular significance, with its emphasis on the need for a resumption of research in this field in order to evaluate the consequences of current events and permit a reading of the future sufficient to prevent certain events from occurring.

Harbulot urges to become aware of the threat: in the international market, with competition in every direction, no one can afford the luxury of fighting a war of reaction.

Yet even in France, Harbulot claims, a certain desire for non-aggressive competition still prevails that is certainly not favorable in terms of competitiveness or creating jobs, due also to the mostly verbal and improvised ways in which awareness of economic warfare is transmitted.

The globalization of exchange is changing the very nature of economic warfare. This new state of affairs gives intelligence culture an extraordinary strategic importance, even more so in light of the fact that information is a capital with a long-term return. In addition to being a production factor, it is also an offensive and dissuasive weapon, and the absence of information engineering has become a strategic problem at the level of SMI. Even if, as Harbulot explained, this weakness in regard to foreign competition is not necessarily synonymous with defeat, the French companies' ability to take action remained insufficient for a long time.

The opening of national markets to foreign exchange has multiplied the difficulty in interpreting phenomena related to competitors and competitiveness. Faced with this revolution in the world market, the approach adopted by French companies remains one of merely "sailing by sight" that has no place in a dynamic national industrial policy.

Active economic aggression measures are a source of concern primarily for the strategic sectors of armament or atomic energy, whereas most other economic actors perceive this type of risk too passively.

Proposals for action in the Martre Report: the third way for French industrial policy

The expression "economic intelligence" officially entered the public debate on national competitiveness together with the request for public intervention in regard between 1992 and 1994.

Merit must go to Jean-Louis Levet, Chief of the technological and industrial development service at the Plan's General Commissariat since 1992 for the possibility to transform the thoughts of Harbulot and Baumard into an official Report. He was convinced on one hand of the need for a radical review of the relationship between the State and industry allowing to seize the new opportunities offered by technological evolution and globalization and on the other of the need for France to implement a new policy of offensive competition on three fronts: the use of natural resources; the use of new strategies for new forms of protectionism, and new ways for the State to intervene in the economy, all of which in the context of a concerted long-term strategy.

Harbulot and Baumard defined the issues to be addressed:

- reflections on the way to encourage economic intelligence at company level;
- the study of foreign economic intelligence systems;
- the development of written knowledge on economic intelligence;
- the development of educational content addressed to higher level university professors and the encouragement of the sharing of experiences between operators in the sector;
- lastly, the launching of a national reflection by public administrations utilizing governmental economic intelligence measures.

The collaboration between Harbulot and Baumard resulted in a joint effort in defining the major working areas for the Plan's work group, with an objective of methodological nature, namely, uniting the disciplines of information engineering and political nature, or in other words, remedying the absence of a French economic intelligence structure.

Furthermore, the integration of Harbulot into the Plan's various work groups enabled the reinforcement of ADITECH, which if up until then had been a mere association, since then became the ADIT (Technological Information Diffusion Agency) through Ministerial Decree in May, 1992, under the control of the Ministry of Foreign Affairs and the Aerospace and Research Ministry.

In the context of the Report, under the leadership of Henry Martre, a previous Chief Executive Officer for Armament, a work group specifically dedicated to questions of economic intelligence was set up: Baumard would work with Harbulot, the former on the comparative analysis of the world's economic intelligence systems, the latter on national reflection on the issue.

The Report, which was published in 1994 in *La Documentation Française*, documented the degree to which French companies were obliged to operate under increasingly more complex circumstances and unpredictable dynamics that demanded the implementation of economic intelligence systems capable of further developing the strategic management of information, economic potential, and the number of jobs. The Report reiterated the meaning of economic intelligence intended as the coordinated research, processing and distribution of information, which can be useful to economic actors. These actions need to be conducted with guarantees of the protection necessary for the preservation of the nation's business assets in the best conditions of quality, terms, and costs

It was through the work of Harbulot that the term and the definition of economic intelligence first appeared in an official document.

The Report clearly shows Harbulot's vision: describing economic intelligence as an activity, not another type of information, involving the leading economic players, the companies.

The sources remain open, disproving the argument that paints economic intelligence as being involved in actions at the limits of legality.

However, it is precisely in regard to the greater availability of open sources that certain problems linked to economic intelligence emerge, such as the data distribution and protection: the circulation of data inside the company assumes fundamental importance whenever it transforms into a news leak, a constantly increasing risk in today's ever more interconnected world.

The Report urged the State to take rapid action, and provided four embracing proposals:

- Involving companies in the practise of economic intelligence
- optimizing the flows of information between the public and private sectors;
- the creation of databases;
- getting the world of education and training involved.

The Report is permeated with the awareness that the problem is primarily political and that reasoning through the dictates of economic intelligence means changing our ways of perceiving the economy:

"Economic intelligence, together with the intention to impose an enlarged horizon of comprehension including companies, agencies and nations, provides a response to the urgent need of understanding the economy in other terms than those of mere and overly simplistic competitiveness. The question is political and requires the directors of the organizations above to enter into awareness because it regards a view of the economy that is not neutral".

The Report issued by the group led by Henry Martre developed a summary of the thought of C. Harbulot and P. Baumard and provided keys to the comprehension of the world. It gave official

form to a particular description of the relations between states on the international panorama in which the latter compete with no legal holds barred: the end justifies the means, and above all else, justifies the marshalling of actions in favour of the economy by intelligence services.

Conceived in terms of systems, networks of protagonists, intentions, and influence, and the coordination of decision-making centres, this view gains leverage from the fears derived from the invisibility of the threats. The central position of the State, the guarantor of national cohesion, is confirmed, as is the accent on the importance of unity and national cohesion, taking Japan and Sweden as examples. France can take control of its future only in a collective perspective, therefore must remedy the absence of interaction between the public and private sectors and overcome the usual priority given to maintaining a defensive position, with the objective of mobilizing the political class in regard to the importance of controlling and using information as an arm of domination.

Harbulot accuses both France to be unprepared for "economic warfare" and its policies to continue believing that a united Europe would provide a fertile field for French economic patriotism.

Harbulot defined economic patriotism as a three-dimensional value system, consisting of a cultural dimension that looks to the roots of the productive system; a dimension of conflict based on the relationships between the competing forces, and a temporal dimension influenced by the evolution of technological progress.

In order to promote the passage from an information culture that is closed and individual to one that is open and collective, he suggested creating an economic intelligence instrument through the concerted effort of public and private parties.

For Harbulot, economic intelligence is the systematic search and interpretation of the information available to everyone for the purpose of understanding the intentions and capabilities of the protagonists. Economic intelligence incorporates all the capacity of surveillance of the competitive environment (protection, vigilance, influence) and is distinguished from traditional intelligence by the nature of its field of application (open information), the nature of its actors (inserted in a collective information culture context), and its cultural specificities (each nation's economy generates its own specific model of economic intelligence). This is represented by means of an economic intelligence diagram with three levels: the companies, the nation, and the world.

Overall, the Report would be judged faint-hearted in the measures it proposed, but more innovative in the vocabulary it employed, by officially introducing, in fact, both the new term "economic intelligence" and a different vision of reality, with the objective of generating a shift in mentality that justified the urgent implementation of a government action plan.

The proposed scope of the Report was the improvement of the offensive and defensive capacities of both national and corporate economic intelligence.

For the purpose of providing these recommendations with a follow-up, Martre promoted the creation of the Comité pour la Compétitivité et la Sécurité Economique (Economic Competitiveness and Security Committee) in 1995 with tasks similar to those of the US National Economic Council.

The establishment of the CCSE significantly empowered French economic intelligence, which could already vaunt the fact of having promptly supplied the French government with news regarding the abandoning of the gold standard and the devaluation of the dollar received from US Treasury Department sources at the start of the Seventies. Furthermore, being characterized by close cooperation and trust between the public and private sectors, French economic intelligence also has a highly centralized structure that enables quick reaction times and a noteworthy ease in acquiring confidential information.

The system's flexibility is achieved through the involvement in the "Economic intelligence structure" at territorial levels.

C. Harbulot was, together with P. Baumard, one of the protagonists between 1990 and 1992 of the construction of French economic intelligence, supported in his conviction that the international context would play a determinant role in the creation of new relationships between the State and businesses business. The discussions about security – promoted on the other side of the Atlantic – along with the political and economic uncertainties linked to the building process of the EU, had already prepared the ground for change.

Christian Harbulot and the creation of "Economic Intelligence"

Christian Harbulot was the first French author to address the topic of economic intelligence, presenting ideas that sparked the debate on its importance, given that the gaining of consciousness of the changes on the international scene could no longer be postponed, and recognizing the priority of economic questions over military ones.

The writings of C. Harbulot are authentic essays on the nature of economic confrontation written with the objective of convincing the political elite that an offensive use of information is a key factor in ensuring a Nation's success.

Through comparative cultural analysis, Harbulot explained why certain peoples had mobilized and addressed the conflictual aspects of the market economy while others had not, and advanced his reasoning by which information capital is at the same time a leading factor in production but also an offensive weapon, in addition to being an arm of dissuasion.

Harbulot demonstrated how Japan's economy was further ahead than America's, and naturally France's, precisely because it was capable of exploiting all the potential of intelligence activity in the sector. The United Kingdom, the United States, Germany, France, and Japan developed their own cultural model of market economy. In particular, Harbulot believed that Germany and Japan had gained remarkable economic leverage from their information and intelligence assets and had implemented more offensive and more effective economic policies because they were based on concerted strategies between private or public companies, between administrations and bank networks. Businesses in these two countries optimized their profitability by reducing the gap between information and intelligence, between open practices and closed practices, between what is available to the entire world and what instead must remain secret, moving from information – the mere awareness of information – to action, or rather information that can be useful for intelligence. Harbulot often accused French political power of not giving the right amount of importance to "economic warfare", thus remaining vulnerable to the risk of losing the control of its own economic information independence when faced with the massive growth of the Asian economies, all of which are – as opposed to those in the West – founded on unspoken rules of economic warfare. For France, instead, the complete ignorance of the offensive potential of information engineering would be the cause of the scarce competitiveness of its companies.

Furthermore, the concept of "economic defence" – intended solely in a military perspective – is equally invalid.

This can be summarized by quoting Luttwak:

A nation's cohesion is no longer born from the fear of a military threat but an economic threat instead, in a context in which the importance given to military alliances decreases and geo-economic priorities prevail instead.

In short, the elite in power in France still needed to be convinced of the existence and the importance of "economic warfare".

The term "economic warfare" appeared too strong and radical right from the start, especially when used by authors like Bernard Esambert, who compared a nation's loss of jobs and wealth and the lowering of its standard of living tout court to the disasters of war. Yet for this author, as well as Harbulot, the underlying idea is that a nation's economic success is based on the concept of "culture" considered as a weapon that some nations use better than others: Japan's economic dynamism can be explained by the strength of its cultural power, as might be Germany's economic power as well. The French economy was playing a defensive game, instead.

However, the vocabulary suggested by Harbulot and terms regarding concepts like "combat culture", "economic confrontation" and "economic warfare" were seen as scarcely convincing and overly radical. Thanks to the work conducted together with Philippe Baumard, the terms "confrontation" and "warfare" were replaced with that of "intelligence". The use of the term intelligence derived from a combination of the French definitions of "surveillance" and "veille" and the Anglo-Saxon and Swedish definitions of the concept of intelligence intended as reasoning, planning, and ability to establish relations between various elements, or more simply, active information gathering activities. However, the term economic intelligence invokes an entirely new category in the field of economic geopolitics that expresses new needs for cooperation between the public and private sector.

P. Baumard proposed a methodology for the creation of a business intelligence system before constructing together with Harbulot a common reading of the stakes at risk linked to the new forms of competition based on offensive approaches to information. The ideas of Harbulot that were given most credence and which best describe the French situation are based on the use of subversive cultural elements in economic warfare.

The analyses of Philippe Baumard are very similar to those of Harbulot, especially concerning changes in terminology: from the concept of "surveillance of the environment", "intelligence" came to signify the "intelligence of the environment" reflecting the prospect of greater tactical and strategic interaction of information.

Various other authors have considered the ambiguity of the term intelligence. The British give it a wider range of significance than the Americans did, for one thing. To make matters worse, difficulties in translation contribute to the confusion. The French word "intelligence", for example, refers nearly exclusively to a human faculty, the intelligence of an individual, but not the activity of by which a government agency or a private company collects information. The French word *renseignement* is applied to the activities of national security agencies and not those of private companies or a particular social group: it expresses the product, the information that was collected in the environment, and makes tacit reference to the secret services.

Philippe Baumard focused his work on semantic problems and the difficulties of understanding and using the term in France in regard to the terms "veille" and "renseignement". Baumard would attempt to renew the image of "vigilance" and "surveillance" in the perception of companies by exploiting the Anglo-Saxon concept of intelligence. However, his meeting with C. Harbulot – whom he even criticized for his use of the French term *renseignement*, declaring his preference for intelligence, as well as for the expression "intelligence économique" which he preferred to indicate with "economic confrontation" – would lead to the integration of the expression "intelligence

économique” in the debate on the adaptation of public actions in regard to the problems posed by the management of information in 1992.

In this way, both style and terminology would become more moderate and closer to the vocabulary used by government administrations.

The progressive development of semantics for the topic contributed to a comprehension of the facts that was more appropriate to the changing times. The function of “vigilance” was very useful to the French contributors, and enabled the shift to the successive concept of economic intelligence intended as information assessed, interpreted, and put to use, also in terms of offence, by companies.

P. Baumard underlined the progress made by the United States in the topic in many ways: with an intense proliferation of texts, with an American economic intelligence community structured around the former members of intelligence services working together in the SCIP association, and with the renewed interest being taken by universities on this issue and journalists who make less confusion between “business intelligence” and spying. In France as well, the reasoning advanced by C. Harbulot proved to be decisive in the implementation of plans for action that would be submitted at the highest levels of government.

Geo-economics and power

After the fall of the Berlin Wall and the collapse of the Soviet Union, the international system witnessed a number of transformations like globalization of trade exchanges, de-industrialization of the Western World and the rise of new powers like China, Brazil and even post-Soviet Russia.

Before then the geo-economic analysis considered the enterprise as the center of the economic balance of power and was mainly focused on competition. At the present stage, this model appears not to be accurate enough to address the contradictions between power politics, market practices and territorial approaches. The chart elaborated by French strategist Christian Harbulot (PMT) allows considering other elements like power, market and territory that better address the complexity of this analysis.

The main challenge is finding a convergence between long-term business interests and state power politics strategies while taking an environmental friendly approach. The enterprises, for example, tend to have a preference for short-term policies, whereas state-led industrial policies are set on a long-term basis.

Nevertheless, there are indeed some cases in which coordination between corporate development strategies and state-led economic policies is successful: for instance, Russian state-led Gazprom as far as the choice of international markets for Russian gas supplies is concerned, and the American Boeing, that refused to open a branch for aircraft assembly in China, in order to avoid transferring sensitive technologies.

On top of business and state policies coordination problems, the economic needs of the territories do not necessarily merge with state-led or business practices, which refer to the logic of competition, like in the case of de-localizations.

The graph below (PMT) highlights the intersection between the three above-mentioned levels (power, market, territory). Its goal is providing a dynamic reading of different economic scenarios, not exclusively centered on the enterprise or on financial actors, whose decisions do not always take into account environmental contexts. This cross-referenced analysis facilitates the drafting of anticipation or corrective economic strategies.

The interpretation of power politics must take into account a political understanding of economic relations, which are promoted especially in developing countries. The interpretation of the market operations, mainly performed by entrepreneurs, must consider a certain amount of detachment from political objectives, especially in the Western world. Lastly, the interpretation of the actions of local stakeholders must consider the fact that the territory has always suffered from the aggressiveness of competition, to which territorial representatives tried to react through innovative management and appealing policies.

Another category that also influences economic decision-making is civil society that does not account to state, business or local stakeholders. Civil society's stances are progressively boosting a broader reflection on market economy and advocating an ethical regulation of economic affairs through some forms of sustainable development.

The organization and management of strategic provisions is a fundamental feature of any discussion related to strategic economic development and the increase of state power. The strategic decision that are more often taken in order to increase strategic provisions security are: creating a special State-business committee, establishing partnership with other states, research and development investments, relaunching production capacity, adopting a recycle policy.

The creation of a State – Business commission on strategic provisions could better connect the public and the private sector so that services provided by the states in key sectors (defense, foreign affairs, industry, ecology, etc.) are available to the business sector. The Committee for strategic metals (COMES), established in France in 2011, is an example of this synergy even though its high level of specialization sometimes limits its broader efficiency.

Many of the OCSE countries, like the United States and Japan, set up a reserve of strategic raw material provisions to draw from in case of a block in supplies. However, this option presents some problematical aspects: 1) setting aside a certain amount of strategic raw materials to accumulate in the reserve can determine a lack of capital supplies for the entrepreneurs; 2) it is not really clear what is more convenient to fill the stockpile with. Accumulating low-alley materials or semi-finished products can be difficult for a country where the first transformation process of final products does not take place.

In order to keep supplies constant over time, the securitization of strategic provisions must rely on the partnership with foreign countries or companies as well. A good example of partnership could be setting up a mining site in a state possessing a given raw material and working on its production and transformation capacities through transferring capitals and know-how. In this regard – as many businessmen highlight – the choice of the partner countries depends on geopolitical risk factors. Argentine and Brazil, for instance, are more likely to attract foreign investment compared with the Democratic Republic of Congo that is not considered as a safe country.

Investing in research and development (R&D), instead, is fundamental to find alternative solution to the substances that are either too expensive or toxic, and to decrease the quantities that are needed without affecting the performance.

Relaunching domestic production capacity contributes to the requalification of the abandoned production sites or whose value for some reasons decreased over time. This option can be challenging for a number of reasons: reopening existing plants is expensive, sometimes the know-how of a given district disappeared over the years, and it is difficult to identify what is the best business opportunity to restore (mines, transformation chains, etc.). On top of a cutting waste practices, businessmen prefer to adopt a material recycling policy, especially in the automotive and aeronautical sector. However, even recycling has its downsides, like expensive and polluting processes, and cannot be considered as a determined solution because there is still some waste percentage that cannot be fully eliminated.

Nevertheless, even in a context of perfect synergy between the investments, the policies presented so far are just the starting point for the securitization of strategic provisions. A successful strategy to address this issue requires an accurate assessment and forecast of the current and the future needs of both enterprises and people of a given community. Before pursuing any kind of policy in this field, the state must necessarily have a clear perspective on its own plan for strategic provisions.

An accurate forecast should envisage future needs and the kind and quantity of the materials that are necessary for the functioning of technologies of the future. Identifying supply chains is another aspect worth considering – especially as far as rare materials are concerned – in light of the possible risks for the industrial plants.

The French government in the early '70 adopted a similar plan after the oil crisis: assessment of future energy needs, development of technologies to cope with it (nuclear power plants), and identification of uranium supply chains and implementation of a strategy based on a reduction in hydrocarbons provisions. The creation of the COMES is part of this plan.

The issue of provisions can be observed from two different angles. Strategic provisions are mainly raw materials of which the state needs constant supply: energy sources like oil, gas, uranium and rare earth elements that are indispensable for the functioning of information technologies and communication, to “green” energy and defense technologies. The Strategy of provisions, instead, consists in the policies to be adopted to guarantee a sufficient supply of strategic materials to sustain prosperity of the French socio-economic model over time.

The enterprise is the main actor of the economy and plays a significant role vis-à-vis the economic war that is relentlessly replacing traditional conflicts in the international arena at the present moment. An example of the combination between war and economics is the fight in the acquisition of post-war reconstruction contracts, like in Bosnia and Kosovo in the '90s but even more in Iraq or Libya. In Africa, especially in the Great Lakes region, great powers compete between each other for the control of strategic raw materials that are vital for the future of industrialized economies.

At this stage of globalization in which the future of the economy is mainly determined by non-state actors, the presence of the State is highly put into question. Nevertheless, it would be impossible to

completely cut out the state from the economy because the roles it inevitably plays in a market: client, sponsor and producer all at the same time.

According to the definition provided by British historian and WWII expert Liddel Hart, setting up a “strategy” means coordinating and canalizing all the resources of a given state (political, military, diplomatic, economic, cultural) towards the outcome desired. With the end of the Cold War, the importance of the military element is progressively decreasing, while trade and economic resources became the main domain of competition between states.

This new setting of inter-state competition is also the result of the rise of new actors, the BRICS countries, alongside the West and Japan, which represent the traditional industrial powers. As far as European countries are concerned, there are some less evident elements to rely on in order to draft a more accurate plan for the future: ensuring state control on strategic sectors through providing incentives for domestic enterprises and, most importantly, aiming at economic growth, employment and gaining presence on foreign markets.

The United States and China are the major great powers that show how state support to the private sector – especially vis-à-vis the protection of strategic sectors and promoting domestic business abroad - is not only possible but also indispensable at power politics.

An interesting feature of the French economy is the difference of treatment – and sometimes the conflict – between multinational and small/medium enterprises. Multinational corporations are the driving force of the economy and although for a long time benefited from the national industrial policies, they are currently trying to weaken the ties with the state. Small and medium enterprises are instead more rooted in the national territory but are often struggling for financing, access to foreign markets, protection of their specific know-how and acquisition of new capacities that are indispensable for their survival. The state should then play a key role in coordinate public and private sphere. However, mutual mistrust between these two sectors – although understandable - turns out to be a hurdle for development in most European countries.

In the United States the situation is quite different: strong ties between public administration, private sector, academia and think tank built up a network that strongly favors communication and obtaining information. This aspect tends to get little attention in Europe, where state power is considered as a limit to overcome rather than an opportunity to take. It is true that public institutions have a significant advantage in terms of intermediation capacities and access to information compared to the private actors. However, if oriented towards the needs of the real economy, multi-level coordination between public and private sector can provide a competitive advantage for both multinational and small/medium enterprises.

Creating competitive clusters allows to use the networks at its full capacity, helps local sharing of good-practices with regard to economic intelligence, protection of intangible heritage of information, and know-how of the enterprises. The state cannot refuse to take this pressing challenge: it must promote the access to good practices especially for small enterprises following the rules of transparency.

In recent years, investment funds became a popular topic in the debate around economic power as possible threat to the survival of western corporation model, especially as far as middle-eastern and Chinese sovereign funds are concerned. However, Chinese investments in European companies are still quite low and mainly concentrated in sectors like raw materials, energy resources and other operations that does not lead to a real control the enterprise.

In some cases, however, some acquisitions are deemed to gain technological (or other) competences, without a real interest to invest in the local development of the acquired undertaking, as the cases of Intel (investment fund with CIA connections), Carlyle Group (in the aerospace industry) and TPG (that from 2006 controls the main French company producing smart cards) demonstrate. In this framework, there are several instruments aiming at protecting State's sovereignty, which is threatened by massive purchasing of economic activities by sovereign funds. Firstly, a screening of foreign investment in strategic fields can be put in place, especially to protect Small and Medium Enterprises. Secondly, a change of attitude is needed, in order to accept that developing countries will control more and more European companies. In these cases, however, the principle of reciprocity shall be respected.

Particular relevance has to be granted to standard and rules, which are normally set out at the international level. Accordingly, lobbying within international organizations, as the United States knows very well, is of the highest importance. Otherwise States could elaborate their own standards or invest, for example, in the International Organization for Standardization, as China is doing.

In this subject matter, the European Union is not able to "speak with one voice". In particular, the lack of a Union's comprehensive strategy, and thus the predominance of national interests, is particularly evident. In accordance with the Treaties, in fact, in the internal market, the protection of competition takes precedence over an effective industrial policy. In light of the foregoing, new priorities should be set out, in order to enhance the coordination that could increase the penetration in non-EU markets (especially concerning some strategic sector, i.e. the defense one) and improve the existing competition. Nevertheless, it should be noticed that these changes might not be possible without the creation of real "United States of Europe".

The current debate often focuses on energy security, not only from an economic point of view. The need to swift from "energy security" to the "energy supply" has been underlined, as well as the importance of securing the energy flows. This is demonstrated by the so-called "oil wars", as the two Gulf wars, the war in Afghanistan and in Libya could surely be defined. However, despite the fact that the oil supply is one of the main causes of these conflicts, delicate international geopolitical balances are crucial elements to be take into account.

Along with the control of the "black gold", the "gas issue" should be given a great importance for several reasons. Research demonstrates that the increasing in energy demand in the next years (from developing countries in particular) could not be satisfied by oil only. Furthermore, it is necessary to find alternative solutions in order to overcome difficulties stemming from extraction techniques in newly discovered oil fields.

Accordingly, States are trying to revise their energy policy, by reducing consumption and improving the quality of their infrastructures to avoid leaks, by diversifying their energy sources, especially by increasing the use of renewable energy (i.e. wind, sun and wave power), and by controlling the use of national resources (as France does with hydropower and nuclear energy).

Moreover, security of supplies is related to raw materials, where the interplay between economic and geopolitical aspects is evident. Agricultural products, minerals and rare earths elements are only few examples.

China holds more than 90% of rare earth elements and uses this monopoly to achieve its political purposes, against Japan for instance, towards which the Chinese government applies restrictions on exports in light of their territorial disputes. Furthermore, conflicts arise in relation to

abundant resources, such as cultivable lands (as it happens with land grabbing) or common goods, such as water, air, biodiversity and the genetic heritage. In this framework, countries, in a globalized world, have to deal with the scarcity of resources, caused by demographic growth, as well as by the increasing of material and immaterial trade flows, flows of goods and people, information and money. In particular, supplies are granted only when flows are safe and this implies several economic and military consequences.

On the one hand, different economic elements shall be protected: the ownership of infrastructures, the technical control of the exploitation of resources, the choice of transport routes (such as pipelines for the European supply) and the control on access routes (such as harbours).

On the other hand, security depends on military capacity to oversee production and export areas, as well as on seaway's extension and control. Examples are the protection of the Gulf of Aden by EU's Atlanta and NATO's Ocean Shield operations.

One of the main geopolitical issues in the current debate concerns rare earth elements. These include 17 elements that are fundamental for high-tech industries, even though they are used in small quantities. For instance, lanthanum can be found in electric vehicle batteries and in sonar; samarium in some missiles' elements; gallium in night vision devices; indium in flat panels. These specific Raw materials are actually at the center of the dispute between China and the United States, which are two of the main actors in international relations of XXI century. Evidence supports the predominance of China in this field: the country holds between 34 and 50% of world reserves and produced, in 2010, 95% of rare earth elements (130,000 tonnes out of 133,000). This was possible after having progressively abandoned the exploitation of western sites and the complete integration in the global economy system. Therefore, Pekin is able to use this leverage in its dialogue with western countries, by imposing very high prices or, even worse, by breaking their supply chain. There is no doubt, however, that a problem of dependence exists and that it is not clear how to solve it. Nevertheless, China's position seems not to be so safe. The country should become an importer of rare earth elements by the end of the current decade.

Between 2006 and 2010 China reduced its export share of these metals from 5 to 10% per year. Furthermore, their production was limited, to avoid the depletion of reserves. However, China-Japan tensions of September 2010 (following the Japanese inspection of a Chinese vessel in "contested" waters) have worsened their relationship. As a result, the Chinese Trade Minister set 30% reduction of export share.

China was trying to use rare earth metals as an economic weapon, which led to a real embargo on its exports towards the European Union, Japan (representing one fifth of its final demand) and United States, whose diplomats were able to obtain by their Chinese colleagues full assurance concerning liability in the future. This demonstrated that Sino-US relations are of the highest importance in the American politics. Currently, 87% US imports of rare earth elements come from China, while the remaining 13% is from domestic reserves.

The Chinese embargo forced the United States to implement a strategic vision that was missing so far, because of the dependence of the country from external resources. Therefore, the US needed to undertake some measures stimulating mining, refining and transformation of this kind of raw materials.. As a result, the US pursued a policy of differentiation of trade partners.

Nevertheless, the exploitation of mines in order to obtain rare earth elements is rather difficult, both at the administrative (the re-opening of one of these mines takes 9 years) and at the political level (environmental organisations are often against these projects). Molycop case represents a successful story in this field. The enterprise, in fact, owned Mountain Pass mine, which is the biggest site of non-Chinese rare earth metals in the world, and obtained in 2010 (few months after the above-mentioned diplomatic tensions with China) the authorization to relaunch the activity. Molycorp's efforts ended at the end of 2012 and the company increased its production from 3.000 tonnes to 20.000 tonnes per year and received 531 million dollars of funds. Currently, the company is the only one that extracts these materials outside China. The step of this process will be summarised in the following paragraph.

In June 2010 Molycorp signed an agreement with Canadian company NeoMaterial, which provides technical assistance and know-how on the production of rare earths elements. Moreover, in December of the same year, Molycorp set up a joint-venture with the Japanese Hitachi, in order to create several associated enterprises producing alloys and magnets in the United States. Furthermore, Molycorp signed a memorandum of understanding with Sumitomo Corporation through which Molycorp completed its supply chain of rare earth metal-manufacturing products. These products are then delivered to Sumitomo Corporation. In April 2011 Molycorp acquired the American branch of the Japanese enterprise Santoku for 17.5 million dollars and the Estonian Silmet for 89 million dollars. Therefore, Molycorp can actually count on a network of customers that goes from the Far East to Europe.

Molycorp has secured funds, mines, know-how, logistical cooperation and a network of buyers, and became the only western enterprise with a full control of the entire supply chain of rare earth elements, from the mining to the sale process. The United States could thus avoid direct conflicts with China, after the threat of embargo and the increase in prices.

Despite the fact that China could not be excluded from rare earth elements-market, its power shall be controlled, as tensions arisen in 2010 showed. The idea of an embargo in September 2010 stimulated competition and pushed western countries to diversify their supply sources. As a result, the offer increased and Chinese power decreased.

Bibliography

Gagliano ,G. *Sfide geoeconomiche.La conquista dello spazio economico nel mondo contemporaneo*,Fuoco,Roma,2017

Gagliano ,G. *Guerra Economica e Intelligence. Il contributo della riflessione strategica francese*, Fuoco Edizioni, Roma, 2013.

Gagliano ,G.*Guerra psicologica. Saggio sulle moderne tecniche militari cognitive e di disinformazione*, Fuoco Edizioni, Roma, 2012.

Gagliano ,G. [*Guerre et intelligence économique dans la pensée de Christian Harbulot*](#),Va Press,2016

Gagliano ,G.*DESINFORMATION, DESOBEISSANCE CIVILE ET GUERRE COGNITIVE*,Va Press,2017

Harbulot C.,Delbeque , E., *La guerre économique*, PUF, 2012.

Harbulot C. *La machine de guerre économique, Etats-Unis, Japon, Europe*, Paris, Economica, 1992.

Harbulot C.*La main invisible des puissance*, Ellipses, Paris, 2005.

Harbulot C. *La guerre cognitive. L'arme de la connaissance*, Lavauzelle, 2004.

Harbulot C.*Techniques offensives et guerre économique*, Paris, Etudes Aditech - CPE,Paris 1990.

Moinet ,N. *Intelligence Economica*, **Saggio sulle moderne tecniche di strategia d'impresa**, (a cura di) G. Gagliano, Fuoco Edizioni, Roma, 2013

Quaderno Sism(Società italiana di storia militare),*Economic Warfare*,Milano,Acles Edizioni,2017