DEFENSE AND DEVELOMENT IN BRAZIL UNDER LULA DA SILVA'S GOVERNMENT: A POSSIBLE CONVERGENCE?

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ABSTRACT

The debate and the policies concerning National Defense gained considerable attention in the Brazilian political agenda under the government of Lula da Silva (2003-2010), especially during his second term. Most initiatives in this area were justified by discourses that sought to associate Defense policy and national economic development, emphasizing the positive economic and social effects of investments in National Defense. In this logic, several initiatives have been considered without proper explanation on how the expected results will be or can be achieved. Considering this, the main objective of this chapter is to question how National Defense policy has been conceived and formulated in Brazil, while our specific purpose is to analyze the attempt to associate defense and economic development - a key element present in the the discourses of the main actors related to the area. These discourses are not unprecedented in the political history of Brazil. However, we seek to understand the reasons for their return in the second half of the 2000s.

Keywords: Brazilian National Defense. National Defense Policy. Development.

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INTRODUCTION

This article is the result of a concern about the way defense has been conceived and formulated in Brazil. We seek to understand the attempt to associate national defense and economic development, a key element in the discourses of the main actors related to the area, especially from the mid-2000s. The focus will be on the government of Luís Inácio Lula da Silva (2003–2010). During this period several initiatives in the area of Defense gained strength and space in the country's political agenda, most of them justified by the idea that associates economic development to that area.

It should be noted that this type of discourse is not unprecedented. D'Araújo (2010, p. 54), for example, points out that the thought in the military sphere that "sovereignty and modernization would be achieved with economic development and technology" influenced much of the Brazilian industrialization project from the 1920s, especially during the civil-military dictatorship (1964-1985). Also noteworthy, the binomial "Security and Development" guided most policies of the "military governments" in Brazil. Between 1970 and 1980, the Brazilian defense material industry had its heyday. Under the "Brazil Power" project, the sector was included in the economic policy in force to promote capacitybuilding in new technologies, by fostering the defense material industry. This fosterage would be carried out through the creation of new businesses - State-owned or of mixed-capital - and by restructuring the existing businesses. The project was interrupted by the economic crisis by the end of the 1980s and the resources allocated for the sector were restricted in the following decade with the implementation of the neoliberal project in Brazil (FERREIRA; SARTI, 2011, p. 8-9, 18-20).

Therefore, we question the reasons and the way a similar discourse regained space in the Brazilian political agenda from the 2000s, especially with the publication of the first version of the National Defense Strategy (NDS) in 2008. In this context, we seek to discuss in this work the arguments supporting this proposed association between defense and development, and how sectors of the Armed Forces, government, national business community, academy, and journalists contributed to rekindle that debate.

The article is divided into four parts: initially, we will present the main aspects of Lula da Silva's government, with greater emphasis on economic and social policies; secondly, we will focus on analyzing the defense policy of that period and the way it was associated with the economic development project of the government in question. We seek to explore the idea behind the trinomial defense-innovation-development, which would support this association, and indicate some weaknesses of this thought in the case of Brazil. Subsequently, we observe that this discourse is convenient for private interests of some sectors of society, which end up reinforcing the need for this association.

LULA DA SILVA'S GOVERNMENT: GENERAL ASPECTS

Lula da Silva's government is, in general, the target of many controversies, since the period is marked by dynamics of ruptures and continuities. The president was co-founder of the Workers' Party (PT) – traditionally of opposition – through which he had run for president since 1989. His victory in the election at the end of 2002 can be understood as a reaction to the neoliberal model adopted by his predecessors, especially Fernando Collor (1990–1992) and Fernando Henrique Cardoso (1995–2002), which resulted in increasing rates of unemployment, exchange rate crisis, and inflation; but also as being due to the smoothing and pragmatism of his party's discourses and proposals – which before talked about ruptures, in a more radical tone and, from the 2000s, adopted a discourse of change and conciliation.

It could be said that the changed tone of the discourses of candidate Lula helped alleviate the distrust by the business community and the financial market concerning his proposals. According to Rubens Sawaya (2014, p. 141), the new government's position was of not facing the power blocks, that is, non-interference with previously established contracts, fiscal responsibility, inflation goals, and the continuation of the floating exchange rate. At the same time, they emphasized the proposals to resume economic growth through economic and social development, by means of a "national plan of strategic planning" to foster production, without ignoring the need for social inclusion and, with it, proposed an alliance between workers and employers.

The analysis of the main macroeconomic and social indicators indicates a truly positive national situation between 2003 and 2010, albeit not exceptional. During this period, the GDP grew at an average rate of 4% per year, including the period of crisis that shook the world financial

and economic system from 2008 (GIAMBIAGI et al. 2011, p. 247-257). This performance can be interpreted through some key factors, such as: the role of China in the international trade; the incentive to credit; and the policies for income transfer. However, it is not possible to ignore in this process the dynamics of conciliation of interests led by the government – specially by the figure of President Lula – throughout the term.

In the first years of government, macroeconomic stabilization dominated most of the national political agenda. It was necessary to ease the uncertainties of the economic agents who saw with disgust the election of Lula for president. To this end, a series of contractionist measures were announced, aiming to: fight inflationary pressure through increased prime rate; a more restrictive goal of primary surplus; and, for this, cut in public spending (GIAMBIAGI, 2011, p. 206-207). The maintenance of these principles over the eight years – albeit to a greater or lesser degree – contributes to the interpretation of the Lula administration as a government of "continuities."

However, the international situation being more favorable from the mid-2000s had utmost importance because it enables this macroeconomic policy to be more flexible. Accordingly, China's role as the main importer of Brazilian commodities is very relevant. The increased interest rates also contributed to the major influx of foreign currency into the country, even though for non-productive investments. The good performance in international trade and the increase in the level of international reserves allowed greater leeway for the government to direct greater attention to social policies and to the issue of development. Policies to foster credit, consumption, investment and redistribution of income were expanded, without, however, abandoning the goals for inflation and the high interest rates.

Nevertheless, André Singer (2012) suggests that the Lula government worked based on the formula "order and change," while Sawaya (2014, p. 141, our emphasis) adds that the worker's party administration was of "composition between power blocks." The president was able to promote a reconciliation of traditionally conflicting interests between banks, workers, national and international private capital, coordinating them to carry out large national projects – such as the Growth Acceleration Program (PAC for the Portuguese acronym) –, which, incidentally, had an important role in ensuring economic growth after 2008 when the favorable international situation was significantly reversed (FILGUEIRAS; GONÇALVES, 2007; MAGALHÃES, 2010; SAWAYA, 2014).

This dynamics enabled more openness to stimulate the political interest and the allocation of investments to sectors that, traditionally, are not prioritized, coordinating them through discourses that emphasize the commitment to social issues and the promotion of development. Not only the government during this period, but the main economic historians, such as Caio Prado Júnior, Celso Furtado, among others, tend to understand economic development as a particular historical process of capitalist nation States, marked by increased productivity and income per capita, improvement of living conditions, concurrent with a process of accumulation of capital and incorporation of technical progress - which would potentially promote transformations at the three social levels: structural, institutional, and cultural. This procedure would manifest itself as a self-sustaining dynamics when initiated, since the market mechanisms would tend to stimulate the increase in the stock of capital and technical expertise; however, it is known that it can vary from nation to nation, and even regionally (BRESSER-PEREIRA, 2006, p. 01-08).

Moreover, the notion of economic development assumed by the Lula administration is a direct reflection of the "cepaline" prospects conceived from and over the 1950s and 1960s, marked primarily by a diagnosis of relative depreciation of the terms of exchange between center and periphery, because of the first's excessive accumulation of capital, technical progress, and military instruments. Accordingly, industrializing processes would become indistinguishable from development procedures, firstly due to stimulating a process of endogenization of technological progress reducing the dependence from the central countries – and autonomy of the accumulation of capital, secondly due to enabling the workforce to transition from agriculture to manufacture, incorporating improved standard of accumulation and of living conditions of the urban and middle classes (BRESSER-PEREIRA, 2006, p. 10). Thus, reflecting the party's autonomist position, the proposals concerning technological independence, sovereign national inclusion, and development based on national autonomy began to ground the justifications for this government's policies and initiatives in various sectors. Through this perspective we seek to understand the greater attention directed to the area of National Defense in this period.

Making an analogy in relation to the idea developed by economist Paul A. Samuelson to explain the limits of technological possibility of the production of an economy, we question whether Lula's government would fit in a model of guns and butter. The original proposal – guns or butter – is a

simplification used to explain the concept of trade off, working the boundaries of possibility of production for the civil sectors, for consumption (butter) and military (guns). According to the author, since the resources – technological and financial – available in an economy are limited to expand the production of butter it is necessary to restrict the production of guns, and vice versa (SAMUELSON; NORDHAUS, 2010, p. 13). By including projects for the Defense area in the plan to address economic development and social issues, the Defense policy proposed by Lula's administration seems to challenge Samuelson's proposal of option for allocation, allowing an interpretation of complementarity between the two spheres in the sense of guns and butter.

This association between defense and development is not unprecedented in history. This process was crucial to the construction of the discourse of support to the American Military-Industrial Complex (MIC) in the post-World War II period. In general, it manifested itself as an economic discourse of production of positive externalities from military spending, such as generation of employment, increased exports, and, mainly, increased technology spillovers from the military to the civil sector, the so-called Spin-off. Spin-off would be the transfer to civil industries of technological developments, or innovations, obtained in the military industry during periods of peace only in situations in which the industrial Research and Development (R&D) has been, for several decades, heavily influenced by the military (TREBILCOCK, 1969, p. 475-6). It is observed that the idea of Spin-off was strengthened with the emergence of the MIC, being sustained for a long time as argument for the high military spending in R&D, in the USA. This can be understood in the context of the Cold War arms race, which evolved from a search for increased power of destruction to a constant search for a scientifictechnological leadership (KALDOR, 1982).

Thus, a rationality was developed around the idea of Spinoff that was sustained for a long time, when there was the emergence of works that challenge the supposed naturalness of the phenomenon, that is, that it would occur automatically in the economy. This questioning reaches its peak in the mid-1980s, when the results of excessive military spending in the U.S. did not result in overall economic benefits to the country.

In Brazil, this association between defense and development would assume specific characteristics. We seek to better understand this issue by analyzing the proposals of coordination between the Defense policies and the policies for productive development throughout the Lula government.

DEFENSE AND DEVELOPMENT

The defense policy of the Lula administration is marked by ups and downs: if, at first, successive crises and incidents caused the downfall of three ministers over a period of four years, after 2007 the sector seems to have gained greater consistency which even stimulated reforms and important initiatives for the area. We observe that much of what was done in the sphere of defense in this period had as justification the attempt to associate the sector as an important component of economic development. With that in mind, we intend in this section to present the main aspects of the Lula government's defense policy and explore how the arguments and interests supporting the idea of the trinomial defense-innovation-development gained strength. We seek to lead the debate towards the understanding of why and how the attempt of association between defense and development regains space in the national political agenda in this period.

Between 2003 and 2007 the relations between the Armed Forces and the representatives of the Defense department were (or continued to be) marked by a series of setbacks. This can be interpreted through both the – still – excessive degree of autonomy of the military in political issues related to Defense and through the lack of interest of civil society and, consequently, lack of preparation of the political representatives to deal with matters concerning the Armed Forces (MARTINS FILHO, 2010; SAINT-PIERRE, 2010; ZAVERUCHA, 2005) Among the points of conflict between the military and the representatives of the department, the salary adjustment for military personnel and the demand for refitting and modernization of the Armed Forces were significant, which had occurred since the previous governments.

In the Government Plan presented in 2002, the worker's party indicated greater openness to deal with these issues. The proposals included discussing the role of the military in the society and defining a guideline to refit the Forces in tandem with the redesign of the national defense policy (PARTIDO DOS TRABALHADORES, 2002, p. 5). However, the difficulties in the economic and social field directed the attention of the government to issues considered to be of greater urgency, such as holding back inflation and unemployment, combating hunger, and stabilizing national balances.

However, that does not imply saying that there were no important initiatives in the period between 2003 and 2007. Most of these

initiatives resulted from efforts by the first minister of defense of the Lula administration – diplomat José Viegas Filho –, and many of his proposals were later resumed and developed by the ministers that succeeded him: vice president José Alencar; the former governor of Bahia, Waldir Pires; and the former president of the Supreme Court, Nelson Jobim. The update of the National Defense Policy (NDP) is an example of this. Published in 2005, under Alencar's management, the document results from the cycle of debates conducted by minister Viegas between 2003 and 2005 to review the first version of the document (1996), and reflects to a great degree the thought of the diplomat for the area (SAINT-PIERRE; WINAND, 2010, p. 16).

The proposal to conduct a cycle of debates is an important factor itself, since there have been few occasions when civilians – representatives of academia, politicians, and businessmen – and the military discussed together the direction of the country's national defense. Nevertheless, Nelson Jobim (2010), the fourth representative of the department under Lula's administration, characterizes the Viegas management as an instance of reformism, albeit moderate. This moderate can be interpreted more as the lack of political support – mainly presidential – so minister Viegas could advance the agenda of reforms and guarantee the position of authority in relation to the Armed Forces rather than as a weak effort of diplomat himself (MARTINS FILHO, 2010, p. 300).

The most significant reforms and initiatives, however, occurred after Jobim was appointed to the department. Jobim was regarded as the first important person to head the Defense since the creation of the ministry, in the sense of being a great political coordinator. Jobim's management starts with a very specific objective: solving the crisis in civil aviation, which triggered a crisis in the military sector.

It can be said that this crisis forced more political attention to be directed to defense issues, albeit indirectly.

Moreover, this can be considered as an explanatory factor to understand the appointment of a strong political figure such as Jobim to the ministry. The impression is that national defense had more strength and legitimacy in the political agenda thereafter, also having greater support from president Lula. Thus, once the issue of the civil aviation crisis had been addressed, several reforms and initiatives could be implemented with the objective of restructuring the country's defense sector. It is important to keep in mind that similar proposals were already

in the NDP formulated in 2005, but were not carried out perhaps due to the unfavorable political climate of the time.

The starting point towards a restructuring was the publication of the first version of the National Defense Strategy, in 2008, which was reinforced with the so-called Law of New Defense, in 2010, and the proposal for the preparation of the White Paper of National Defense, whose first version was published in 2012, already under the government of Dilma Rousseff. The diagnosis made by the creators of these projects to justify restructuring was that the Brazilian military capabilities were far short of that needed to ensure the defense of a country with the size geographical, economic and political – of Brazil, thus requiring an upgrade of thought and material capacity in the area of defense and security. The notion of security developed in this process widened the perception of the need for modernization and restructuring of the military capacities. And the published documents reflected, therefore, the consolidation of this view as a public policy, already coordinated with the other sectors of the State to contribute to generate development and national autonomy, as established by the proposals of the PT.

Generally speaking, it was based on the idea that the modernization of military resources could have a very strategic role: both in terms of national defense – given that in an uncertain and adverse scenario the country must be prepared to handle many different types of threat, which demands constant updating of the resources and instruments necessary for the armed forces – and in terms of economic development – since in order to be prepared for defense the sector demands high-tech goods and constant technological innovation – and, consequently, skilled workforce –, which would serve as an incentive to technical progress, which could also be transferred to other productive sectors (through the so-called dual-use technologies). This type of argument is already found in the 2005 NDP. According to the document,

4.13 The persistence of obstacles to world peace requires permanent updating and progressive revamping of our Armed Forces, with emphasis on the development of the defense industry, aiming at reducing technological dependence and at overcoming unilateral restrictions of access to sensitive technologies (BRASIL, 2005a).

Thus,

6.9 Strengthening the country's capacity in the area of Defense is essential and should be achieved through the permanent involvement of the governmental, industrial, and academic sectors, aimed at scientific and technological production and at innovation. The development of the defense industry, including the mastery of dual-use technologies, is essential to achieve the safe and predictable supply of defense materials and services (BRASIL, 2005a).

Briefly, the argument falls in the proposal for promotion of national autonomy, since, through the revitalization of the national defense industry, it would be possible to reduce the technological dependence in relation to the central countries, thus reducing the possible risk of restriction of technologies considered sensitive. At the same time, it would contribute to the objective of promoting development, because the revitalization would require greater integration between sectors of the government, the industry in general, and the academy, in order to stimulate technological capacity-building in the country to the point of producing technologies autonomously (PERON, 2011, p. 14).

Thus, there would be a connection between defense, innovation, and development, whose association converges at a specific point: the revitalization of the defense material industry. Nevertheless, an industrial policy was designed especially for the military sector. The National Defense Industry Policy (NDIP), also approved in 2005, can be understood as an effort by the federal government to foster dialogue and interaction between the national defense and other sectors involved in the goal of strengthening the so-called Defense Industrial Base. Among them, we highlight the sector of research, science, and technology.

The document establishes a common understanding about concepts such as Defense Industrial Base and the so-called strategic defense products. With the objective of refitting the Armed Forces, the NDIP provides incentives for restructuring the Brazilian defense material industry, including: reduction of the tax burden on businesses that compose the DIB; progressive reduction of external dependence through incentives for local production; improvement of the technological quality

of Defense products; and improvement of the capacity for mobilization of the DIB (BRASIL, 2005b).

Nevertheless, President Lula, still in 2007, at the time he announced the creation of a group to formulate the NDS, indicated the need for construction of an "Armed Forces GAP, a defense GAP," in a correlation with the Growth Acceleration Program, which allocated a considered amount of investments to the area of transport, energy, housing, and sanitation. At that point in time, the president already reinforced the association between the defense sector and the commitment to development and economic growth. This objective is reinforced by minister Jobim who assumes the proposal of integrating the national defense project with the development project (MONTEIRO, 2007).

Although the NDP is not mentioned in the NDS, the NDS presents and reinforces a similar argument, but through a more assertive tone. The 2008 document is quite emphatic in highlighting the relationship between national defense, science and technology, innovation, and development, in addition to coordinating this dynamics with the goal of greater international protagonism of Brazil, as a sovereign nation. Regarding this aspect we point out the following excerpt:

National defense strategy is inseparable from national development strategy. The first motivates the latter. The latter provides a shield for the first. Each reinforces the reasons of the other. In both, nationality is awakened and the Nation is built. Defended, Brazil can say no, when it has to say no. It will have the capacity to build its own model of development (BRASIL, 2008).

Nevertheless, the reorganization of the defense material industry is included in the document as one of the main guiding lines for the proposal for restructuring the national defense. According to minister Jobim himself (2009),

Consolidating and strengthening the national defense industry is (...) essential both to consolidate the Brazilian defense and the institutional values of our democracy and to accelerate Brazil's social and

economic development.

As pointed out, the main objective of the reorganization is the intention to "foster the development of a military-university-business complex capable of operating in the edge of technologies that will nearly always have dual utility, civil and military" (BRASIL, 2008). Saint-Pierre (2010, p. 9) notes that, although the NDS is centered on the issue of Defense, the document extends to cover other aspects, such as education, economy, infrastructure, and science and technology. Through this procedure, it is reinforced – as in the NDP – the need for coordination between defense and other sectors that are key to development, such as the academia, business community, and the sector of science and technology for innovation.

From the perspective presented in the documents, technological independence comes to be understood to overcome the difficulties, the gap between the functions and objectives of the Armed Forces and the means that they have available to implement them. Furthermore, the sector, in demanding concentration of efforts in science and technology, would serve as a starting point for innovation and new technologies that can be equally useful in the civil sector. As summarized by Carreiro da Silva (2015, p. 2015):

(...) all the main policies that guide the official thinking of the national Brazilian defense, fostering the national defense industry is essential for the national defense, being also a vector of technological innovation through the establishment of dual technologies.

Therefore, the national defense industry would be a key factor in this dynamics. Nevertheless, the industry sector and Brazilian businessmen began to direct greater attention to the area of defense over the years of the Lula administration, reinforcing the arguments expressed in the official documents. As stated by Rubens Barbosa, as chairman of the Board of Foreign Trade of the Federation of Industries of the State of São Paulo (FIESP):

The great transformations currently undergone by South America and by Brazil demand from society, the government, and the private sector a new attitude toward the development of an armaments industry that is autonomous and ready for the challenges that Brazil came to face, with the prospect of a more relevant role in the global context (BARBOSA, 2008, p. 3).

Strengthening the relationships between Brazil and the neighboring countries would be important in this process, not only in order to mitigate any suspicion of arms race in the continent, but mainly due to the commercial possibilities that would be enabled through this greater integration. Also according to Barbosa (2008, p. 3),

(...) the potential is huge. The strengthening of domestic production can serve not only the domestic market, but also those of South America and other developing regions. In addition to manufacturing new equipment, the aftermarket could also be properly explored.

A similar argument was presented by businessman Marcelo Odebrecht (2010, p. 376) on the seminar "International Security: Brazilian perspectives", whose lectures originated a publication with the same name:

Brazil, the undisputed regional leader in South America, can lead the creation of a 'technology park' for its defense industry and give rise to a 'regional cluster, capable of combining the interests of our neighbors. (...) The construction of this cluster in South America, albeit with the necessary involvement of the business community, should be led by the Brazilian State, considering the country's geopolitical interests.

The reflection of this thought can be perceived in the way the construction of the South-American Defense Council (SDC) was conducted in 2008, within the framework of the Union of South American Nations,

since cooperation in the sphere of Defense industry among member countries was determined as one of the specific objectives of the Council (UNIÃO DE NAÇÕES SUL-AMERICANAS, 2008, p. 65-72). It is worth noting that the creation of the SDC was established by the NDS and was conducted mainly by an effort of the then defense minister Nelson Jobim.

Another effort to coordinate defense with the goal of development is the inclusion of the so-called defense complex as one of the mobilizing programs in strategic areas within the industrial policy project of the Lula administration, the Productive Development Policy (PDP), also launched in 2008. Although prior to the NDS, the project includes as one of its goals: "recovering and fostering the growth of the installed industrial base, increasing the supply to the Brazilian Armed Forces and exports" (BRASIL, 2016). The instruments to seek this goal expand the participation of other agencies and sectors in the sphere of Defense, such as the Ministry of Science and Technology, the Ministry of Education, the National Development Bank, the SEBRAE, among others (BRASIL, 2016).

Accordingly, major strategic projects were resumed in the period – such as the FX-2 program and the Submarine Development Program (Prosub) –, and they can be understood as an attempt to implement this greater coordination between defense, innovation, and development through the multiplying effects that investments in the military sector could cause in research, science, and technology. It is observed that many of the projects proposed in the period, in particular these two above, are neither unprecedented nor were created through the NDS. They are old programs, but that acquire a new significance – in a new moment – through this document, since they now align with the proposal of development of the Lula administration and with the interests of the military and business sectors.

Through this sense we propose to think this government's defense policy from the perspective of "guns and butter." In the limit, what has been proposed is a model of greater participation of the State as promoter and facilitator of the reorganization and technological training of the industry through economic aid and protection for the production of defense materials autonomously, with the expectation of stimulating a dynamics of technical progress and innovation in the country, with the aim of favoring the other productive sectors (PERON, 2011, p. 16; SAINT-PIERRE; WINAND, 2010, p. 18).

THE WEAKNESS OF THE ASSOCIATION AND THE LIMITATIONS OF THE ARGUMENT PRESENTED

Although the argument used to associate defense and development has been reinforced by several representatives from different sectors – military, academy and politics –, we think it important to question the viability of the proposals presented, taking into consideration, mainly, the economic and social conditions of Brazil. There are works that indicate the weakness of this argument in a country of late industrialization, such as Brazil. Dagnino (2010) and Peron (2011), for example, show that the idea of economic development through technological innovation promoted by the defense sector is based on the experience of developed countries – which is also questioned –, and that it is not possible to simply import concepts and assumptions to boost this dynamics in the country.

As argued by the authors, the revitalization of the defense industry would require a great effort of modernization – in the sense of making it more competitive internationally, technologically up-to-date, diverse and with high dynamics of innovation and exports – and the supporters of this idea do not seem to understand the peculiarities of the Brazilian economy, especially regarding the issue of production and the dynamics of innovation in the country. Even in the case of transfer of technology from abroad, the results that are expected from this process – such as improved productivity, workforce training, and boost for innovation and technological capacity-building – would be difficult to be sustained in a country of late industrialization, without a culture or project of investment in science and technology and highly dependent on imports of capital goods.

Discussing specifically the issue of spin-off and the production of dual-use technology, Peron (2011, p. 114) instigates many questions about this perspective.

Are there an industrial base with skilled workforce and the minimal number of laboratories conducting R&D available in these countries? Who controls the production of technology in these countries, and is there free access to information and know-how on the technologies transferred? Is there capacity for absorption and reproduction of these technologies?

In the documents produced during the Lula administration, as well as in the discourses of the main actors involved in the area of Defense, we can perceive a tone of determinism – or economic rationality – which would explain how spending in the military sector could lead to technical progress and economic development. However, further details or a careful assessment of how this process should be incorporated in the country are not presented, especially considering the difficulties found here in the area of production.

Also according to Peron (2011, p. 132), the argument is put as a kind of fetish that is presented to the public in a coherent way, while omitting "the peculiarities of the late economic formation and of the obsolete Brazilian technological production." It is not surprising, therefore, that the NDS is interpreted as a document that is excessively ambitious and of difficult implementation, when the reality of the country is considered (LIMA, 2015, p. 202; ROCHA, 2011, p. 46). D'Araújo (2010, p. 57) provides a similar interpretation. Specifically about the NDS, the author considers that "the ambitions (...) contrast with the Brazilian State's limited capacity for investment and also present a fantastic character, since the country is far short of the possibilities to implement them."

In addition, the country still relies heavily on imports. Although there is transfer of armament technology – one of the points that are quite emphasized by documents and discourses of the actors involved in the Lula administration –, there are still barriers that prevent the total transfer of this technology (patents) and domestic obstacles to the incorporation of the imported innovation into the production process in the country. Dagnino (2010, p. 79) also points out that, even at the heyday of the Brazilian defense industry – between the 1970s and 1980s, Brazil did not cease imports, since the local industry did not produce – or was not capable of producing – products with the technological complexity necessary for the Armed Forces.

It should also be considered the structure and characteristics of the global arms market, considerably distinct from the other market segments, since these products are loaded with sensitive technologies, whose marketing can have impacts on the political and strategic context. Accordingly, the national production – especially of these technologies considered sensitive – would be susceptible to international pressures,

mainly by the large producers. Thus, Dagnino (2010, p. 55) point out the cost of opportunity of thinking economic development based on the production of arms instead of alternative projects, outside the military sphere. The work of Duarte (2012) corroborates this understanding, by showing historically that no causal connection is observed between military technological innovation and economic development. In the view of this author,

(...) the decision of modernizing the armed forces should not be subject to criteria of economic development, as well as initiatives for gain in productivity or technological innovation of the Brazilian civil industrial park should not comply with the criteria and requirements of military organizations. Although it is recognized that wealth and security are national goals with mutual benefit of their results (...), their respective provision processes are disparate and subject to specific criteria and procedures (DUARTE, 2012, p. 30).

Thus, we question whether the results expected from the projects of other initiatives in the area of defense during the Lula administration were not designed and formulated in a moment of euphoria, made possible mainly by a favorable economic environment and by the coordination of interest between the various actors operating in that area. Although the effort to direct greater political attention to the sphere of Defense, normally occupied by the military, was valid, we think it necessary to consider the possibility of a review on the objectives conceived for the area, especially to ensure greater suitability to the reality and needs of the country.

ACTORS, INTERESTS, AND NATIONAL DEFENSE: SOME CONSIDERATIONS

National defense has, historically, low priority in the country's political agenda and for society in general. Brazil is not directly threatened by external factors, seldom participated in armed conflicts, and is not located in a zone of intense inter-State conflict. Nevertheless, there is still the major perception of threat in the domestic dimension, which influences

the direction of our Armed Forces to internal issues.

The military intervention in the country's political activity is another factor that contributes to this. A civil-military relationship was built here whose main characteristic is the distance and distrust between the parties. As a result, civil society - including the political representatives – has little interest or understanding concerning the issues related to national defense and military activities, which are practically restricted to the military institution. This is what Oliveira (2005, p. 80) calls the paradox of national defense: given the political and geographic size of Brazil, "political leaders and the public lack knowledge of and appreciation for national defense, including properly military factors." On the political level, this aspect is even more serious, since the area is regarded as a sector of low return in terms of elections. According to this same author: "Due to having no influence on prestige and votes, the military issue does not raise the interest of the parties, whose attention is concentrated on higher and more urgent issues" (OLIVEIRA, 2005, p. 101). As a result, there is still reduced involvement and supervision by the elected representatives regarding issues related to the area.

It may be possible to say that the civil aviation crisis and the consequent military crisis were significant in attracting greater political attention to the issue of Defense. Nevertheless, an individual with pragmatic attitude and high capacity for political coordination was appointed to the ministry, which had virtually unrestricted support of the Presidency of the Republic to oversee a series of reforms in the sector. The initiatives deployed thereafter, however, are not sufficiently justified by these factors. We interpret the attempt to associate defense as a strategic sector for development as a possible explanation of this new moment of national defense, given the Lula administration's commitment to the objective of economic and social development. In these circumstances, the projects for the area have gained greater visibility in the political sphere due to being directed to this end as well, as a functional element for economic development.

This dynamics was reinforced by two movements: the expansion of the scope of participation of various actors in discussions and decision-making processes for the area of defense; but, above all, by the convergence between the discourses of groups that are central for the sector, especially between the Armed Forces and the representatives of the national defense material industry, whose particular interests were consistent with this

proposal and supported the effort of reconciling security, modernization of the military instruments, and economic development. Accordingly, the observation of Peron (2011, p. 12) is quite pertinent in noting that

(...) both documents [NDP and NDS] have in their guidelines and in the concepts of security and defense the "strategic" essence due to enabling the convergence between military and civil interests by alluding to the necessity of revitalizing the defense industry and, mainly, of creating a momentum for the promotion of new technologies for meeting the security objectives (...)

On the side of the Armed Forces, the context was favorable to reverse the situation of neglect built by the political authorities in relation to the military sector since the redemocratization. In addition to the salary issue, which was a point of conflict several times between the governments of Cardoso (1994–2002) and Lula, the dissatisfaction with the increasingly obsolete Defense materials was a strong demand by representatives of the Forces and was reinforced when the country began to have a role of greater regional and international prominence. According to general Augusto Heleno, still in 2007,

We have claimed the refitting and modernization of the Army for a long time. This is an old wish of ours. As time goes by, the situation is getting more critical (...). Blatantly, we are lagging behind. We need to update the country's stature with its defense capacity, which is obsolete.

In the same year, in a public hearing in the Foreign Affairs and National Defense Committee, the Navy commander Julio Soares de Moura Neto said that "the Brazilian naval power could disappear by 2025, if there is no new investment in equipment" (PODER..., 2007). The discourses of the military sector also found support in the foreign policy of the Lula administration, marked by discourses highlighting the autonomy and the greater protagonism of Brazil in the international system. By observing

the discourse of General Heleno above, in relation to the aspiration for greater international protagonism of the country, the need to update the Brazilian military capability was advocated. Nevertheless, several works of scholars sought to explore this renewed interest in the area of defense through this more assertive line of Brazilian diplomacy adopted in the period (OKADO, 2012; LIMA, 2010; LIMA, 2015).

This culture mix established by the convergence of interests between different sectors was also favorable for the industrial groups, since all the discussion included in some manner the need to revitalize the national production of defense materials. For example, in this statement by minister Mangabeira Unger, one of the creators of the NDS: "it is not viable for a serious defense industry that defense companies are treated as mere companies, when we are dealing with the production of technologies that are essential for the security of the country" (ROSAS, 2008). Nevertheless, a considerable portion of the large Brazilian business groups and their representatives would come to support this revitalization.

The government's indication of its intention to foster the industry through fiscal incentives and subsidies attracted the national business community, which considerably expanded their activity in the area of defense. The industrial and business sector representatives came to reinforce the idea of Defense as a vector of development, advocating the need to rebuild and strengthen the national defense industry. For example, in an interview with journalist Roberto Godoy, the president of the Brazilian Association of the Defense Material Industry – Frederico Aguiar – comments:

To have a strong defense industry, in any country, the role of the State is indispensable. A huge step in Brazil was taken with the creation of the National Defense Strategy – NDS, which is a long-term State document; guidelines and priorities for Defense, among others, technology transfer, and full command of our defense systems. In practice, this means fiscal and tax adjustment, technological development policy, technological innovation fosterage, legislation on safeguards and civil responsibilities in the guard of sensitive information; mandatory budget – that protected

from cuts or restrictions – for high technological content programs, with budgetary availability guarantees (AGUIAR, 2010).

Also noteworthy, the Federation of Industries of the State of São Paulo (FIESP) instituted, in 2007, a department dedicated exclusively to the defense industry – the Comdefesa – and, by 2012, large national conglomerates had entered the sector: Odebrecht, OAS, Queiroz Galvão, Andrade Gutierrez (FARIELLO, 2012). Embraer – although already in the sector – created in 2010 a unit specializing in the area of defense and security. The idea that the defense industry has a strategic role in promoting innovation, generation of employment, scientific research, and the development of dual technologies – among other reasons – opened considerable space for the manifestation of the particular interests of the industrial sector, which would strengthen and support the discourse of defense as strategic vector for economic development.

It is important to note that our intention is not to question the need to foster or restructure the national defense industry or the necessity of refitting the Armed Forces, but, rather, to call attention to the fact that a discourse has gained enough strength to influence public policies, without being subject to strict assessment criteria to determine whether that which is proposed is doable or in fact necessary for the reality of the country (DAGNINO, 2010, p. 19). It is in this sense that we propose as a final discussion reflecting on how the defense policy has been conceived and conducted in Brazil.

The Lula government, especially in his second term, seems to have initiated a new stage of national defense, in which important (albeit insufficient) guiding documents for the area were produced, with new incentives for the implementation of projects considered strategic for the Armed Forces. A justification to understand this is the fact that the Lula administration was based on a project for economic development and that, through a very favorable environment, was able to reconcile interests and direct investments to various sectors that had long been inoperative. Thus, after the civil aviation crisis – which forced greater political attention to the area –, reforms in the sector were justified and supported by the attempt to associate defense to development.

We observe that the concept behind this association has some weaknesses, mainly because the argument sustained does not seem

to consider the economic and social specificities of Brazil. However, it cannot be ignored that this idea gained considerable strength and we attribute this strength to the convergence between the interests of groups that have great influence on the sector, especially the Armed Forces and the representatives and enthusiasts of the national defense industry.

Nevertheless, much of that which is proposed by the documents published in the period between 2003 and 2010 corresponds directly to the interests of these actors, but the justifications for the large projects are marked by shallow discourses, which do not necessarily bring explanations as to how these initiatives will bring positive impacts to civil society. For example, the documents do not specify the mechanisms to be employed to foster the area of research, science, and technology in the country so it is capable of absorbing the technology transferred and generate the expected spillovers; or how the development of nuclear technology – through the submarine project – can benefit other sectors that are not directly related to defense, such as medicine and biology.

We can conclude that the Lula administration's proposal of associating economic development and defense, although not explicit in the form of a specific program, was that which catalyzed investments in major programs of the area, such as the FX-2, the Prosub, and the investments in the aerospace sector, which bring opportunities for the development of strategic partnerships, such as the Sino-Brazilian satellite. In general, this discourse was very positive as it led to investments in various sectors. However, few studies have been developed so far to examine the real impact of these investments, as to their capacity to generate employment, new technologies and business opportunities for the civil sector, capacity-building for production chains, and, fundamentally, strategic dividends for the country. In this respect, in the government sphere, we observed some effort only by the IPEA.

The intention of expanding the involvement of society with the area of national defense was stated on several occasions as one of the goals of the Lula administration for the sector. However, we believe that this objective has advanced timidly. Although the area is more open to the participation of new actors and sectors, the decision-making processes and the agents that are heard by political authorities are still quite restricted, including for members of the academy that research security and defense. This is evident in the very wording of the NDS, which, although emulating popular consultations, is still organized within the

walls of the country's military institutions, recovering particularistic concepts and perspectives about defense and security.

The association with development can lead to greater participation of society in defense, provided it is founded on plurality and transparency. This is the very essence of the concept of development, the capacity to enable economic growth through the reconciliation of multiple interests, including – through cognitive and decision-making participation – of sectors that have been historically marginalized in these processes.

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