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**THE NATIONAL DEFENSE OF THE BRICS IN A CONTEXT OF  
TRANSITION IN PATTERNS OF GLOBAL MILITARY EXPENDITURES**

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**1 INTRODUCTION**

Since 2008, following the international economic crisis, North Atlantic Treaty Organization (NATO) countries began to restrict their military expenditures, intending to maintain this trend until the end of the decade. Such process points towards a cycle of spending containment of the main NATO countries, based both on the perception that the current economic crisis will pose a considerable restriction in their fiscal capacity over the next years and on the expectation of a decreasing intensity of the armed conflicts in which these countries are currently engaged.

By contrast, in the same period emerging countries (especially the BRICS) have put forward ambitious plans to modernize their armed forces, through a consistent expansion of their military expenditures. This scenario could provide a *window of opportunity* for them to: *i*) reduce the military power gap in comparison to members of the transatlantic alliance (or to enhance it, in case they have already surpassed them); and/or *ii*) advance military modernization programs, saving resources and gaining facilitated access to sensitive technologies.

Furthermore, such a trend also allows BRICS to be perceived in a more consistent manner as possible “providers” of international security, capable of acting as stabilizing forces not only in their own regions, but also in more distant ones.

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The purpose of this article consists in: *i*) identifying probable trajectories in the military expenditures of the main NATO countries and the BRICS; and *ii*) indicating some of their implications, notably opportunities in terms of military equipment procurement, sharing of sensitive technologies, and enhanced perception of the international community regarding their responsibilities concerning peace and security issues.

The text is divided into two sections, in addition to this brief introduction and the final remarks. In the first section we present data regarding the military expenditures of the fifteen countries with the largest spending during the 2006-2011 period, evidencing the international crisis' effects over their capacity to invest in defense. The second section analyzes the estimates for these expenditures until 2016, focusing on spending aimed at military equipment procurement. Finally, after pointing out the obstacles to some of the major military projects in NATO countries through the next years due to the international crisis, we identify new opportunities and challenges for the BRICS in the defense field.

## **2 MILITARY EXPENDITURES AND OTHER ECONOMIC INDICATORS (2006-2011): ECONOMIC CRISIS EFFECTS ON DEFENSE**

During the 2006-2011 period, the annual global military expenditure was, on average, US\$ 1.53 trillion. It was concentrated in a reduced number of countries, especially the major developed nations and the BRIC (Brazil, Russia, India and China). For comparative purposes, table 1 lists the 15 countries with the biggest expenditures during the 2006-2011 period.

**Table 1**

The fifteen countries with the biggest military expenditures in the world: 2006-2011 (In US\$ billion, at constant 2010 prices)

Country	Military Expenditures					% of global expenditure: average 2006-2011
	2006-2007 (average)	2008	2009	2010	2011	
1 United States	578.3	629.1	679.6	698.2	689.6	42.0
2 China	81.9	96.7	116.7	121.1	129.3	6.8
3 France	61.2	60.7	64.7	59.1	58.2	4.0
4 Russia	49.3	56.9	59.6	58.6	64.1	3.7
5 United Kingdom	54.9	58.2	59.3	58.1	57.9	3.7
6 Japan*	54.3	53.2	54.3	54.7	54.5	3.5
7 India***	34.2	39.0	45.9	46.1	44.3	2.7
8 Germany	42.9	44.1	45.8	45.1	43.5	2.9
9 Saudi Arabia**	40.3	42.3	43.5	45.2	46.2	2.8

10	Italy****	37.4	38.2	37.1	35.5	31.9	2.4
11	Brazil	25.9	29.1	31.2	34.4	31.6	1.9
12	South Korea*****	24.2	26.3	27.8	27.6	28.2	1.7
13	Australia	20.0	21.3	22.9	23.2	23.0	1.4
14	Canada	18.2	20.5	21.4	23.1	23.1	1.4
15	Turkey	17.2	16.8	18.0	17.6	18.7	1.1
-	South Africa	4.6	4.6	4.8	4.6	4.8	0.3
-	Total - 15 countries	1,139.8	1,232.4	1,327.8	1,347.6	1,344.1	82.1
-	Rest of the world (including South Africa)	265.6	275.1	279.6	275.3	280.4	17.9
-	Total	1,405.4	1,507.5	1,607.4	1,622.9	1,624.5	-

Source: SIPRI (2012). Authors' elaboration.

Notes:

\* Expenses on military pensions are not included. Moreover, it refers to the amount established in the budget, not necessarily reflecting the actual outlays.

\*\* Refers to the amount established in the budget, not necessarily reflecting the actual outlays. Moreover, it includes the expenses with public order and security.

\*\*\* Does not include expenses with nuclear military activities. Moreover, it includes spending with BSF, CRPF, Assam Rifles, ITBP and SSB.

\*\*\*\* Includes expenses with civil defense.

\*\*\*\*\* Does not include the expenses with three special funds, aimed at: reallocation of military installations; reallocation of American bases; and Welfare for Troops.

- The following data are estimates: China and Russia for the whole period; Italy for 2007-2011; and Germany and Canada in 2011.

- The data refer to the fiscal year for each country.

We point out the elevated amount of United States' expenditures, far higher than that of any other country. Between 2006 and 2011, it corresponded to 42% of the world total, a position which, since 1990, has been sustained above 36%. From the fifteen listed countries, nine are developed (including South Korea), with the sum of their expenses corresponding to 63% of the world total in the period. Moreover, the five biggest budgets are the ones of the five permanent members of the United Nations Security Council (UNSC): the sum of their expenditures corresponded to 60.2% of the world total in the period.

The BRICS corresponded to 15.4% of the world total of military expenditures. Internally in this group, however, the distribution of such expenditures was unequal: the expenses of China represented 45% of the BRICS total count, against 24% from Russia, 17% from India, 13% from Brazil and 2% from South Africa.

Among the 15 biggest military budgets between 2006 and 2011, only Saudi Arabia and Turkey were neither developed nor members of the BRIC. Turkey, in particular, overcame important European countries in terms of military expenditures, such as Spain and the Netherlands, an indirect reflex of the effects of the economic crisis in European Union (EU) countries over their defense budgets.

The main NATO countries' governments consider it unfeasible to maintain their military expenditures in the current levels in a context of economic crisis. In fact, the four EU countries listed (France, the United Kingdom, Germany, and Italy) have reduced these expenditures between 2008 and 2011. Although in the case of the United States we observe a delay between the beginning of the economic crisis and the implementation of budget cuts, there is an unquestionable trend of diminishing or stabilizing their expenditures on defense in absolute terms that should last until the end of this decade (as analyzed in section 3).

Table 2 presents an economic and fiscal overview of the five NATO countries with the biggest defense budgets and the BRICS, through a period starting in 2008 and ending on 2016 (based on official estimates from 2013 on).

**Table 2**

Variation of the GDP, average annual fiscal deficit and evolution of gross public debt in the 2008-2016 period – the largest economies of NATO and the BRICS

		Evolution of GDP (2016/2008) (%)	Average annual fiscal deficit (2008/2016) (% GDP)	Estimated gross public debt in 2016 (% GDP)	Evolution of gross public debt (2016/2008) (%)
<b>NATO countries</b>	United States	15.6%	6.1%	114.2%	50.1%
	United Kingdom	5.6%	5.3%	95.8%	83.5%
	France	5.0%	2.8%	90.1%	32.1%
	Germany	8.8%	0.9%	75.8%	13.3%
	Italy	4.5%	1.2%	123.3%	16.7%
<b>BRICS</b>	Brazil	38.1%	2.1%	55.0%	-13.4%
	Russia	27.4%	0.4%	13.0%	64.6%
	India	79.6%	9.9%	64.7%	-12.7%
	China	115.5%	1.0%	12.6%	-25.9%
	South Africa	28.9%	3.8%	44.2%	61.3%

Source: World Bank and IMF. Authors' elaboration.

Note: the data regarding GDP growth, fiscal performance and the public indebtedness are estimate (IMF Fiscal Monitor) for the period 2013-2016.

According to the official estimates presented in Table 2, members of NATO will probably face a period of low economic growth rates, which could pose several constraints to their capacity of sustaining military expenditures at the same level of the last decade. In addition, for the analysis of military expenditures trajectory it is relevant to consider not only the economic performance of each country, but also their perspectives on fiscal indicators and public indebtedness for the near future. Since for most of the developed economies a substantial reduction in fiscal deficits in the short term is unlikely, the expected evolution of gross public debt is one of acceleration in the coming years, hindering the expansion of government spending. We add to this scenario the fact that the economic crisis will give rise

to other public expenditure priorities, particularly in the social area, which will pose growing dilemmas concerning the allocation of resources to defense projects.

In contrast, the expressive economic growth expected of the BRICS during the same period, in a context of stabilized or negligible public indebtedness, allows these countries to engage in a swift expansion of their military power over the next years. Certainly, these countries face greater dilemmas regarding social demands than the developed economies. However, in what concerns macroeconomic conditions, they seem to be more capable of dealing with these demands throughout the decade without compromising the ongoing plans of improving their defense capabilities.

In the next section we analyze more closely some of the near future perspectives of the defense sector in the main NATO powers (the United States, the United Kingdom, France, Germany and Italy) and in the BRICS, highlighting how the evolution of western powers' military expenditures throughout this decade can bring about opportunities and challenges to the BRICS given their objectives of strengthening their militaries and increasing their regional and global power.

### 3 MILITARY EXPENDITURES REDUCTION IN NATO COUNTRIES AND EXPANSION IN THE BRICS

As mentioned in the previous section, due to the economic crisis initiated in 2008, several developed countries are reducing their military expenses, while major emerging countries intend to maintain an ascending trajectory. In table 3, there are projections of military expenditures for the NATO members with the five biggest defense budgets and for the BRICS.

**Table 3**

Estimates on Military Expenditures: 2012-2016

(In US\$ billions, at constant 2012 prices)

		2012	2013	2014	2015	2016	2016/ 2012
<b>NATO Countries</b>	United States	645.7	606.4	566.8	568.1	567.2	-12.2%
	United Kingdom	62.8	56.9	56.1	53.8	54.9	-12.6%
	France	54.7	54.0	53.4	53.1	53.3	-2.7%
	Germany	44.0	45.6	44.6	43.2	42.7	-3.0%
	Italy	27.6	26.8	24.9	24.9	25.8	-6.4%
	TOTAL	834.8	789.7	745.8	743.1	743.9	-10.9%
<b>BRICS</b>	Brazil	33.9	35.9	38.2	40.2	44.0	29.7%
	Russia	63.0	65.4	68.2	71.0	73.8	17.2%
	India	51.0	50.7	52.6	56.0	60.9	19.4%
	China	121.2	130.0	140.7	151.7	163.7	35.1%

South Africa	5.2	5.2	5.5	5.8	6.2	19.6%
<b>TOTAL</b>	<b>274.3</b>	<b>287.2</b>	<b>305.2</b>	<b>324.7</b>	<b>348.6</b>	<b>27.1%</b>

Source: Jane's (2012). Authors' elaboration.

Note: the values are not directly comparable to those on tables 1 and 2 due to methodological differences in calculation and, particularly, to the fact that the values in this table are in 2012 U.S. dollars. The main purpose of this table is to demonstrate the expenses projection until 2016 as a result of the effects of the economic crisis, which is not affected by the different values.

As shown in this Table, the selected NATO countries are expected to reduce their expenditures, while BRICS are expected to increase them. While, in 2012, the summed expenses of the BRICS were equivalent to 32.9% of the summed expenses of these five NATO countries, the foresight is that this percentage will become 46.9% in 2016.

Moreover, one can analyze predictions regarding the expenses related to military equipment procurement in these same countries. In so doing, it is possible to identify in a more precise manner the segments where the cuts will be more pronounced. Table 4 shows these data for the same countries listed in table 3.

**Table 4**

Military Expenses for Equipment Procurement: 2012-2016

(in US\$ billions, at constant 2012 prices)

		2012	2013	2014	2015	2016	2016/ 2012	
NATO Countries	United States	Army	24.84	22.57	20.01	19.74	20.39	-17.9%
		Navy	45.79	43.36	42.09	46.71	45.00	-1.7%
		Air Force	40.87	36.63	36.58	37.16	40.10	-1.9%
		Defense-Wide	9.08	4.62	7.90	8.63	8.53	-6.0%
		<b>TOTAL</b>	<b>120.58</b>	<b>107.18</b>	<b>106.58</b>	<b>112.24</b>	<b>114.02</b>	<b>-5.4%</b>
	United Kingdom	Army	4.22	3.87	3.90	3.66	3.46	-17.9%
		Navy	5.73	5.02	4.92	4.76	5.24	-8.5%
		Air Force	6.79	5.91	5.74	5.61	5.94	-12.6%
		Defense-Wide	0.09	0.07	0.07	0.06	0.07	-24.5%
		<b>TOTAL</b>	<b>16.83</b>	<b>14.87</b>	<b>14.63</b>	<b>14.09</b>	<b>14.71</b>	<b>-12.6%</b>
	France	Army	2.64	2.54	2.58	2.56	2.38	-10.0%
		Navy	2.53	2.49	2.47	2.51	2.63	+4.1%
		Air Force	3.15	3.02	2.99	2.97	3.60	+14.2%
		Defense-Wide	2.01	1.99	1.97	1.96	1.84	-8.8%
		<b>TOTAL</b>	<b>10.33</b>	<b>10.04</b>	<b>10.01</b>	<b>10.00</b>	<b>10.45</b>	<b>+1.2%</b>
	Germany	Army	1.49	1.48	1.45	1.40	1.38	-7.1%
Navy		2.26	2.34	2.29	2.22	2.19	-3.0%	
Air Force		3.89	3.91	3.83	3.71	3.66	-5.9%	
Defense-Wide		0.37	0.38	0.38	0.36	0.36	-3.2%	
<b>TOTAL</b>		<b>8.01</b>	<b>8.11</b>	<b>7.95</b>	<b>7.69</b>	<b>7.59</b>	<b>-5.2%</b>	
Italy	Army	1.23	1.15	1.11	1.08	1.22	-0.6%	
	Navy	1.17	1.15	1.08	1.09	1.14	-2.6%	
	Air Force	0.96	1.03	0.96	1.00	1.20	+25.3%	
	Defense-Wide	0.25	0.24	0.23	0.23	0.24	-2.8%	
	<b>TOTAL</b>	<b>3.61</b>	<b>3.57</b>	<b>3.38</b>	<b>3.40</b>	<b>3.80</b>	<b>+5.3%</b>	
BRICS	Brazil	Army	0.81	0.84	0.89	0.92	1.00	+23.4%
		Navy	1.13	1.20	1.30	1.39	1.55	+37.1%
		Air Force	0.55	0.60	0.64	0.67	0.73	+32.1%
		Defense-Wide	1.44	1.52	1.62	1.71	1.87	+29.7%
		<b>TOTAL</b>	<b>3.93</b>	<b>4.16</b>	<b>4.45</b>	<b>4.69</b>	<b>5.15</b>	<b>+31.0%</b>
	Russia	Army	3.08	3.33	3.74	4.18	4.35	+41.1%

	Navy	3.27	3.43	3.60	3.79	3.97	+21.4%
	Air Force	3.23	3.53	4.09	4.53	4.59	+41.9%
	Defense-Wide	0.40	0.42	0.44	0.45	0.46	+15.7%
	<b>TOTAL</b>	<b>9.98</b>	<b>10.71</b>	<b>11.87</b>	<b>12.95</b>	<b>13.37</b>	<b>+34.0%</b>
India	Army	2.99	2.25	2.46	2.91	3.16	+5.9%
	Navy	4.95	4.89	5.25	5.58	6.05	+22.1%
	Air Force	6.13	6.69	6.92	7.36	8.00	+30.6%
	Defense-Wide	0.24	0.20	0.25	0.27	0.30	+25.5%
	<b>TOTAL</b>	<b>14.31</b>	<b>14.03</b>	<b>14.88</b>	<b>16.12</b>	<b>17.51</b>	<b>22.4%</b>
China	Army	8.93	9.40	9.78	10.25	10.85	+21.5%
	Navy	6.53	7.17	7.59	8.41	9.07	+39.0%
	Air Force	7.35	8.21	8.65	9.37	9.80	+33.3%
	Defense-Wide	0.62	0.67	0.65	0.68	0.75	+21.1%
	<b>TOTAL</b>	<b>23.43</b>	<b>25.45</b>	<b>26.67</b>	<b>28.71</b>	<b>30.47</b>	<b>+30.0%</b>
South Africa	Army	0.36	0.38	0.37	0.39	0.41	+13.3%
	Navy	0.02	0.04	0.10	0.11	0.12	+387.5%
	Air Force	0.30	0.37	0.43	0.41	0.43	+40.9%
	Defense-Wide	0.11	0.10	0.11	0.12	0.13	+14.5%
	<b>TOTAL</b>	<b>0.79</b>	<b>0.89</b>	<b>1.01</b>	<b>1.03</b>	<b>1.09</b>	<b>+38.0%</b>

Source: Jane's (2012). Authors' elaboration.

Analyzing the *total* expenses on equipment procurement we observe that, among NATO countries, the drop is inferior than the one of total military expenditures (and in some instances there is even growth) in the United States, France and Italy; while it drops in an equal or superior proportion to the total expenditures in the cases of the United Kingdom and Germany. In any case, when compared to the BRICS' expenses, the trends are clearly distinct. Whereas the BRICS' expenses corresponded in 2012 to 32.9% of the expenses of the five NATO countries, this figure could rise to 44.9% in 2016. Additionally, the BRICS' expenditures in 2012 would be 35% superior to the sum of France, the United Kingdom, Germany, and Italy expenses, a percentage that could reach 85% in 2016.

This scenario brings two possibilities to the BRICS regarding their military capacities. The first one is its *direct* consequence: through a superior volume of equipment procurement, some of the BRICS could reduce the gap separating their material military capacities relative to some NATO countries'. Even if the gap expands in some cases (comparing Brazil and the United States, for instance), it would be possible to, at least, diminish the velocity of such expansion. The second one is its *indirect* consequence: the reductions in equipment procurement in these countries enhances the relative weight of the external market, contributing to a bigger bargaining power of purchasers, making possible the achievement of more beneficial agreements on trade and transfer of technology.

Far from being a proposal of confrontational stances toward NATO countries, these remarks simply indicate some opportunities for the BRICS to implement military projects in a more effective and efficient manner. And rather than "exploiting" NATO countries, we stress possible ways to facilitate the strengthening of the cooperation between some of the BRICS

and NATO members. In addition to that, one should consider that contemporary defense markets are quite globalized, making such proposals more feasible for countries intending to cooperate with different partners over these issues.

With the objective of detailing the procurement profiles of the countries analyzed, table 4 shows disaggregated data by acquiring branch (Army, Navy and Air Force) in the main NATO members and in the BRICS. When analyzing the NATO countries, we observe the following trends: *i)* in the United States, the drop would be more pronounced in the Army; *ii)* in the United Kingdom, it would be significant in the three segments, although with a bigger burden on the Army; *iii)* in France, there would be a significant drop in the Army and in the defense-wide procurements, a relative stability in the Navy and a growth in the Air Force; *iv)* in Germany, there would be a reduction in all forces, with a bigger burden on the Army; and *v)* in Italy, we see a trend of growth in the Air Force, and stability on the others. Among the BRICS, we highlight the following: *i)* in Brazil, there would be a relative growth in all segments, particularly in the Navy, whose budget would almost equal the sum of the Army and Air Force procurements; *ii)* in Russia, we see a growth in all forces, with a lower relative priority for the Navy; *iii)* in India, there would be a clearly smaller priority for the Army; *iv)* in China, also we see a smaller priority for the Army; and *v)* in South Africa, there would be attribution of a bigger importance for the Navy (although from a very low starting point).

Based on these estimates, it is possible to infer that the projected reduction in equipment expenses in NATO countries would not occur uniformly within the military branches: in almost all these countries, the Army would assimilate most of the cuts, and the reductions in the other branches would be less significant or there could even be expenditure increases. These indicators suggest that, although there is a global reduction trend in equipment expenses in Western powers, these powers seek to sacrifice to a lesser extent the more capital intensive branches (Navy and Air Force).

When negotiating the purchase of equipment or technology with NATO countries, it is expected that the BRICS could find more advantageous deals in those countries whose defense industry sectors will probably bear most of the burden of the reduction in military spending. In other words, the deeper the cuts, the greater the bargaining power of the customers. In this context, the data presented in this article might prove useful for the purposes of identifying the most promising opportunities for foreign military procurement and partnerships. Based on this information, one could also see the chance for a much broader and

effective agenda of cooperation among the BRICS in the defense field. For example, Brazil, China and South Africa have signaled in defense plans and other official documents a higher relative priority for the Navy in terms of new military projects; this common priority could enable deeper cooperative actions among the three countries.

Finally, it is possible to offer some comments on the BRICS' participation in international peace and security issues. The reduction of military expenditures in NATO countries and its expansion in the BRICS could result in pressures from the international community to increase the BRICS countries' contribution in matters of peace and security, either on a regional or global basis. Far from being a burden, this could be an opportunity for the BRICS.

Brazil, for example, is able to sustain an expansion of its military at a higher level than its neighbors. In the South American context, strongly marked by regional integration and a low degree of interstate threat perceptions, this could imply a more prominent role for Brazil as a maintainer of regional stability. Some military projects in Brazil show how such process could occur even in the short to medium-term. The Integrated System for Border Surveillance (Sisfron) is currently being implemented by the Brazilian Army, and it will be fully operational in 2022, providing security not only to Brazil, but also to its neighbors. Furthermore, the Brazilian Navy is working on the Blue Amazon Management System (SisGAAz), aimed to monitor the Brazilian Jurisdictional Waters, providing security in a large part of the South Atlantic. Another form of Brazilian contribution could be an expanded role in peacekeeping operations, in which Brazil has had, historically, a discreet position (with the clear exception of the country's participation in the MINUSTAH).

Another aspect relates to participation in multilateral security institutions. Among the BRICS countries that currently do not integrate the UNSC as permanent members (Brazil, India and South Africa), the expansion of such contribution could reinforce the legitimacy of their demands to change their status to permanent members.

Nevertheless, all the BRICS have highly sovereignty-based foreign policy traditions, centered in the non-intervention principle. Accordingly, the responsibility to protect (R2P) principle finds strong resistance in these countries. Such fact restricts not only their participation in international interventions, but reduces the possibilities of BRICS operations under the UN flag, given the permanent member status of Russia and China (both able to veto operations of this kind).

In the face of such dilemma, cooperation on interventions could make progress on the basis of a contribution offered by the Brazilian government, the concept of *responsibility while protecting* (RwP). If, on the one hand, the concept does not breach the sovereigntist tradition, it implies, on the other hand, flexibility, especially when added to another concept, namely the “non-indifference” (as a partial counterpoint to “non-intervention”). Debate on such concepts by the BRICS could contribute to refining international discussions over the future of international interventions, even if it is not fully adopted by the group.

#### **4 FINAL REMARKS**

With the perspective of military expenditures reduction in several developed countries, a “window of opportunity” opens up for emerging countries to reduce the gap in terms of military power and technological capacity between them and NATO powers. Hence, China and Russia could reduce the distance in military capacities in relation to the United States; Brazil and India could strengthen themselves when compared to other powers such as France, the United Kingdom and Germany; and South Africa, in an inferior military power level, could improve its conditions compared to smaller NATO members, such as Portugal and Belgium.<sup>2</sup>

In such an environment, BRICS’ governments and defense companies (mainly from those that possess limited industrial capacities and technologies, such as Brazil and South Africa) could pursue new business opportunities. For that purpose, they could use both strategic partnerships and the State’s purchasing power. The advantages expected are not limited to price reductions, but also involve bigger bargaining power in offset agreements negotiation, benefiting the Armed Forces and national companies of the sector. Given that technological catching up constitutes an essential element in these countries’ search for asymmetries reduction in relation to the great powers, the reduction in global military expenditures – following the developed countries’ crisis – could set up a unique opportunity for a beneficial repositioning of emerging powers in the international scene.

Nevertheless, “great power brings great responsibility”. Therefore, this opportunity for BRICS to expand their role as providers of international security, both in a regional and a global extent, come along with the challenge of coping with a higher degree of cooperation and commitment with the international community demands.

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<sup>2</sup> With the reservation that, in the case of Brazil, there is a limit in possibilities of gap reduction in comparison to France and the United Kingdom, represented by the impossibility of developing nuclear military capacities, by determination of the Brazilian Constitution and of international treaties signed and ratified by the country.

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