

Militarization Indices and Security Strategy in the Arab Countries



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August 2021



Al-Zaytouna Centre for Studies & Consultations

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Introduction

Literature discussing "Holistic Approach" in contemporary international relations focuses on three dimensions that overlap and establish the "security concept" and all the strategies based on it. They are:¹

- 1. Community security: It means securing the "free development of the social, political, economic, cultural and technical dimensions in a peaceful internal environment," which requires the continuation of social cohesion and the absence of religious, ethnic, sectarian, sectarian, class, regional, color-based or gender-based cracks in society.
- 2. State security: It means preserving "the political and natural geography of a political entity, and preventing others from controlling its natural resources," or taking advantage of them (such as springs located outside the state, or when oil or gas fields span more than one country, etc.
- **3. Regime security:** It means "the ruling class remains unaltered," forcibly or voluntarily.

Accordingly, the political systems in the world can be divided into six types, based on how they prioritize these three dimensions:²



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- 1. Systems prioritizing community security then state security then regime security (Welfare states).
- 2. Systems prioritizing community security then regime security then state security (Capitalist countries).
- 3. Systems prioritizing state security then community security then regime security (Israel).
- 4. Systems prioritizing state security then regime security then community security (Taiwan).
- 5. Systems prioritizing regime security then community security then state security (Socialist countries).
- 6. Systems prioritizing regime security then state security then community security (Most developing countries, especially the Arab countries).

Certainly, these dimensions are interrelated and interact with each other, and the priorities of countries may change from one stage to another, due to internal or external reasons. However, this does not negate the fact that each country has its own political value system and they prioritize these dimensions accordingly. Here, we will not discuss all of these types, we will focus on the last one, applicable to almost all Arab systems, albeit at varying levels, while discussing the most important variable in their structure and policies, in addition to other indicators. As a result, the understanding and interpretation of the political behavior of Arab countries would be enhanced.

First: Militarization

Militarization can be defined as the "the relative weight of the military apparatus of a state in relation to the internal and external interaction of the political entity it belongs to." In political studies, there are different approaches to measuring this weight, but most of them determine militarization through three central indicators, measured through six sub-indicators, by which the relative weight and importance of the military apparatus of a state in relation to society as a whole is measured:³





Table 1: Militarization Central Indicator and Sub-indicators

Central Indicator	Sub-indicator	Weighing Factor*
F 1:4	Military expenditures as percentage of gross domestic product (GDP)	5
Expenditures	Military expenditures in relation to health spending (Government's in particular)	3
	Military and paramilitary personnel in relation to population	4
Personnel	Military reserves in relation to population	2
	Military and paramilitary personnel in relation to physicians	2
Weapons	Heavy weapons in relation to population	4

^{*} The weighted indicators were added together and then normalized.4

As for the Militarization ranks and scores of the Arab countries, they are as follows:5





Table 2: Militarization Indices of the Arab Countries Compared to Israel in 2000 and 2019/2020 (Out of 500)

Countries	Score 2000	Rank	Score 2019/2020	Rank
Mauritania	224	45	199	30
Morocco	213	47	218	23
Algeria	251	29	255	15
Tunisia	169	73	175	47
Libya	329	13	183 (2017)*	43
Egypt	228	40	199	31
Sudan	247	31	162	54
Jordan	354	8	279	10
Syria	387	6	329 (2013)*	4
Lebanon	326	15	275	11
Iraq	157 (2004)*	77	226	18
Saudi Arabia	351	9	294	6
Kuwait	343	10	284	9
Qatar	n/a	n/a	191 (2013)*	44
Bahrain	394	5	301	4
UAE**	395	4	296 (2017)*	7
Oman	362	7	306	3
Yemen	282	24	148 (2017)*	68
Israel	440	2	363	1

^{*} In some cases, when we did not find the measurement of a certain year, we chose the closest year measurement.

Table 2 provides the militarization scores and ranks of the Arab countries in 2000 and 2020. It shows that:

▶ 1. Out of 18 Arab countries whose militarization indices have been measured, 12 Arab countries have advanced in their global rank, that is, their militarization has increased. They constitute 66.7% of the Arab countries.





^{**} UAE = United Arab Emirates.

- 2. In 2000, the Global Militarization Index (GMI) showed that 7 Arab countries (five Gulf Arab countries, along with Syria and Jordan) were among the top ten countries in the world. This means that 70% of the highly militarized countries are Arab countries.
- ▶ 3. In 2019/2020, i.e., after twenty years, the number of Arab countries among the top ten remained the same (7 out of 10), and they are the same countries that occupied these positions in the first period.
- 4. Since 2001, according to GMI, Israel tops the list of the world's most militarized nations, which confirms that the image of a democratic state that it is trying to promote to the world is not consistent with the militarization measurement. A quantitative academic study indicates a high correlation coefficient between the militarization index and the decline in civil liberties. It analyzed data from 30 countries, and showed that a country's level of militarization and civil liberties is associated with the political values in society. It showed that a country's high military expenditure and low level of civil liberties correlates positively with citizens' Belief in a Zero-Sum Game. Israel considers any Arab development in any of the fields as "a loss, and that it has to prevent it with all forms of force." This is similar to the perspective of Arab regimes that see any "political development" in their societies, in the region or in the world a threat to them and their power survival, so they consider "militarization" necessary to stop such development.

Second: Militarization Sub-Indicators

After discussing the GMI and the ranking of the Arab countries, we will discuss the sub-indicators of militarization in the Arab world, based on a number of institutions concerned with measuring each of these indicators. As a result, the relationship between the Arab military institution and the Arab society will be defined on the one hand, and then the mega trend of the nature of this relationship will be determined, on the other hand.

The militarization sub-indicators are:





1. Arab Military Expenditure⁸

Military expenditures are represented by two sub-indicators: military expenditures as percentage of GDP, and military expenditures in relation to health spending (Government's in particular).

Literature has defined military expenditure as the spending on the armed forces (including peace keeping forces), defense ministries and other government agencies engaged in defense projects; paramilitary forces when judged to be trained, equipped and available for military operations;



and all expenditures on current personnel, both military and civil, retirement pensions of military personnel; and social services for personnel and their families; operations and maintenance; procurement; military research and development; military construction; and military aid.

When the sub-indicators of Arab military spending were measured, the results were as follows:

Table 3: Military Expenditure as a Percentage of the GDP in the Arab World and Globally 2000–2019

Year	Military expenditure as % of GDP - Arab World 9	Military expenditure as % of GDP- Globally ¹⁰
2000	6.417	2.191
2001	6.415	2.233
2002	5.896	2.337
2003	5.470	2.396
2004	5.077	2.396
2005	4.632	2.399
2006	4.387	2.360
2007	4.525	2.325



2008	4.199	2.391
2009	5.325	2.622
2010	5.039	2.528
2011	4.913	2.426
2012	5.004	2.381
2013	5.755	2.316
2014	6.348	2.264
2015	7.469	2.268
2016	6.162	2.236
2017	6.473	2.191
2018	6.067	2.170
2019	5.420	2.205

Table 3 reveals that in all the years of the 2000–2020 period, the Arab military expenditures (which include two sub-indicators mentioned in Table 1) were more than the double of the global ones, making the Arab region the highest in the world in this aspect. It suffices to note that in 2020, the total Arab military expenditure amounted to \$113.4 billion, and the North African Arab countries spent in 2020 \$24.7 billion, a 42% increase when compared to 2011 and 1.2% of total global military spending.

As for the Israeli military spending, it amounted to \$21.7 billion in 2020, a 32% increase when compared to 2011, and 2.7% increase when compared to 2019. Israeli military expenditure when compared to the GDP reached 5.6%, while this percentage was in the countries with the highest military expenditures, between 1.4% in Germany and 4.3% in Russia.

When comparing the Arab region with the rest of the regions and countries, it becomes clear that the total global military expenditure in 2020 amounted to about \$1,981 billion and that it has increased by 9.3%. during 2011–2020. In this case,





the global military expenditure represents 2.4% of global GDP, and the percentage of Arab military expenditure to GDP is more than double the global percentage.

Among the top 15 countries in list of the percentage of military expenditure to GDP, we find that there are 8 Arab countries (according

to Stockholm International Peace



Research Institute – SIPRI) and 10 Arab countries (according to International Institute for Strategic Studies – IISS), as follows:¹¹

Table 4: The Arab countries that are Among the Top 15 Countries with the Highest Military Expenditure as a Percentage of GDP, Compared to Israel

Country	Military Expenditure as a Percentage of GDP SIPRI 2019	Military Expenditure as a Percentage of GDP IISS 2020
Oman	8.8	12
Saudi Arabia	8.4	7.1
Algeria	6	6.7
Kuwait	5.6	7.1
Jordan	4.7	4.9
Morocco	-	5.3
Lebanon	4.2	10.5
Bahrain	3.7	-
Iraq	3.5	5.8
UAE	-	5.6
Qatar	-	4.4
Israel	5.3	5.2





Studying the 2020 first 40 countries with the highest military expenditure in the world, we find that the spending of these countries is equivalent to about 92% of the total global spending. Out of these, there are 6 Arab countries:¹²

Table 5: The Arab Countries with the Highest Military Expenditure 2020

Country	Military Expenditure 2020 (\$ billion)	Global Rank
Saudi Arabia	57.5	6
Algeria	9.7	24
Iraq	7	29
Kuwait	6.9	30
Oman	6.7	31
Morocco	4.8	40

In 2020, the Saudi military expenditure was 2.9% of the global one, ranking sixth globally and surpassing the expenditures of Germany, France or Japan. During 2011–2015, Saudi military expenditure increased (at the beginning of the military intervention in Yemen) by 63%, however, after that, it started to decline due to the decline in oil prices. Between 2016 and 2020, it decreased by 37%, while remaining high compared to 2011 by 29%.







When comparing Arab military expenditures as percentage of GDP with the health expenditure as percentage of GDP, we find the following:

Table 6: Military Expenditures and Health Expenditures as Percentage of the GDP of Some Arab Countries Compared to Israel

Country	Military Expenditures as % of the GDP 2019 ¹³	Health Expenditures as % of the GDP 2018 ¹⁴
Algeria	6	6.22
Bahrain	3.7	3.13
Egypt	1.2	4.95
Iraq	3.5	4.11
Jordan	4.7	7.79
Kuwait	5.6	5
Lebanon	4.2	8.35
Libya	15.5	6.05
Mauritania	2.8	4.58
Oman	8.8	4.13
Qatar	1.5	2.49
Saudi Arabia	8	6.36
Sudan	1.6	4.51
Syria	4.1	3.57
Tunisia	2.6	7.29
Morocco	3.1	5.31
UAE	5.6	4.23
Yemen	4	4.88
Israel	5.6	7.52



Table 6 indicates that there are 7 Arab countries whose military expenditure exceeds their health expenditure compared to the total government spending, they are: UAE, Syria, Saudi Arabia, Oman, Libya, Kuwait and Bahrain, most of which are located in the Arabian Gulf (5 out of 7).

2. Arms Imports

Arms imports represent the highest in Arab military expenditure. The comparison of arms imports indicates that between 2010 and 2020, Arab countries increased their arms imports by about 61%, and that 5 Arab countries are among the top ten countries with the highest increase in arms purchase rate, as shown in the following table:¹⁵



Table 7: Percent change of Arab Arms Imports 2010–2014 and 2015–2019

Importer	Percent change of Arab Arms Imports 2010–2014 and 2015–2019*	
Qatar	631	
Egypt	212	
Saudi Arabia	130	
Iraq	98	
Algeria	71	
Jordan	54	
Oman	24	
Countries with Decline in Arms Imports	Decline Percentage	
Morocco	- 62	
Kuwait	- 22	
UAE	- 18	

^{*} The two periods are indicative of one before the Arab Spring and the other after that and until now.





The Congressional Research Service Report "Arms Sales in the Middle East: Trends and Analytical Perspectives for U.S. Policy," has indicated that the 2000–2019 period has witnessed considerable increase in arms supply to Arab countries. The arms suppliers were as follows: 16

Table 8: Top Arms Suppliers to Arab Countries 2000–2019

Arms Supplier	% Share of Total Arab Arms Imports	
US	44.9	
Russia	19.3	
France	11.4	
UK	5.8	
Germany	3.7	
China	2.5	
Other	12.5	

The competition between major powers reinforces militarization, and the size of foreign military presence in the Arab countries (Military bases, experts, joint exercises, security agreements, etc.) is consistent with the volume of arms supply of these major countries.

3. Military Expenditure as a Percentage of General Government Expenditure

Table 9 shows Arab military expenditure as a percentage of the general government expenditure, where in 2019 it was 12.13%, while globally it was 6.1%. This means that the Arab world spends on militarization compared to spending on other sectors, twice the global average. The Arab countries in this field are led by Saudi Arabia and Oman, with an average of 20.3% each, followed by Algeria 15.5%, Jordan 15.2%, Lebanon 13.8% and Bahrain 12.1%.¹⁷



Table 9: Military Expenditure as a Percentage of General Government Expenditure of Some Arab Countries Compared to Israel 2019

Country	Military Expenditure as a % of General Government Expenditure 2019
Saudi Arabia	20.3
Oman	20.3
UAE*	17
Algeria	15.5
Jordan	15.2
Yemen*	14.3
Lebanon	13.8
Syria	13.6
Bahrain	12.1
Libya	10.8
Mauritania	10.7
Kuwait	10.5
Morocco	10.3
Sudan	9.2
Tunisia	7.9
Iraq	7.8
Qatar	4.9
Egypt	4.2
Israel	13.2
Arab average	12.13
World average	6.1

^{*} 2014.



Third: The Militarization of Arab International Relations: Index of Arab International, Inter-Arab and Civil Wars

Wars in the Arab region can be divided into three types:

- ▶ 1. Civil wars: They remain confined between different forces in the same Arab country.
- ▶ 2. Interstate wars: They are between Arab countries or between them and non-Arab countries.
- ➤ 3. Internationalized civil wars: They are internationalized by foreign intervention.

According to the available indicators on the number of these wars and the parties involved in them, we found the following:¹⁸

Year	Arab countries involved in wars	Civil and interstate wars	Internationalized civil wars
2000	3	3	
2001	3	3	0
2002	2	2	
2003	2	2	2
2004	3	3	
2005	4	5	5
2006	4	5	
2007	4	4	4
2008	4	4	
2009	5	5	5
2010	5	5	
2011	7	7	6
2012	7	7	
2013	5	7	7





2014	7	8	
2015	7	10	7
2016	8	11	
2017	8	12	12
2018	8	13	
2019	8	11	12
Annual average	4–5 countries	6–7 countries	6–7 conflicts

The above table indicates the following:¹⁹

- ▶ 1. Quantitative international studies show that the annual rate of intrastate conflicts in the international community had increased from 30 conflicts during the 1989–2011 period to 70 conflicts during 2012–2019, which is confirmed by the above table at the Arab level. This means that internal wars are increasing globally and not just regionally, for the world is interconnected economically and technically, but it is disintegrating politically and socially due to the globalization effect.²⁰
- ▶ 2. When comparing the number of internationalized conflicts in each region of the world, it turns out that the Arab region has the highest rate of external interference in Arab local conflicts. There are 6 to 7 foreign countries that intervene annually in Arab local conflicts during the period referred to in the table. This means that despite their high militarization index, the Arab military forces are unable to resolve local conflicts in their favor, therefore they seek help from foreign forces.
- ▶ 3. If we correlate the previous results with the stability rates at the regional level, and we compare that with the rest of the geopolitical regions of the world, it turns out that the Arab region is the highest in political instability. Out of 19 Arab countries whose indicators of political stability were available, only two countries are considered stable (UAE and Qatar with rates of 67% and 64% respectively). There are two countries that enjoy medium political stability (Kuwait and Oman with rates of 60% and 56%, respectively). As for the rest of the 15 Arab states, they are unstable, i.e., their instability rate is over 50%. When looking at the Arab sub-regions, it becomes clear that the rates of instability are as follows:





- The Nile Basin 79% (Egypt and Sudan).
- The Fertile Crescent 77% (Levant and Iraq).
- Arab Maghreb countries 67% (Algeria, Tunisia, Libya, Morocco and Mauritania).
- The Gulf countries 52% (Gulf Cooperation Council (GCC) countries and Yemen).

When correlating population distribution with instability levels, we find that 80% of Arabs live in countries of 75% **instability** levels.

This means that Arab militarization has led to the opposite of the regimes' justifications of militarization. It has clearly led to instability, and this result is supported by unambiguous quantitative indicators.

Fourth: The Impact of Militarization on Democracy Index in the Arab World

Based on the academic models of measuring democracy, and without going into the details and methods of these measurements, we find that they all agree on the following:²¹

- 1. In 2010–2020, the democracy index the Arab world was 3.5 (out of ten). This means that the political, military, social and economic turmoil during the Arab Spring did not have a positive and significant impact on the democracy level in the Arab world.
- 2. Globally speaking, in 2010–2020, the world's average democracy index was 5.3–5.5 out of ten. This means that the Arab average is significantly behind the rest of the world.
- 3. By dividing the world into 7 geopolitical regions, it becomes clear that the Arab world ranks last among the world's regions in terms of democracy.
- ▶ 4. When ranking the countries, it turns out that all Arab countries (except Tunisia, which ranked 54th and Morocco 96th) fell into the category of authoritarian states. Their ranks started from 118 (Jordan), followed by the rest of the Arab countries.
- ▶ 5. Despite the clear rise in the Gulf military expenditure on the one hand, and the high level of per capita income, on the other hand, all Gulf countries are among the countries whose democracy index rank the least.





We have mentioned in the previous pages when talking about Israeli militarization that there are correlations between aggregated scores for Belief in a Zero-Sum Game (at the internal level) and indices of national military expenditure, consequently the lack of democracy and civil liberties.

Conclusions

We have assumed that the Arab countries belong to the category whose political administration prioritizes the regime's security, i.e., staying in power, and due to the absence of democracy and the peaceful transfer of power, the military is entrusted with maintaining or changing the political regime. In case the regime reaches an intractable stalemate with the society, the military forces change of regime through a coup or with the support of the street. Here, it is necessary to compare the 1948–2010 period, when the Arab military carried coups and then sought to bring the street to support them, and the 2011–2021 period, when the streets began to move first, and the military invested later in these changes in one way or another. In the first period, the army initiated the change of regime (regardless of the nature of the existing regime), then the new regime sought to mobilize popular support, while in the second, the army hid behind the street movement (whatever the street's credibility is) to change the regime, as if it is responding to the popular will, which legitimizes its move. What's common between the two periods is the employment of military to change the regime.

The military appears to benefit from internal or external turmoil through the following:²²

- ▶ 1. Security risks to the state or society make the political decision more dependent on the military. Therefore, it is of the military interest to keep the ruler under the preoccupation of security threats, internally or externally, so as to remain more dependent on the military.
- 2. To ensure the loyalty of the military, regimes bestow on these institutions many benefits through privileges and by turning a blind eye to the corruption in them, especially in arms deals, in which some sources estimate that the commission rate is between 15–30%. A report by the Stockholm International Peace Research Institute (SIPRI) mentions that corruption in the arms trade contributes roughly 40% to all corruption in global transactions.





3. The Richardson (Lewis F. Richardson) arms race model, which analyzes the relationship between wars and the arms race at the global or regional level, indicates that this race enhances the chances of turmoil and wars more than the

chances of peace and stability. For the latter make the military fear losing its importance and role in the strategic decision-making, which is detrimental to the interests of the military elite. This means that maintaining internal or external tension is in the military's interest.



- ▶ 4. Despite the huge military expenditure of Arab countries, and their high ranking in the militarization index, their impact on security and internal or external threats are very modest. In fact, the armed popular organizations have been more effective in different regions of the Arab countries than the traditional armed forces, especially when facing Israeli and US threats.
- ▶ 5. It is remarkable that the Arab-Israeli peace agreements led to an increase in Arab militarization. For since the Egyptian-Israeli Treaty in 1979, the Oslo Accords with the PLO 1993/1994, the Wadi Araba Treaty with Jordan, and until the Arab normalization with most of the Gulf states, Sudan and Morocco, the Arab military expenditure as a percentage of GDP has been indicating that Arab militarization with its various sub-indicators is increasing. ²³ This confirms our view that in most Arab countries, militarization is used internally rather than to confront foreign threats, particularly when taking into consideration that the global trend is heading towards a decline in military expenditure as compared to global GDP. ²⁴

In short, the increasing Arab militarization has brought neither stability nor democracy nor societal development. It has failed miserably in ensuring the sovereignty and independence of Arab countries. The primary objective of the Arab military has been limited to the priority of protecting the regime. While the task of looking after the security of the state and community is always made to serve the security of the regime, through further militarization.



Endnotes

- ¹ Concerning the Holistic Security Concept in international studies, see: Timothy Heath, "The 'Holistic Security Concept': The Securitization of Policy and Increasing Risk of Militarized Crisis," China Brief Journal, The Jamestown Foundation, vol. 15, no. 12, 19/6/2015, pp.7-8; Sossi Tatikyan, New National Security Strategy Takes Holistic Approach But Needs Streamlining, EVNReport magazine, Yerevan. 15/9/2020, https://www.evnreport.com/politics/new-national-security-strategy-takes-holisticapproach-but-needs-streamlining; and National Security Strategies: Towards a New Generation, Site of DCAF's International Security Sector Advisory Team https://issat.dcaf.ch/Learn/SSR-in-Practice/Thematics-in-Practice/National-Security-Strategies
- ² Vihren Bouzov, "Security as a Political and Social Value," *Dialogue and Universalism* Journal, vol. 27, no. 2, 2017, pp.145–149.
- ³ Global Militarisation Index (GMI) Map, Year 2019, site of Bonn International Center for Conversion (BICC), https://gmi.bicc.de/#rank@2019
- To calculate GMI, the weighted indicators were added together and then normalized, see details of the GMI method in: Jan Grebe, Occasional Paper VII: The Global Militarisation Index (GMI), BICC, February 2011,
- https://www.files.ethz.ch/isn/128021/occasional_paper_VII_02_11_eng.pdf
- The GMI research is done by Bonn International Centre for Conversion and funded by the German Federal Ministry for Economic Cooperation and Development.
- ⁴ Jan Grebe, Occasional Paper VII: The Global Militarisation Index, pp. 16–17.
- ⁵ After those responsible for preparing the measurement model made adjustments to the weights of the sub-indicators, the values changed without significant change in ranking. This is due to the fact that only a small number of countries have the modified sub-indicator (numbers of reservists), see results and modifications in, Max Mutschler and Marius Bales, Global Militarisation Index 2020, BICC, https://www.bicc.de/uploads/tx bicctools/BICC GMI 2020 EN.pdf
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- ⁶ Israel Ranked World's Most Militarised Nation, site of Inter Press Service News Agency, 14/11/2012, http://www.ipsnews.net/2012/11/israel-ranked-as-worlds-most-militarised-nation
- ⁷ See tables 5, 6 and 7 in: Joanna Różycka Tran et.al., A Warrior Society: Data From 30 Countries Show That Belief in a Zero-Sum Game Is Related to Military Expenditure and Low Civil Liberties, *Frontiers in Psychology Journal*, *9*/1/2019.
- ⁸ These data and figures were collected from the following references:
 - a. Diego Lopes da Silva, Nan Tian and Alexandra Marksteiner, Trends in World Military Expenditure, 2020, SIPRI Fact Sheet: April 2021, site of Stockholm International Peace Research Institute (SIPRI), 26/4/2021, https://sipri.org/sites/default/files/2021-04/fs_2104_milex_0.pdf
 - b.M. Szmigiera, Military expenditure as percentage of gross domestic product (GDP) in highest spending countries 2020, site of Statista, 10/5/2021, https://www.statista.com/statistics/266892/military-expenditure-as-percentage-of-gdp-in-highest-spending-countries
 - c. International Institute for Strategic Studies (IISS), *The Military Balance 2021* (London: Routledge, 2021), Chapter. 2.
 - d.Frequently asked questions, SIPRI Military Expenditure Database, https://www.sipri.org/databases/milex/frequently-asked-questions#1-definition
- ⁹ Military expenditure (% of GDP) Arab World, site of the World Bank, https://data.worldbank.org/indicator/MS.MIL.XPND.GD.ZS?locations=1A



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- ¹¹ Military Expenditure by Country as Percentage of Gross Domestic Product, 1988-2020, SIPRI, https://sipri.org/sites/default/files/Data%20for%20all%20countries%20from%201988%E2%8 0%932020%20as%20a%20share%20of%20GDP%20%28pdf%29.pdf; Fenella McGerty, Global Defence-Spending on the up, Despite Economic Crunch, IISS, 25/2/2021, https://www.iiss.org/blogs/military-balance/2021/02/global-defence-spending-increases; M. Szmigiera, Countries with the Highest Military Spending Worldwide in 2020, Statista, 7/5/2021, https://www.statista.com/statistics/262742/countries-with-the-highest-military-spending; and List of countries by military expenditures, site of Wikipedia, https://en.wikipedia.org/wiki/List of countries by military expenditures
- ¹² Diego Lopes da Silva, Nan Tian and Alexandra Marksteiner, Trends in World Military Expenditure, 2020, SIPRI.
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- ¹⁴ Current Health Expenditure (% of GDP), World Bank, https://data.worldbank.org/indicator/SH.XPD.CHEX.GD.ZS
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