

BICC's Global Militarization Index (GMI) 2013

What is the Global Militarization Index (GMI)?

The Global Militarization Index (GMI) depicts the relative weight and importance of the military apparatus of one state in relation to its society as a whole. For this, the GMI records a number of indicators to represent the degree of militarization of a country:

- the comparison of military expenditures with its gross domestic product (GDP) and its health expenditure (as share of its GDP);
- the contrast between the total number of (para)military forces and the number of physicians and the overall population;
- the ratio of the number of heavy weapons available and the number of the overall population.¹

The GMI is based on data from the Stockholm Peace Research Institute (SIPRI), the International Monetary Fund (IMF), the World Health Organization (WHO), the International Institute for Strategic studies (IISS) and BICC. It shows the degrees of militarization of 153 states since 1990. BICC provides yearly updates.

This update of the GMI 2013 is based on data from the year 2012 (i.e. the most recent year for which data has been available) and comprises 149 states². BICC's GMI is supported by the German Federal Ministry for Economic Cooperation and Development (BMZ).

Global Militarization: Top Ten

The fact that Israel, Syria, Jordan and Kuwait, four countries in the Middle East, are among the Top 10 countries on the GMI reflects the high level of militarization in this region, which is so rich in conflicts. Furthermore, all the other states in the region, with the exception of Qatar, are listed among the GMI's Top 40. This high level of militarization together with general rearmament projects involving arms imports from all over the world (cf. below) is contributing to a further destabilization of the area and can lead to the use of violent means to resolve internal as well as external conflicts, as in Syria.

Yet, certain European countries such as Russia and Cyprus also continue to assert their positions in the TOP 10. Cyprus's regular place in the top set is due primarily to the conflict between the island's Greek and Turkish population groups, which has continued unresolved for decades. Whereas Azerbaijan has already ranked high in previous years, Armenia³ is a new entrant this year. The rapid buildup of military capacities in the Caucasus is accompanied by heated diplomatic rhetoric and the risk of rekindling the long-term military conflict over Nagorny Karabach.

¹ A more detailed description of the method can be found at: Grebe, Jan. 2011. "The Global Militarization Index (GMI) – A tool for evaluating development orientation of states as well as regional developments." Occasional Paper, February 2011, Bonn: BICC.

² The GMI 2013 has been recalculated for all previous years, which results in changes if compared to calculations of previous years.

³ Since 2013, the data for Armenia also includes reservists, which is why the country now ranks considerably higher than in previous years.

With Singapore and South Korea, two Asian states are also among the TOP 10 of the GMI. While the ranking of Singapore has to be seen in connection with the “Total Defense” security strategy of the smallest state in Asia, the militarization of South Korea takes place against the backdrop of the continuing conflict with North Korea. (There is no reliable data about the probably extremely high militarization of the latter.)

Global Militarization Index 2013 Top 10

Rank	Country	Military Expenditure Index Score	People Index Score	Heavy Weapons Index Score	GMI Score
1	Israel	4.69	6.27	3.65	794
2	Singapore	4.22	6.48	3.29	752
3	Russia	4.41	5.93	3.32	729
4	Armenia	4.44	6.18	2.97	724
5	Syria	4.47	5.67	3.30	714
6	Jordan	4.28	5.66	3.22	694
7	South Korea	3.84	6.14	2.94	679
8	Azerbaijan	4.47	5.55	2.83	673
9	Cyprus	3.60	5.82	3.32	667
10	Kuwait	4.45	5.12	3.18	666

On the methodology of the GMI. Please refer to Occasional Paper VII. Grebe, Jan. 2011. The Global Militarization Index (GMI). Bonn: BICC, February

Focus on regional rearmament: Middle East

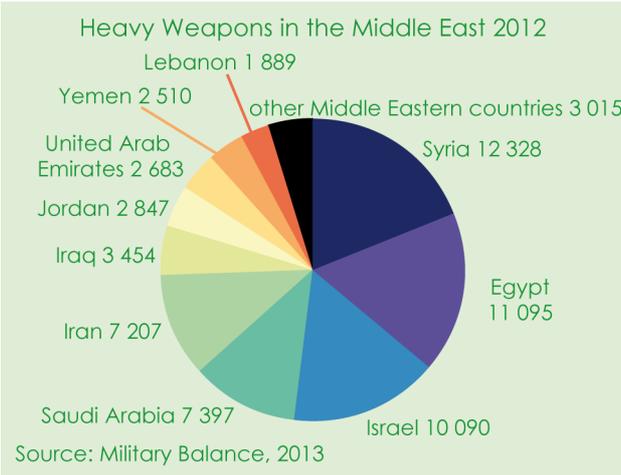
The scale of rearmament in the Middle East is unparalleled. Israel (GMI: 1st place) and the Arab states of Syria (GMI: 5th place), Jordan (GMI: 6th place), Kuwait (GMI: 10th place), Oman (GMI: 11th place), and Saudi Arabia (GMI: 13th place) are among the most militarized countries in the region. This high level of militarization is demonstrated among other things by the ratio between military expenditure and Gross Domestic Product, which is well over seven percent in some states in the region and thus far in excess of the world average of approximately 2.5 percent (by comparison: the figure for Germany is approximately 1.4 percent).

Military expenditures in the Middle East show a clear upwards trend. In 2012, they amounted to US \$128 billion, while in 2000, they came to US \$80 billion—a remarkable increase of 60 percent.

Global Militarization Index 2013 Top 10 Middle East

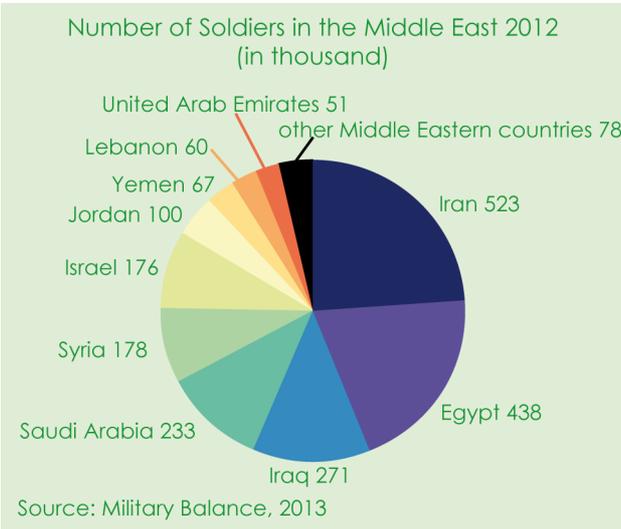
Rank	Country	GMI	Military Expenditure/GDP	Health Expenditure/GDP
1	Israel	794	6.6	7.7
5	Syria	714	4.0	3.7
6	Jordan	694	4.5	8.4
10	Kuwait	666	3.5	2.7
11	Oman	665	8.7	2.3
13	Saudi Arabia	646	7.6	3.7
15	Bahrain	645	3.5	3.8
18	Lebanon	614	4.0	6.3
26	Egypt	578	1.7	4.9
28	Iran	564	1.8	6.0

There is a comparatively high concentration of heavy weapons systems⁴ in the region. Syria still has the largest number of such systems, followed by Egypt (GMI: 26th place) and Israel.



The Gulf monarchies, particularly Saudi Arabia, are investing billions in the procurement of new weapons, most of which they import due to the absence of an indigenous arms industry. In 2011 alone, the Saudi Arabian government ordered combat aircraft and other military goods worth US \$60 billion from US arms companies. Saudi Arabia’s ambition is to expand and strengthen its role as a regional heavyweight. Its procurement schemes are focused on strategic weapons such as missiles and combat aircraft, which also enable it to attack distant targets in the region. The driving factor behind these deals is most probably the country’s rivalry with Iran and the wish to adopt a threatening stance towards this rival.

All in all, the individual states in the Middle East have a high number of soldiers compared with the total population. Iran (GMI: 28th place), Egypt and Iraq (GMI: 40th place) all have very large armed forces. The Gulf monarchies, in contrast, have small military apparatuses, which are, however, very well equipped and often well trained.



⁴ Armored vehicles, artillery, combat aircraft, large battleships

Militarization in Asia and Oceania

The rising militarization in this region is taking place against the background of various unsolved territorial conflicts, mutual security threats and rivalries between individual states. Although the ratio of military expenditure to Gross Domestic Product is moderate in most countries, military expenditure has nevertheless risen considerably in absolute terms (cf. below).

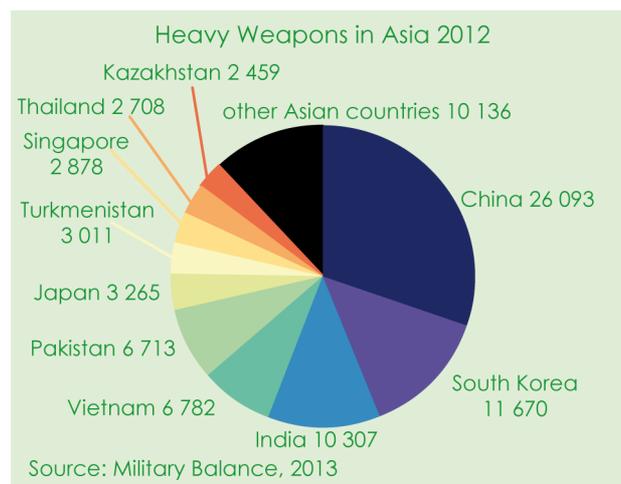
As concerns military expenditures, China (GMI: 83rd place) does not only hold a top place globally but also in Asia. China alone is responsible for 40 percent of all military expenditure in the region. All in all, expenditure on the continent amounted to US \$382 billion in 2012. This compares with US \$202 billion in 2000, an increase of 89 percent.

This trend towards rearmament is also demonstrated by the fact that India (GMI: 73rd place), China, Pakistan (GMI: 46th place), South Korea (GMI: 7th place), and Singapore (GMI: 2nd place) have joined the ranks of the world's leading arms importers in recent years.

Global Militarization Index 2013
Top 10 Asia

Rank	Country	GMI	Military Expenditure/ GDP	Health Expenditure/ GDP
2	Singapore	752	3.4	4.6
7	South Korea	679	2.8	7.2
14	Brunei	645	2.5	2.5
21	Vietnam	607	2.5	6.8
22	Mongolia	595	1.1	5.3
35	Sri Lanka	542	2.6	3.4
37	Thailand	539	1.5	4.1
46	Pakistan	515	2.9	2.5
47	Kyrgyzstan	514	3.7	6.5
49	Cambodia	513	1.5	5.7

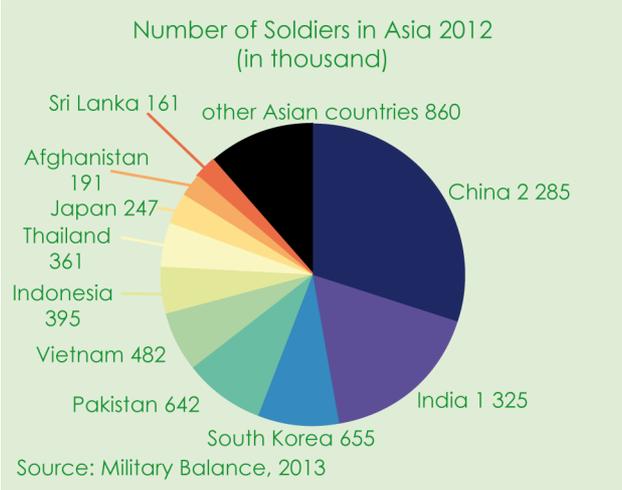
States in Asia have increased their numbers of conventional large weapons systems by investing heavily in modernizing their arsenals. China stands out as far as the number of heavy weapons systems is concerned and towers over all other countries in the region. South Korea remains a highly militarized state against the backdrop of the continuing conflict with North Korea.



The unresolved territorial conflicts in the East and South China Sea are influencing the procurement of maritime weapons systems in particular. Many states see a potential threat in China's efforts to strengthen its armed forces and are therefore endeavoring to modernize their own naval forces. This means that China is not alone in promoting the construction and procurement of new submarines; Vietnam (GMI: 21st place), South Korea, Japan (GMI: 111th

place), Australia (GMI: 72nd place) and Indonesia (GMI: 91st place) are also purchasing or planning to procure new submarines.

China has by far the largest army in the region and, based on the number of soldiers, also the largest armed forces worldwide. However, its forces have no combat experience and would only have a limited ability to conduct complex operations far from their own territory. India, too, has a very large military apparatus with 1.35 million soldiers.



For many states, modernizing their arsenals to meet changing threat scenarios is a step towards professionalizing and in some cases also to reducing the size of their armed forces.

Jan Grebe