

# MILITARY EXPENDITURE ANALYSIS

DATS 6103 – Individual Project 1 - Arathi Nair

## COUNTRIES

- China
- Russia
- Germany
- UK
- France
- Italy
- Iran
- Saudi Arabia
- South Korea

## DATA SOURCE

- Military data - Stockholm International Peace Research Institute (SIPRI)

<https://www.sipri.org/databases/milex>

- GDP data - World Bank

<https://data.worldbank.org/indicator/NY.GDP.MKTP.CD> ,

<https://data.worldbank.org/indicator/NY.GDP.PCAP.KD>

## MILITARY DATA

	Mil_2010	Mil_2011	Mil_2012	Mil_2013	Mil_2014	Mil_2015	Mil_2016	Mil_2017	Mil_2018	Mil_2019
Country										
China	115.71	137.97	157.39	179.88	200.77	214.47	216.40	228.47	253.49	261.08
UK	58.08	60.27	58.50	56.86	59.18	53.86	48.12	46.43	49.89	48.65
Germany	44.85	46.77	44.47	44.87	44.22	37.02	39.72	42.37	46.51	49.28
Russia	58.72	70.24	81.47	88.35	84.70	66.42	69.25	66.53	61.39	65.10
France	52.04	54.12	50.22	52.00	53.13	45.65	47.37	49.20	51.41	50.12
Italy	32.02	33.83	29.78	29.96	27.70	22.18	25.03	26.45	27.81	26.79
Iran	13.56	14.28	16.49	12.00	9.90	10.59	12.26	13.93	11.23	12.62
Saudi Arabia	45.24	48.53	56.50	67.02	80.76	87.19	63.67	70.40	74.40	61.87
Israel	13.88	15.16	14.60	16.32	17.81	16.52	17.49	19.43	19.76	20.46
Korea, South	28.18	30.99	31.95	34.31	37.55	36.57	36.89	39.17	43.07	43.89

## GDP DATA

	GDP_2010	GDP_2011	GDP_2012	GDP_2013	GDP_2014	GDP_2015	GDP_2016	GDP_2017	GDP_2018	GDP_2019
Country										
China	6.09	7.55	8.53	9.57	10.48	11.06	11.23	12.31	13.89	14.34
UK	2.48	2.66	2.70	2.79	3.06	2.93	2.69	2.67	2.86	2.83
Germany	3.40	3.74	3.53	3.73	3.88	3.36	3.47	3.67	3.95	3.85
Russia	1.52	2.05	2.21	2.29	2.06	1.36	1.28	1.57	1.67	1.70
France	2.64	2.86	2.68	2.81	2.85	2.44	2.47	2.60	2.79	2.72
Italy	2.13	2.29	2.09	2.14	2.16	1.84	1.88	1.96	2.09	2.00
Iran	0.49	0.58	0.60	0.46	0.43	0.38	0.42	0.45	0.45	4.58
Saudi Arabia	0.53	0.67	0.74	0.75	0.76	0.65	0.64	0.69	0.79	0.79
Israel	0.23	0.26	0.26	0.29	0.31	0.30	0.32	0.35	0.37	0.40
Korea, South	1.14	1.25	1.28	1.37	1.48	1.47	1.50	1.62	1.72	1.64

# MILITARY SHARE OF GDP DATA

	Share_2010	Share_2011	Share_2012	Share_2013	Share_2014	Share_2015	Share_2016	Share_2017	Share_2018	Share_2019
Country										
<b>China</b>	1.91	1.83	1.84	1.87	1.91	1.91	1.93	1.90	1.90	1.89
<b>UK</b>	2.37	2.29	2.19	2.07	1.95	1.86	1.81	1.77	1.77	1.74
<b>Germany</b>	1.32	1.25	1.26	1.20	1.14	1.10	1.15	1.16	1.18	1.28
<b>Russia</b>	3.58	3.42	3.69	3.85	4.10	4.86	5.45	4.23	3.72	3.88
<b>France</b>	1.97	1.89	1.87	1.85	1.86	1.87	1.92	1.91	1.85	1.86
<b>Italy</b>	1.51	1.49	1.44	1.41	1.29	1.21	1.34	1.36	1.34	1.35
<b>Iran</b>	2.91	2.38	2.76	2.24	2.28	2.76	2.97	3.11	2.46	2.31
<b>Saudi Arabia</b>	8.57	7.23	7.68	8.98	10.68	13.33	9.87	10.22	9.51	7.98
<b>Israel</b>	5.94	5.79	5.67	5.57	5.75	5.50	5.48	5.53	5.34	5.26
<b>Korea, South</b>	2.46	2.47	2.50	2.50	2.53	2.49	2.46	2.42	2.50	2.67

# MILITARY PER CAPITA DATA

	Milcap_2010	Milcap_2011	Milcap_2012	Milcap_2013	Milcap_2014	Milcap_2015	Milcap_2016	Milcap_2017	Milcap_2018	Milcap_2019
Country										
China	84.53	100.23	113.70	129.24	143.46	152.45	153.04	160.78	177.56	182.09
UK	915.27	941.40	906.55	875.01	904.62	817.83	725.80	695.86	743.09	720.42
Germany	554.93	578.38	549.20	552.71	542.86	452.64	483.31	512.54	559.54	590.02
Russia	409.26	488.77	565.78	612.18	585.47	458.10	476.65	457.14	421.23	446.30
France	827.68	856.04	790.01	813.88	827.73	708.23	732.52	758.69	791.04	769.52
Italy	539.75	567.70	497.35	497.91	458.55	366.15	412.66	435.90	458.66	442.45
Iran	183.85	191.30	218.35	156.86	127.81	134.90	154.14	172.69	137.30	152.24
Saudi Arabia	1649.97	1716.84	1937.85	2230.13	2612.27	2748.81	1962.58	2126.81	2207.53	1805.35
Israel	1888.70	2025.25	1917.37	2110.56	2267.58	2070.16	2156.64	2357.41	2357.47	2402.16
Korea, South	568.67	622.50	638.26	681.51	742.02	719.57	723.48	766.60	841.68	856.82

# GDP PER CAPITA DATA

	GDPcap_2010	GDPcap_2011	GDPcap_2012	GDPcap_2013	GDPcap_2014	GDPcap_2015	GDPcap_2016	GDPcap_2017	GDPcap_2018	GDPcap_2019
Country										
<b>China</b>	4550.45	5618.13	6316.92	7050.65	7678.60	8066.94	8147.94	8879.44	9976.68	10261.68
<b>UK</b>	39435.84	42038.57	42462.77	43444.53	47425.61	44974.83	41064.13	40361.42	43043.23	42300.27
<b>Germany</b>	41531.93	46644.78	43858.36	46285.76	47959.99	41139.54	42098.92	44349.59	47639.00	46258.88
<b>Russia</b>	10675.00	14311.08	15420.87	15974.64	14095.65	9313.01	8704.90	10720.33	11370.81	11585.00
<b>France</b>	40638.33	43790.73	40874.70	42592.93	43011.26	36638.18	37037.37	38812.16	41631.09	40493.93
<b>Italy</b>	36000.52	38599.06	35053.53	35549.97	35518.42	30230.23	30939.71	32406.72	34520.09	33189.57
<b>Iran</b>	6599.66	7781.41	7927.85	6018.32	5585.53	4904.33	5253.42	5520.31	5416.53	5506.23
<b>Saudi Arabia</b>	19262.55	23745.80	25243.36	24844.74	24463.90	20627.93	19879.30	20803.74	23338.96	23139.80
<b>Israel</b>	30693.59	33669.25	32511.24	36309.47	37678.89	35776.80	37321.62	40541.86	41719.73	43641.40
<b>Korea, South</b>	23087.23	25096.26	25466.76	27182.73	29249.58	28732.23	29288.87	31616.84	33340.27	31761.98



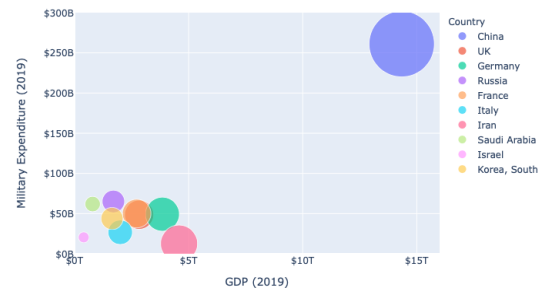
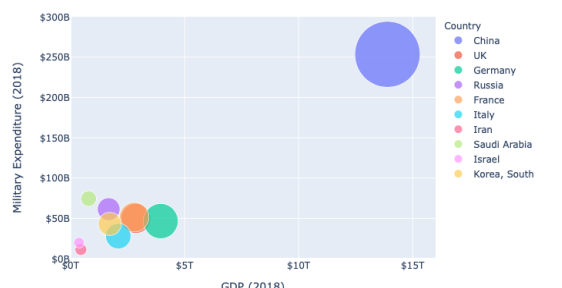
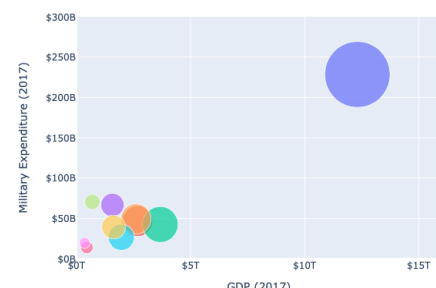
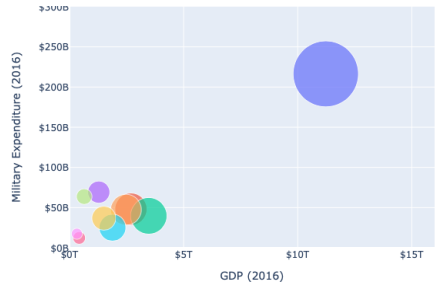
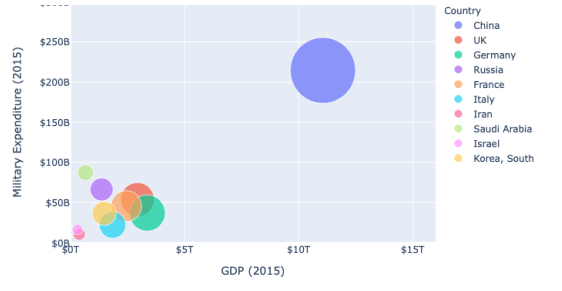
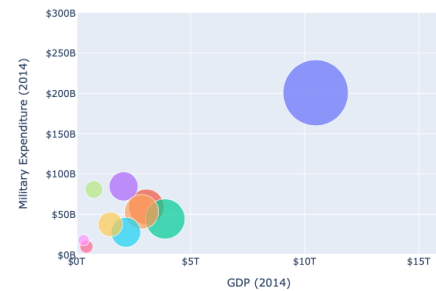
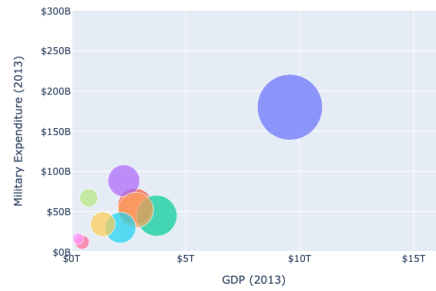
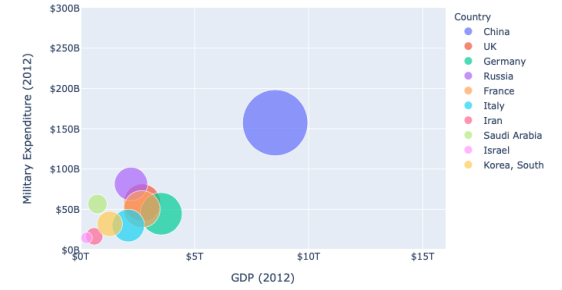
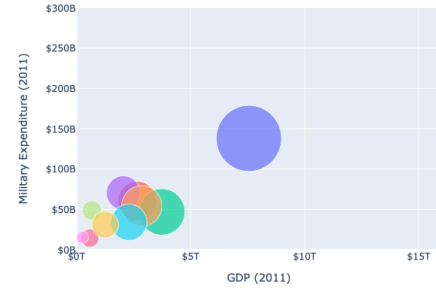
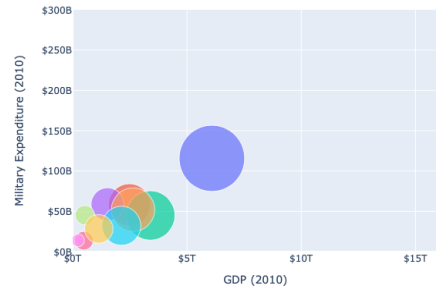
## GOV. SPENDS DATA

	Gov_2010	Gov_2011	Gov_2012	Gov_2013	Gov_2014	Gov_2015	Gov_2016	Gov_2017	Gov_2018	Gov_2019
Country										
<b>China</b>	7.64	6.79	6.55	6.54	6.58	6.10	6.04	5.89	5.56	5.40
<b>UK</b>	5.32	5.29	5.05	4.98	4.81	4.69	4.66	4.60	4.61	4.54
<b>Germany</b>	2.74	2.76	2.81	2.67	2.57	2.50	2.59	2.62	2.64	2.83
<b>Russia</b>	10.12	10.32	10.84	11.12	11.77	13.81	14.83	12.13	11.36	11.37
<b>France</b>	3.46	3.36	3.28	3.23	3.26	3.30	3.39	3.39	3.30	3.34
<b>Italy</b>	3.02	3.01	2.83	2.75	2.53	2.41	2.73	2.79	2.76	2.77
<b>Iran</b>	15.16	13.01	19.32	15.61	14.80	15.43	15.21	16.05	13.47	13.34
<b>Saudi Arabia</b>	25.95	22.01	23.10	25.27	26.55	32.65	25.52	30.70	25.86	20.34
<b>Israel</b>	14.69	14.58	14.05	13.83	14.76	14.59	14.47	14.26	13.53	13.25
<b>Korea, South</b>	13.22	12.97	12.71	12.57	12.80	12.64	12.62	12.33	12.25	12.08

# MILITARY SPENDS COMPARED TO GDP (in US\$)

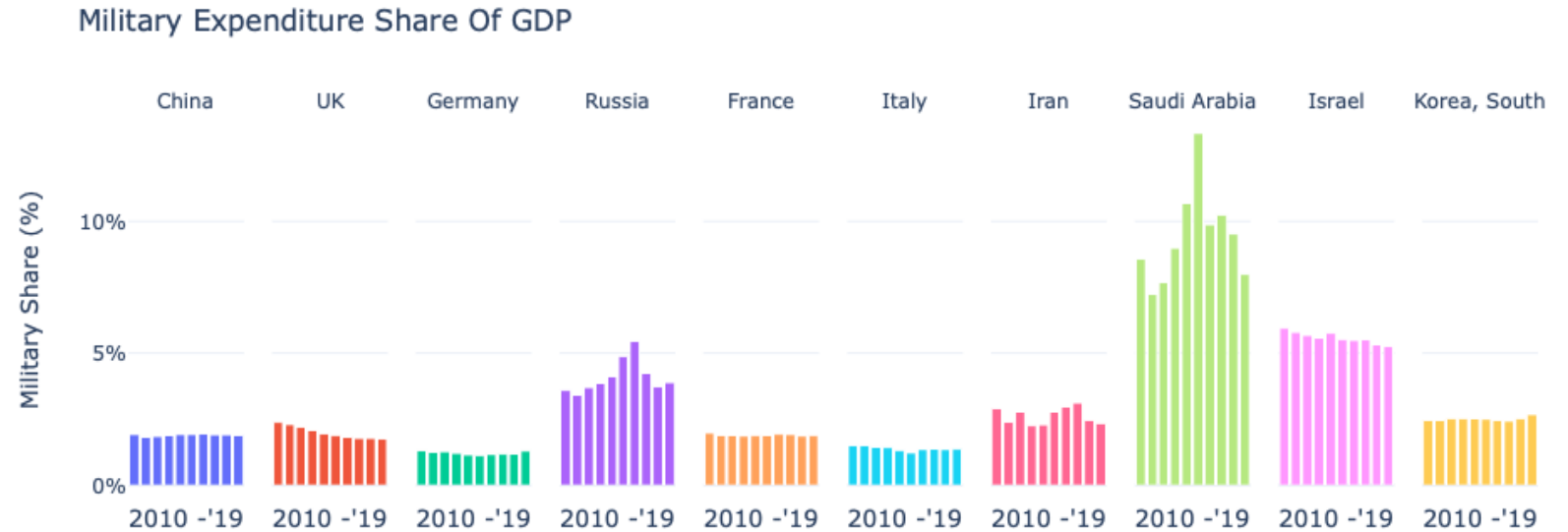
In this current list of countries, China accounts for the highest total GDP, as well as total military expenditure. This closely matches the country's economic growth and has also led to increasing annual military expenditure compared to its counterparts.

Saudi Arabia has slowly increased its military expenditure over the years and has become the second highest spender in military along with Russia.



However, the situation is quite different if we look at the military expenditure as a percentage share of the country's GDP. Saudi Arabia's military expenditure has accounted the highest share of its GDP even with reduced military spends in the last few years.

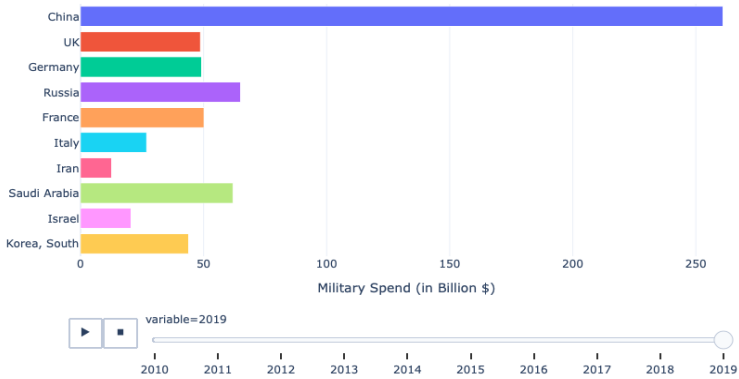
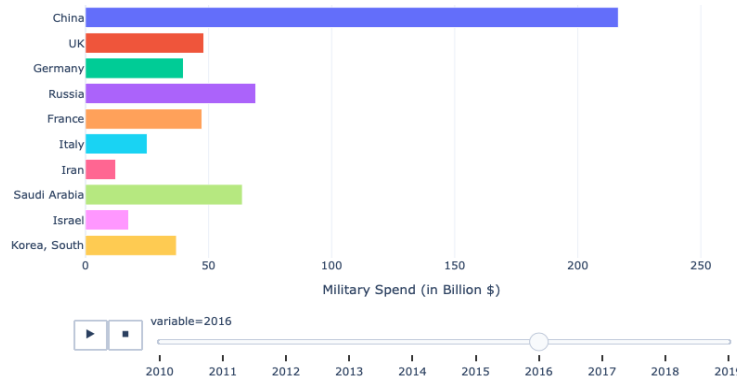
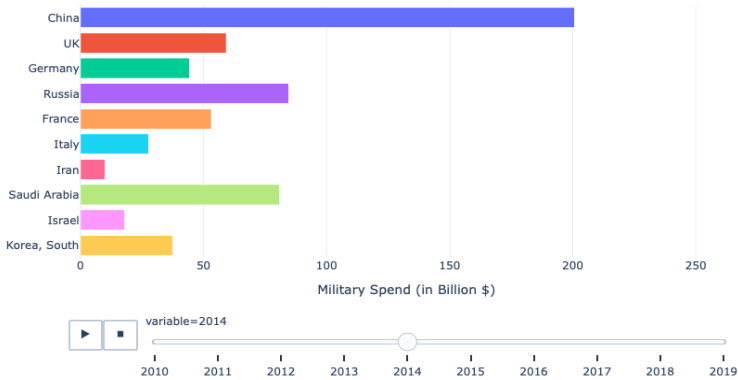
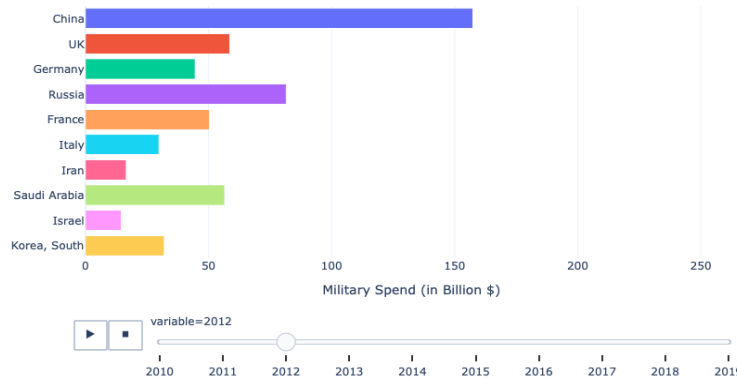
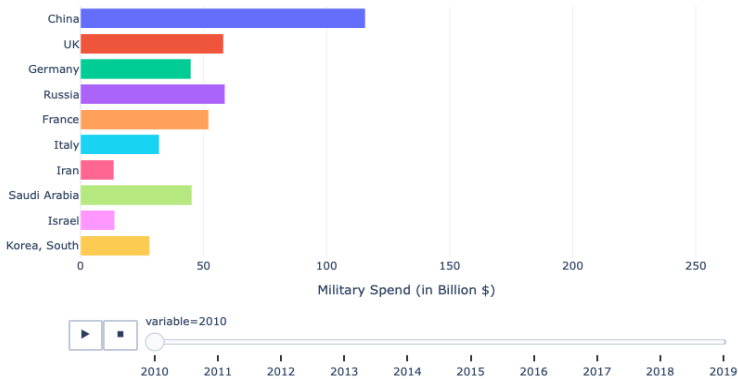
Similarly, Israel has comparatively spent a high share of GDP on its military expenses.



# OVERALL MILITARY EXPENDITURE

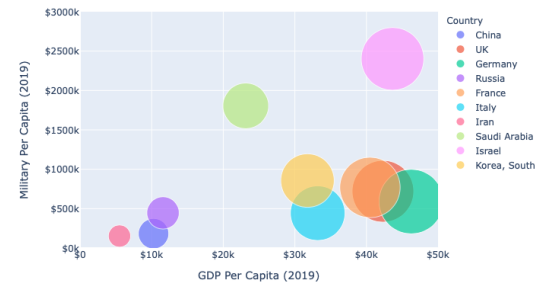
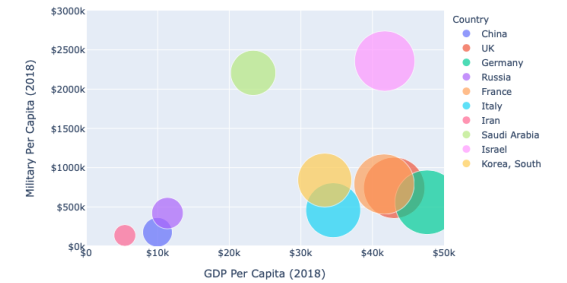
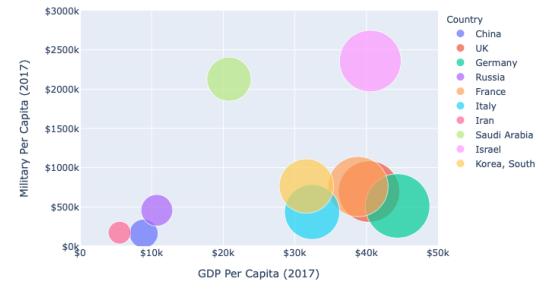
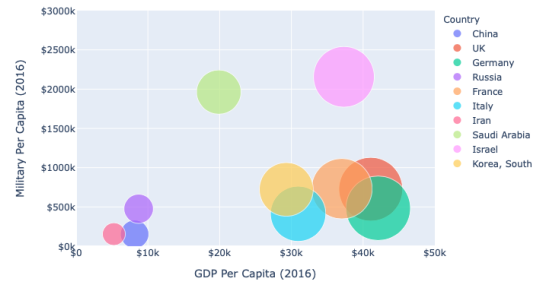
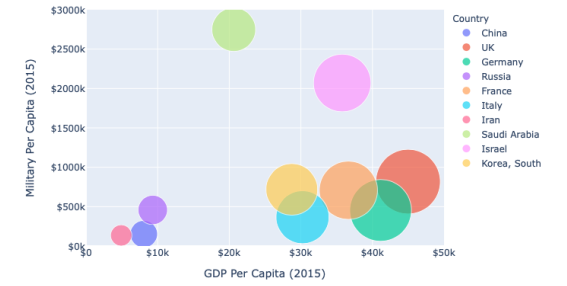
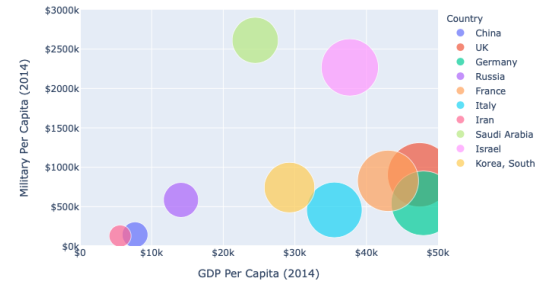
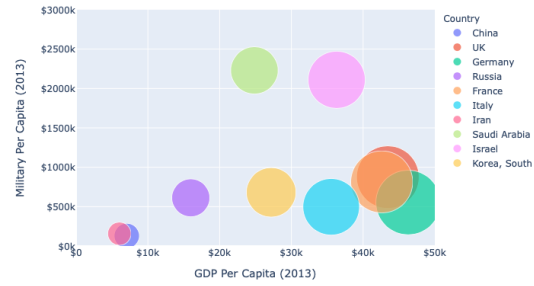
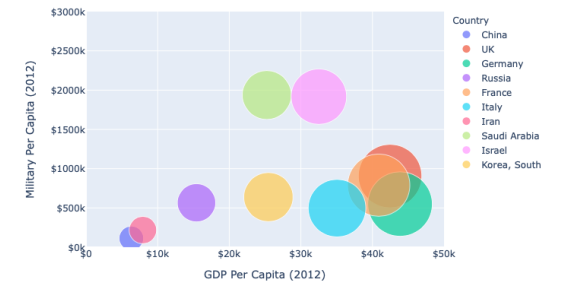
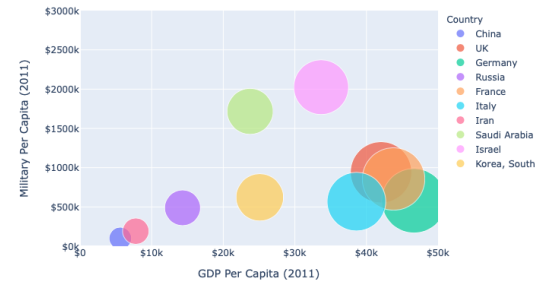
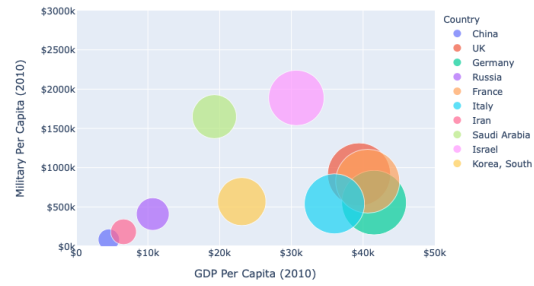
Over the last decade, China has significantly increased its military expenditure making it the second largest military spender in the world.

Meanwhile Saudi Arabia has incrementally increased its military expenditure and is now at par with Russia.



# MILITARY PER CAPITA COMPARED TO GDP PER CAPITA (in US\$)

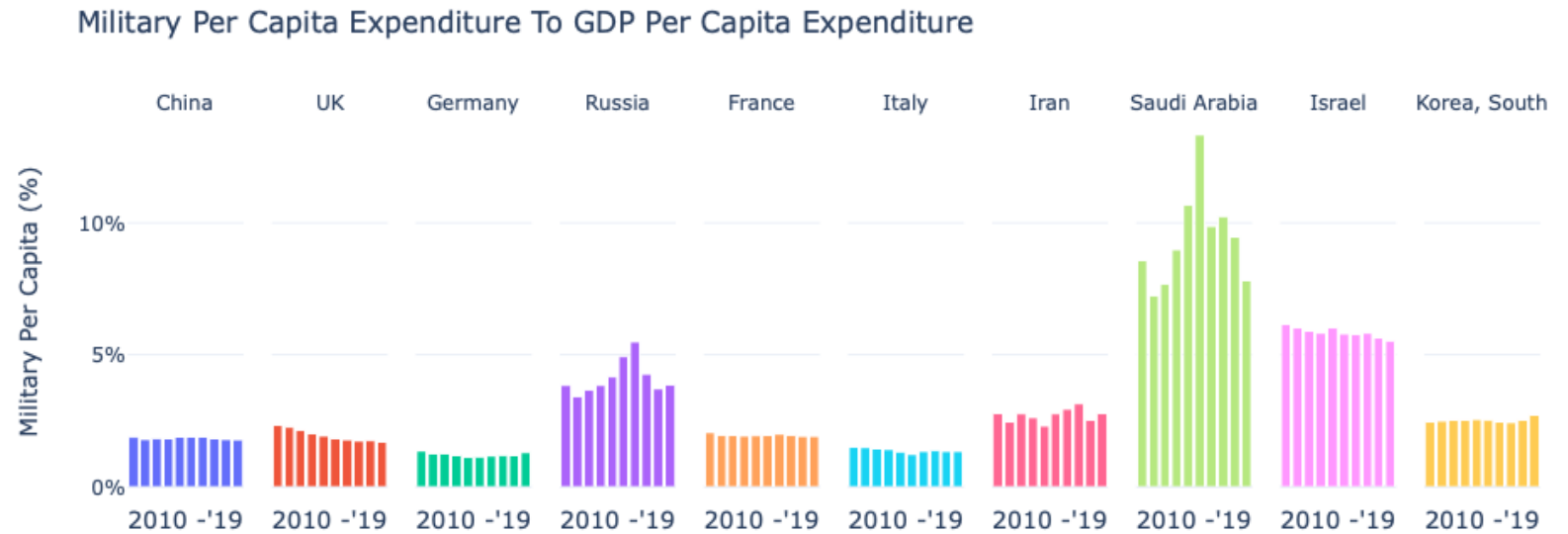
Located in high conflict region, countries like Israel and Saudi Arabia have the highest military per capita expenditure compared to their counterparts despite having a smaller population size.



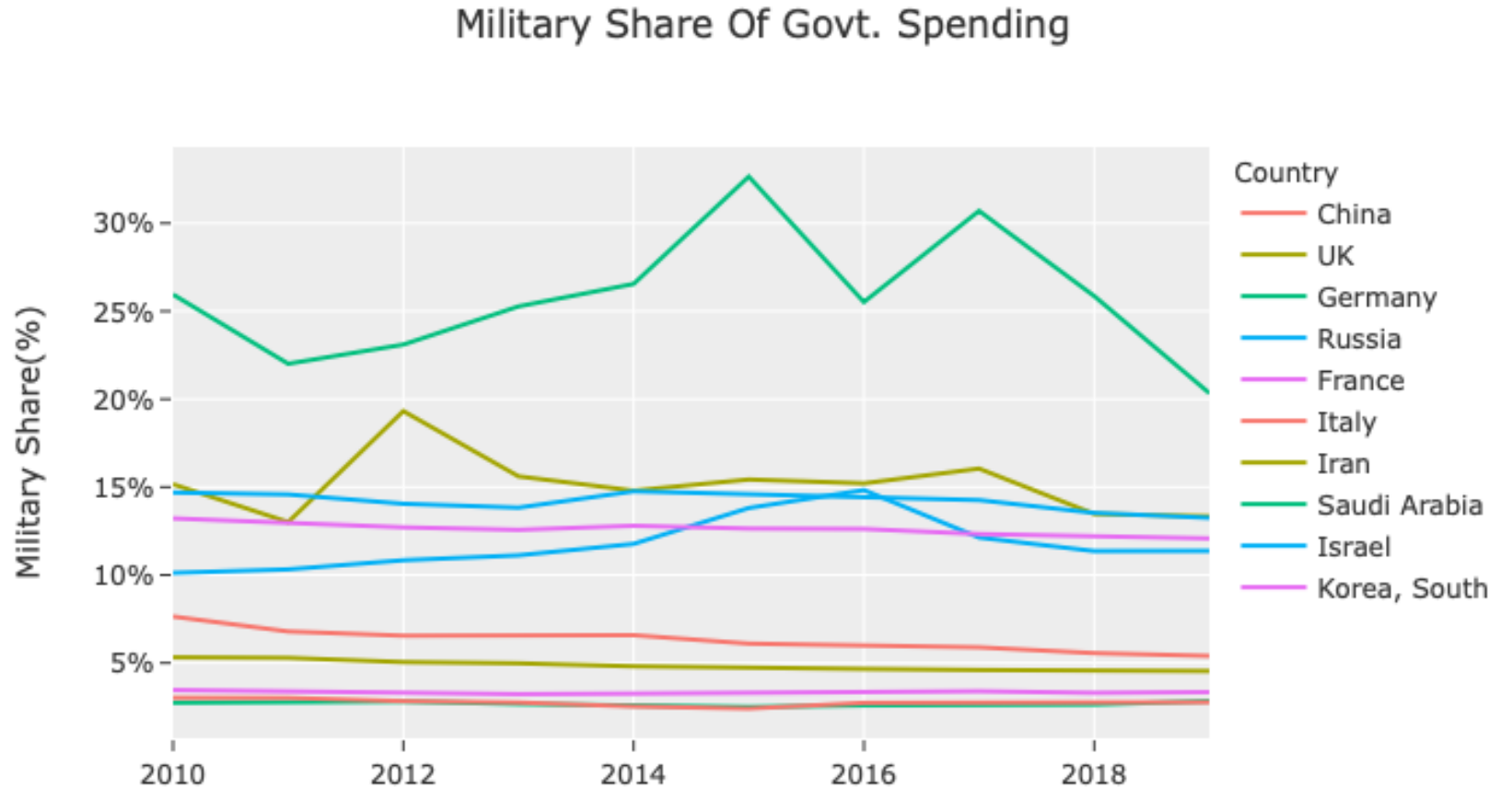
## MILITARY PER CAPITA COMPARED TO GDP PER CAPITA (in %)

The same pattern follows in terms of percentage spend on military per capita compared to GDP per capita. Saudi Arabia has the highest military per capita expense followed by Israel and Russia.

For rest of the countries, military per capita expense compared to GDP per capita has comparatively been low and stable.



Government expenditure on military is usually higher in countries with warlike situations and here we see that Saudi Arabia has allocated a higher share of government expenditure on its military. Iran also follows a similar trend and is at second position, while rest of the countries have a steady government expenditure on the military.



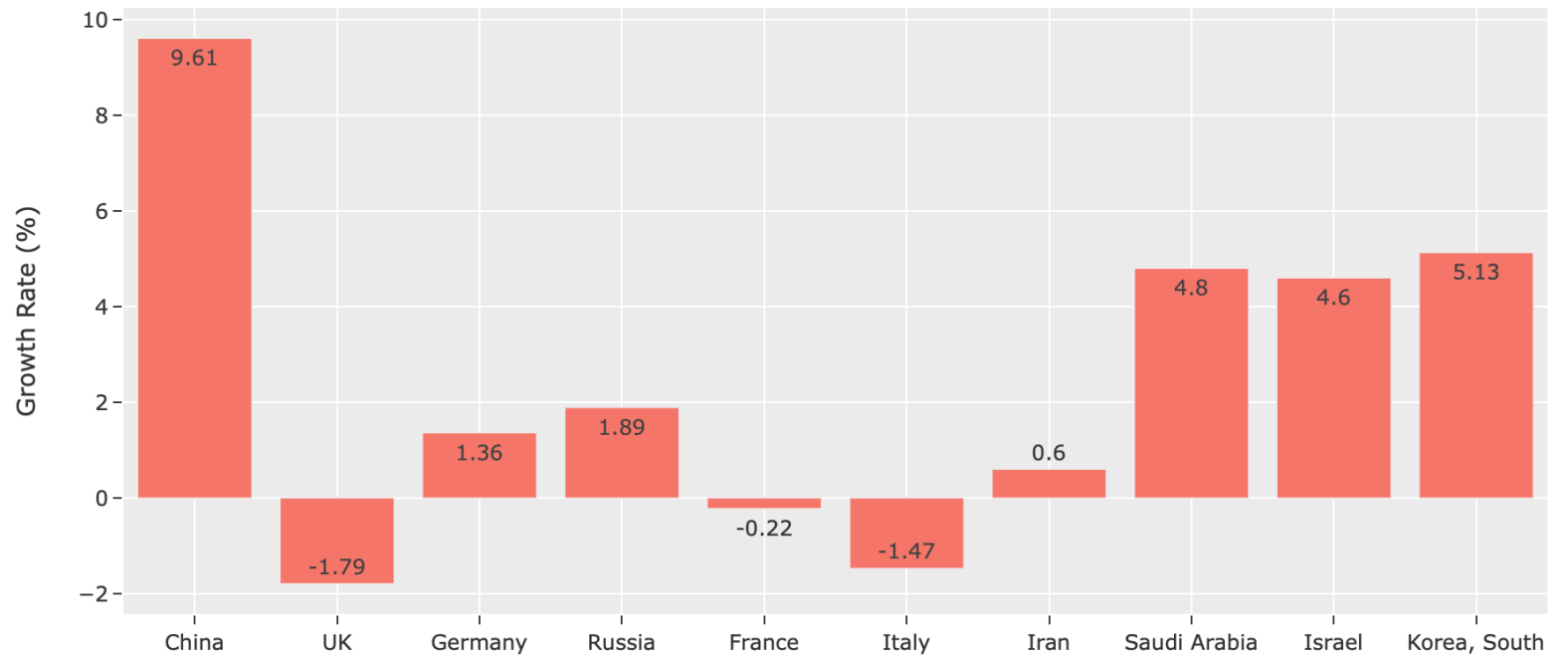
## FASTEST GROWING COUNTRIES IN MILITARY SPEND

China's military expenditure growth rate is the highest due to its steady growing GDP and continuous investment in the military. Countries like Saudi Arabia, Israel and South Korea have also maintained similar growth rate.

This increase in military expenditure by these countries is mainly because of the rising conflict with their neighboring regions.

Whereas UK, France and Italy have reduced their military spends because of their slow GDP growth.

Average Annual Military Expenditure Growth Rate





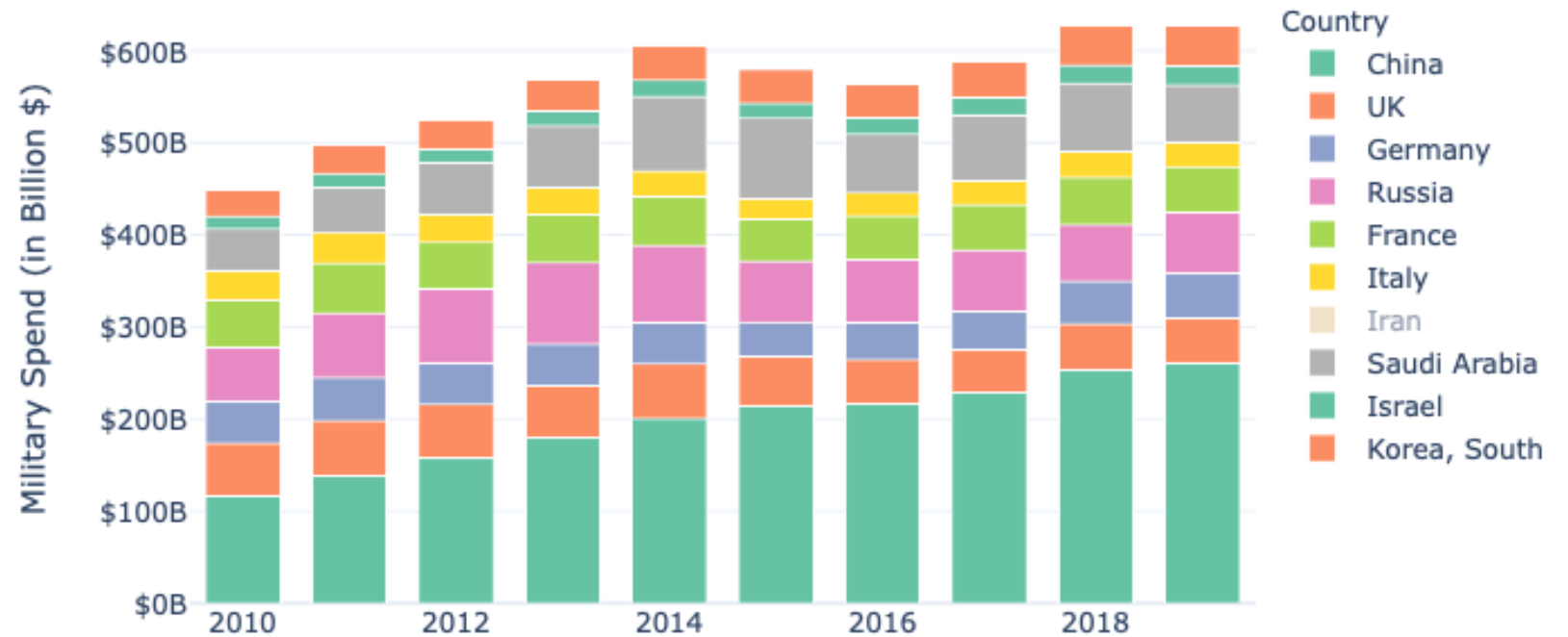
## TOTAL MILITARY EXPENDITURE OVER THE DECADE

Overall there has been a steady increase in military expenditure by these countries with a slight dip in 2015 & 2016 which could be due to slow economic growth during that period.

China has been the major contributor to this growth and has consistently been the highest spender among these nations.

Saudi Arabia and Russia have also increased their military spends and are the second highest military spenders.

Total Military Expenditure Over The Decade



## KEY FACTORS INFLUENCING THE MILITARY EXPENDITURE

- Regional Geopolitical situation which could possibly lead to a conflict has been the key driver for countries to invest more in this market.
- Although the global military expenditure has been growing in the past few years, the unpredictable economic landscape caused due to Covid-19 pandemic could lead countries to reduce military budget and prioritize other pandemic responses & recovery projects in the coming years.

Thank You