
Military Spending Among Different Countries

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Raw Data Military Spending



United States-750,000,000,000
China- 237,000,000,000
Saudi Arabia- 67,600,000,000
India- 61,000,000,000
U.K.- 55,100,000,000
Germany- 50,000,000,000
Japan- 49,000,000,000
Russia- 48,000,000,000
South Korea- 44,000,000,000
France- 41,500,000,000
Brazil- 27,800,000,000
Italy- 27,800,000,000
Australia- 26,300,000,000
U.A. Emirates- 22,755,000,000
Canada- 22,500,000,000

Israel- 20,000,000,000
Iran- 19,600,000,000
Turkey- 19,000,000,000
Spain- 15,100,000,000
Algeria- 13,000,000,000
Netherlands- 12,419,000,000
Poland- 12,000,000,000
Afghanistan- 12,000,000,000
Pakistan- 11,400,000,000
Egypt- 11,200,000,000
Singapore- 11,200,000,000
Taiwan- 10,725,000,000
Colombia- 10,600,000,000
Morocco- 10,000,000,000
Oman- 8,686,000,000

Raw Data Population



United States- 331,002,651

China- 1,439,323,776

Saudi Arabia-34,813,871

India-1,380,004,385

U.K.-67,886,011

Germany-83,783,942

Japan -126,476,461

Russia-145,934,462

South Korea-51,269,185

France-62,273,511

Brazil-212,559,417

Italy-60,461,826

Australia-25,499,884

United Arab Emirates-9,890,402

Canada- 37,742,154

Israel-8,655,535

Iran-83,992,949

Turkey-84,339,067

Spain-46,754,778

Algeria-43,851,044

Netherlands-17,134,872

Poland-37,846,611

Afghanistan-38,928,346

Pakistan-220,892,340

Egypt-102,571,562

Singapore-5,850,342

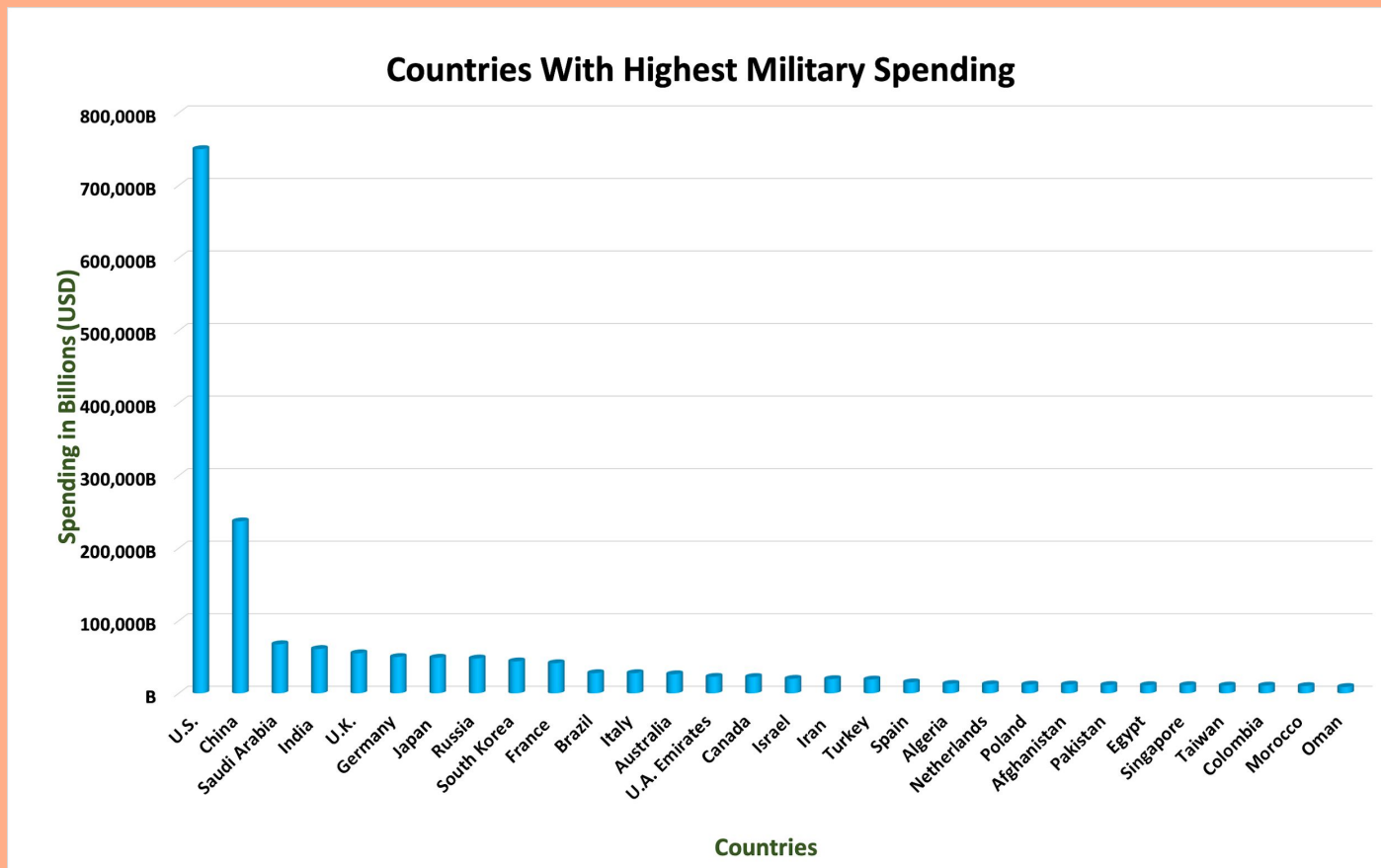
Taiwan-23,816,775

Colombia-50,882,891

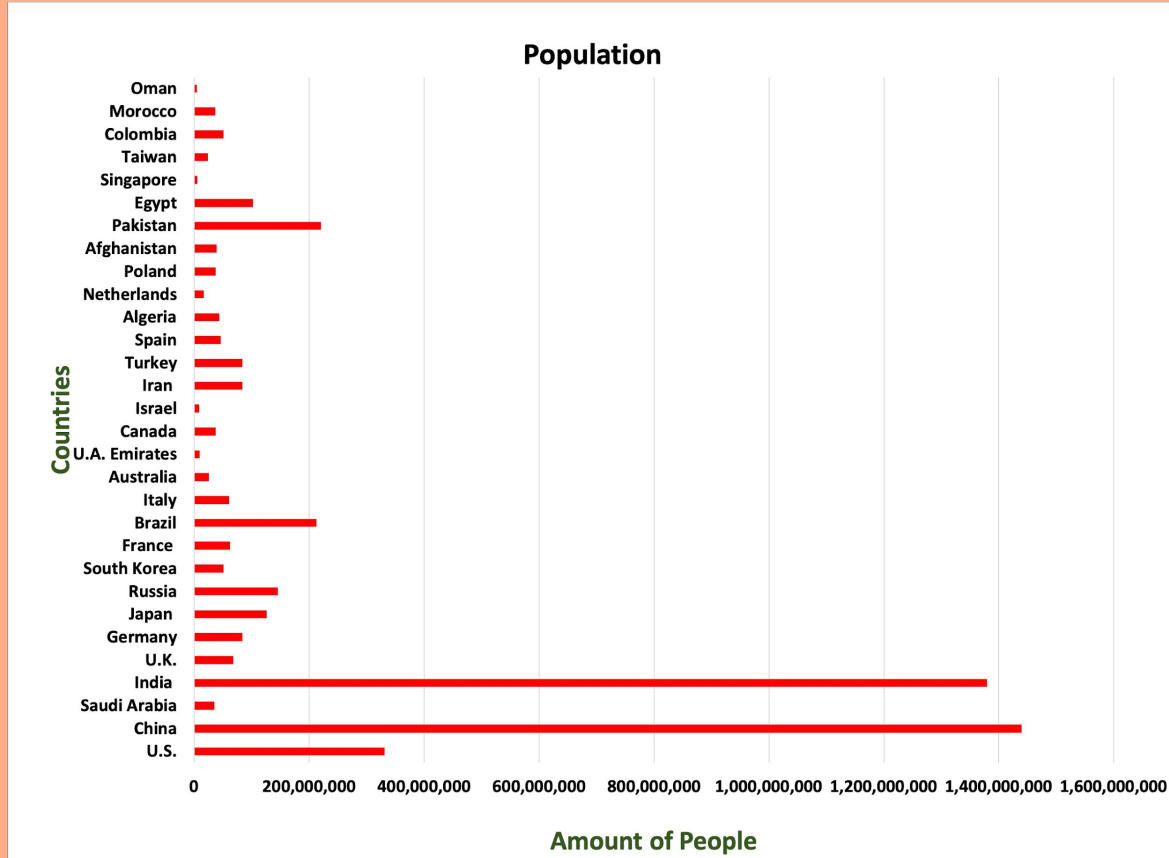
Morocco-36,910,560

Oman-5,106,626

- Graph For Military Spending



Population Graph





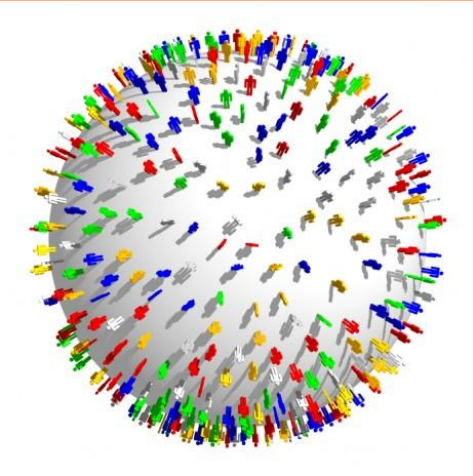
Hypothesis

- Null: Countries that spend the most on their military have the largest populations: $\mu(m) = \mu(p)$
- Alternative: Countries with the largest population do not spend the most on their military: $\mu(m) \neq \mu(p)$

Military Spending Descriptive Statistics

- Average: 57,576,166,667
- Median: 21,250,000,000
- Mode: 27,800,000,000
- N=30
- Variance= $135,084,918,325^2$





Population Descriptive Statistics

- Average: 162,548,541
 - Median: 51,076,038
 - Mode: N/A
 - N=30
 - Variance: $340,886,248^2$
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Confidence Interval

- The sample size is considered large so it was tested with a normal distribution.
 - $X1 - X2: 57,576,166,667 - 162,548,541 =$
57,413,618,126
 - 95% confidence interval
 - The σ of $X1$ and $X2$ is **24,663,097,509**
 - Z score: .002
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Confidence Interval (continued)

- Alpha: $1 - 0.95 = 0.05$
 - P- Value= **0.9984**
 - $57,413,618,126 \pm 48,339,611,118$
 - CI: **(9,074,007,008; 105,753,229,244)**
 - EBM: $105,753,229,244 - 9,074,007,008 / 2 =$
48,339,611,118
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Reject Or Accept

- We fail to reject the null hypothesis
- $P: 0.9984 > 0.05$
- There is a type II error

Where Data Was Collected



- Population:
<https://www.worldometers.info/world-population/population-by-country/>
 - Military Spending:
<https://www.globalfirepower.com/defense-spending-budget.asp>
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