

COUNCIL *on* FOREIGN RELATIONS

Maurice R. Greenberg
Center for Geoeconomic Studies

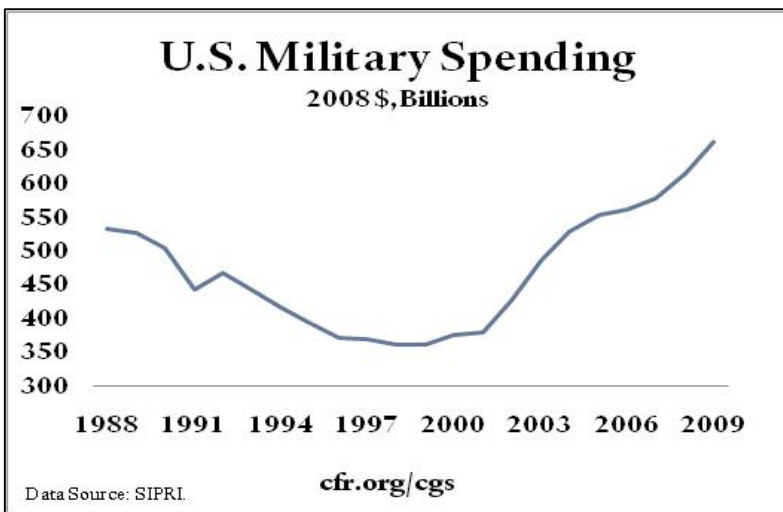
Trends in U.S. Military Spending

June 28, 2011

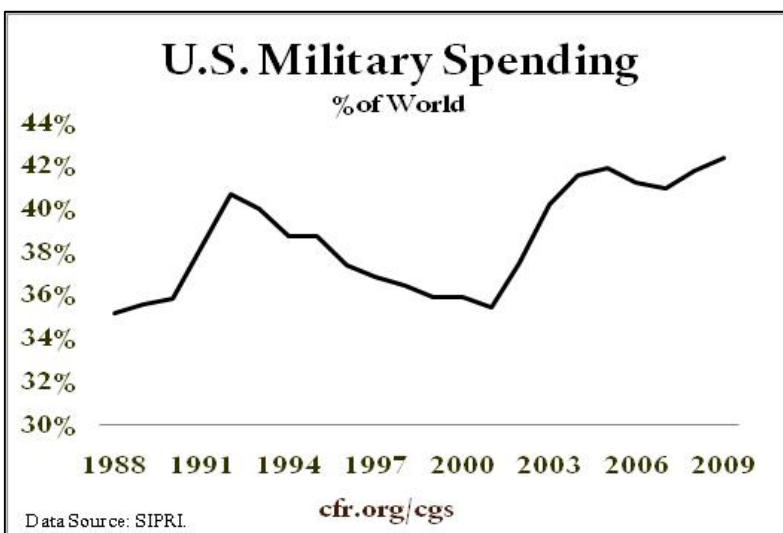
Neil Bouhan Analyst, International Economics nbouhan@cfr.org

Paul Swartz Analyst, International Economics pswartz@cfr.org

Military budgets are only one gauge of military power. A given financial commitment may be adequate or inadequate depending on the number of and capability of a nation's adversaries, how well it spends its investment, and what it seeks to accomplish, among other factors. Nevertheless, trends in military spending do reveal something about a country's capacity for coercion, and senior U.S. officials have called the federal budget deficit a threat to national security. The following charts present trends in U.S. military spending and analyze the forces that are driving them.



- Measured in inflation-adjusted dollars, the defense budget has risen steadily since a trough in 1998.



- Even when U.S. inflation-adjusted military spending fell by one-third in the 1990s, its share of global military spending only fell by six percentage points because other countries, particularly Russia, reduced their military spending as well.

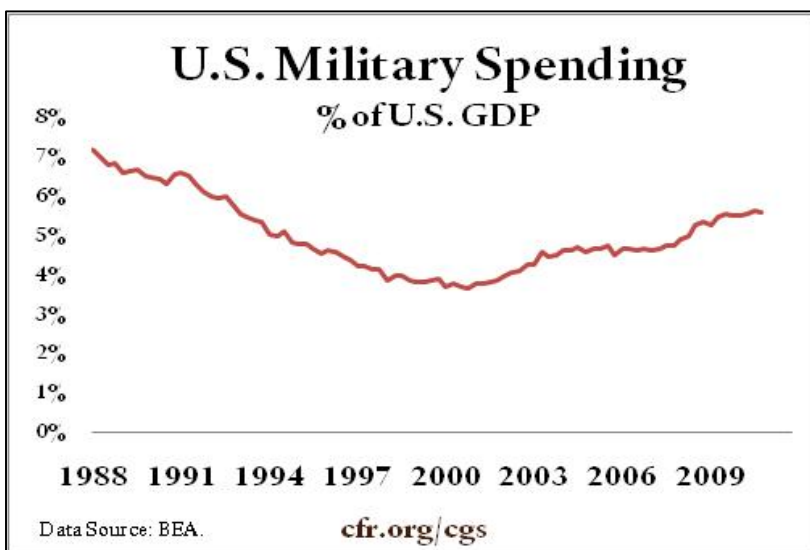


- Military spending has ranged widely, from less than 1 percent of gross domestic product (GDP) in 1929 up to 43 percent in 1944. These extremes illustrate that resource allocation to defense can increase rapidly when a world war demands it.



- Focusing just on the post–World War II period, U.S. military spending as a percent of GDP has ranged from a 15 percent high in 1952 (during the Korean War) to a low of 3.7 percent in 2000 (the period of relative tranquility preceding the terrorist attacks of the following year).

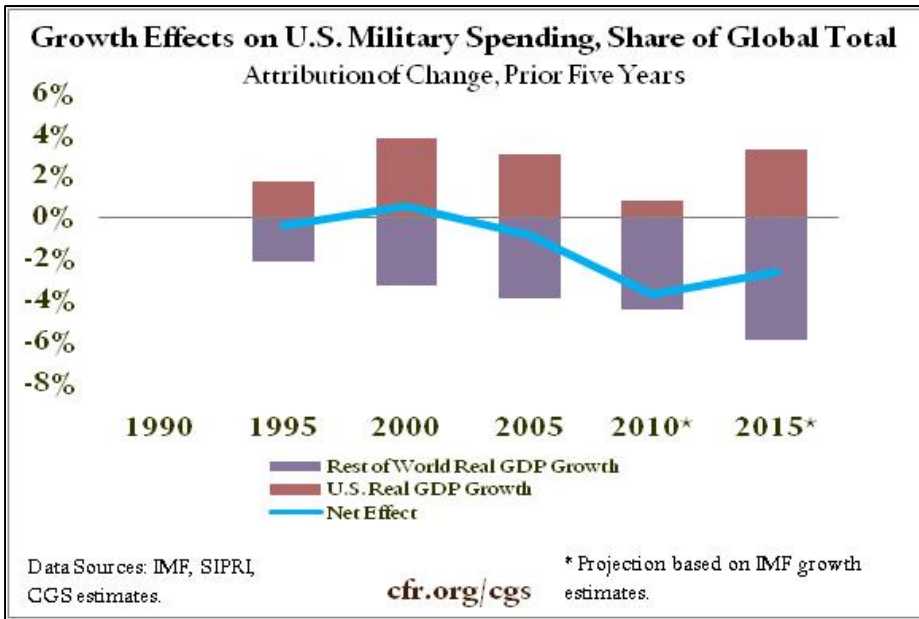
- In the post–Cold War world, the U.S. military budget has fluctuated within a relatively narrow band. It fell by about 3 percentage points of GDP as the nation reaped the peace dividend of the 1990s, then rose after the terrorist attacks of 2001.



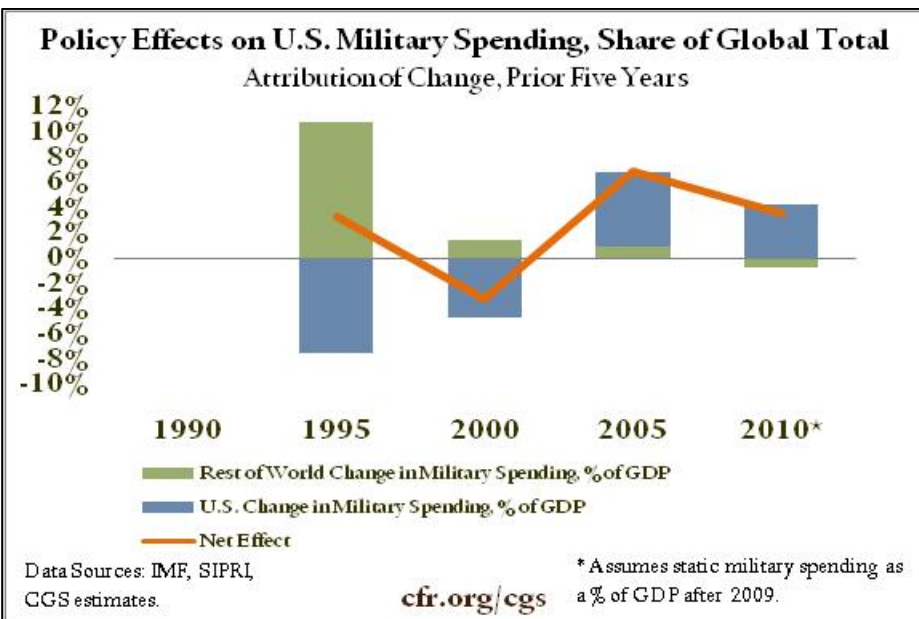
- However, there are questions about the sustainability of even this increase in military spending. Though history shows that defense budgets can rise to very high levels when a nation’s security is directly threatened, such increases drain resources from other government spending, inflicting political and social costs. In an environment of budget austerity and muted real GDP growth, and in the absence of attacks on the U.S. homeland, a continuation of recent spending patterns seems unlikely.

To see why U.S. military spending is likely to fall as a share of global military spending, it helps to look at the drivers of this ratio. For any country, a change in military spending as a share of the global total can be attributed to two factors: changes in income and changes in the allocation of that income. A rising share of global military expenditure based on a rising share of global GDP is likely to be more sustainable over the long term than a rise based on a decision to spend more of GDP on defense at the expense of other priorities. As national income grows, military spending can grow without trading off guns for butter.

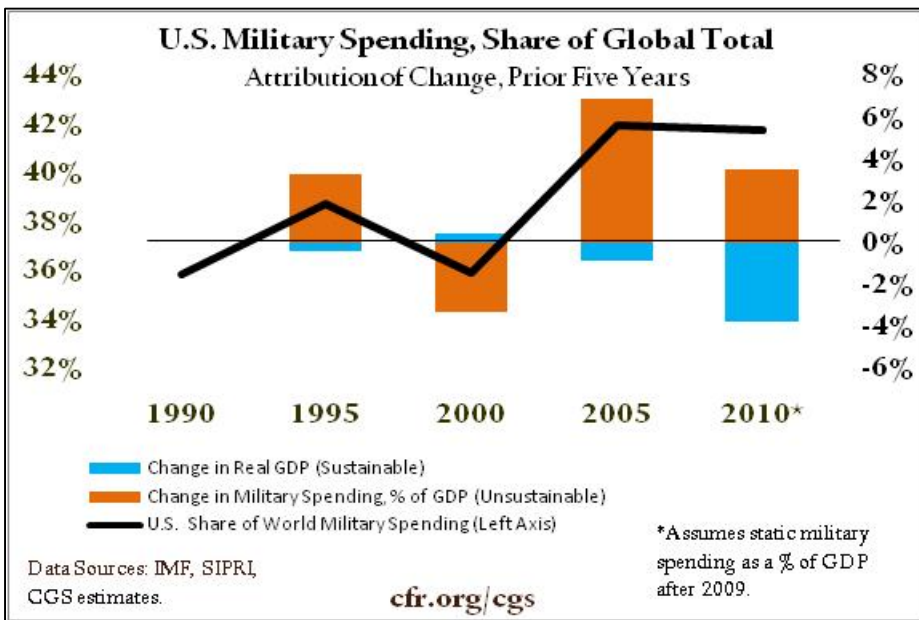
The following charts distinguish between the impact of growth and the allocation of income on the U.S. share of global military spending.



- From 1990 to 2005, U.S. growth roughly kept pace with global growth. So the impact of U.S. growth on the nation's share of global military spending (represented by the reddish bars) offset the impact of rest-of-the-world growth (represented by the purple bars). As a result, the net growth effect, shown by the blue line, was close to zero.
- Over the past five years, faster foreign growth has reduced the U.S. share of military spending.

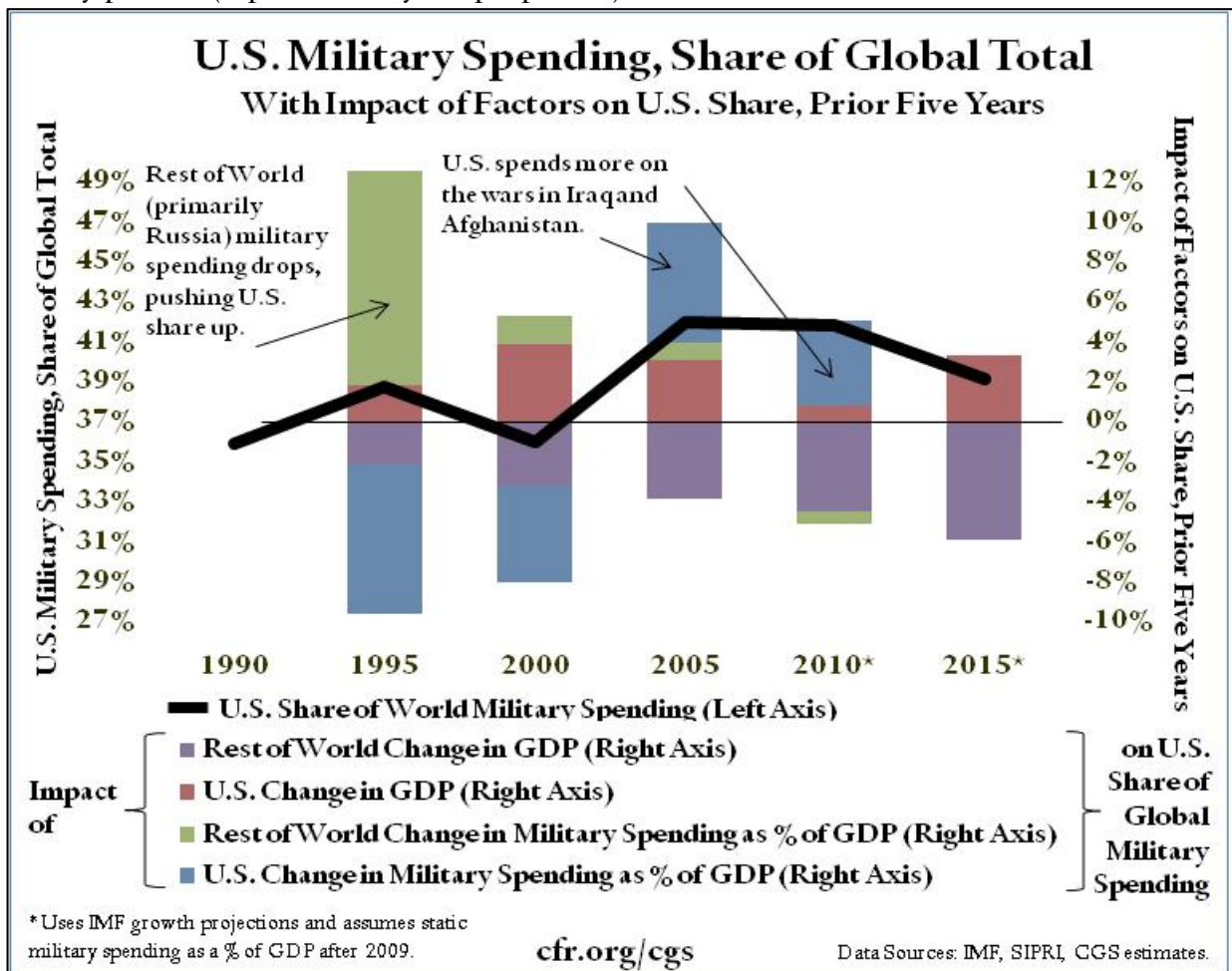


- The impact of growth on military budgets, shown above, has been disguised by shifting policy on how much of GDP to allocate to defense.
- In the 1990s, the U.S. policy choices (shown in the blue bars) cut defense budgets. In the 2000s, they increased them.
- Between 1990 and 1995, cuts in foreign allocation of GDP to defense (especially in Russia) boosted the U.S. share of total military spending (see the green bar). Since 1995, the rest of the world has spent a stable share of GDP on the military.

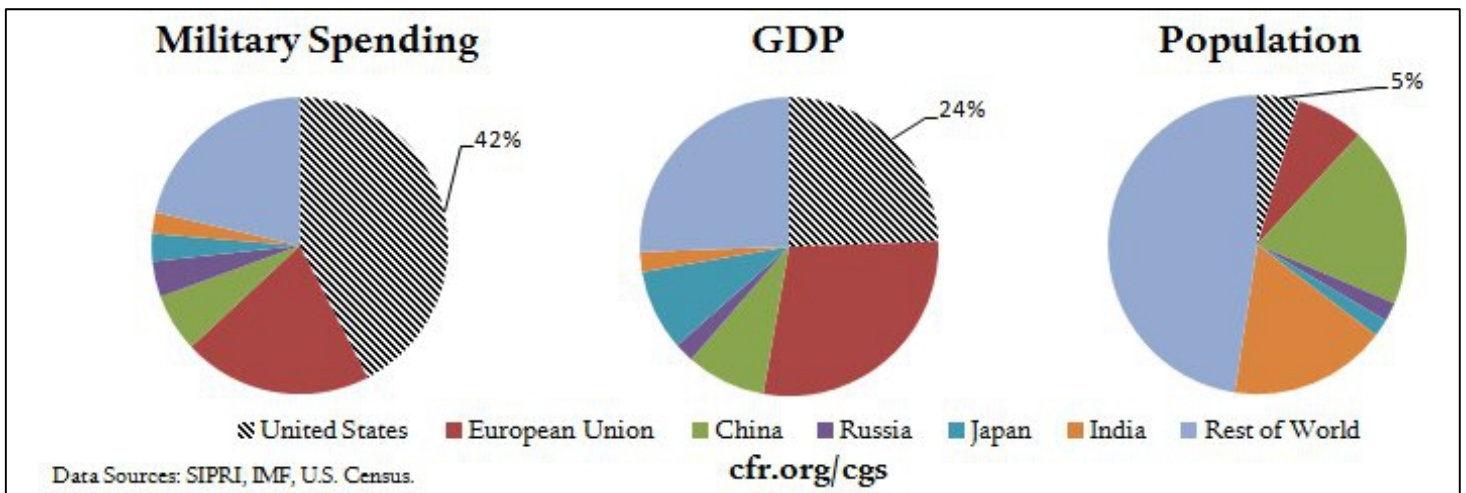


- Combining the two previous charts, it is clear that ultimately unsustainable factors (changes in spending as a percentage of GDP) have buoyed the U.S. share of world military spending, while sustainable factors (changes in GDP) have been a headwind.
- A decline in the U.S. share of world military spending seems likely in the absence of a new sense of insecurity.

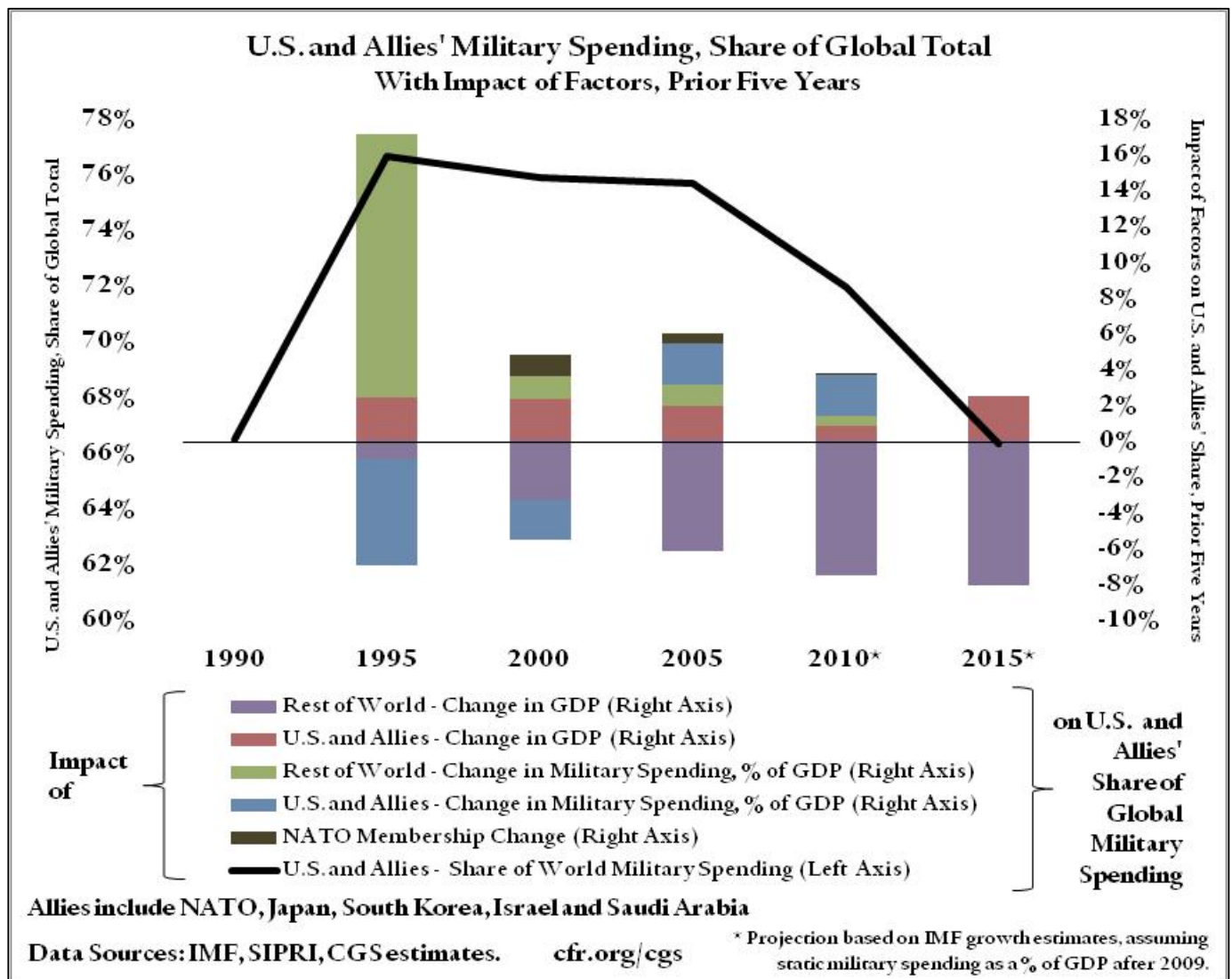
The next chart consolidates the information in the past three images. The black line shows the U.S. share of world military spending at five-year intervals, while the bars show what drove the change during each five-year period. The blue bars show how willing the nation has been since 2000 to spend a rising share of GDP on defense. If one assumes this commitment holds steady at its present level in the next five years, and if one uses International Monetary Fund growth estimates for the United States and its rivals, the U.S. share of military spending is set to decline as U.S. GDP growth (represented by the reddish bar) is lower than that of other military powers (represented by the purple bar).

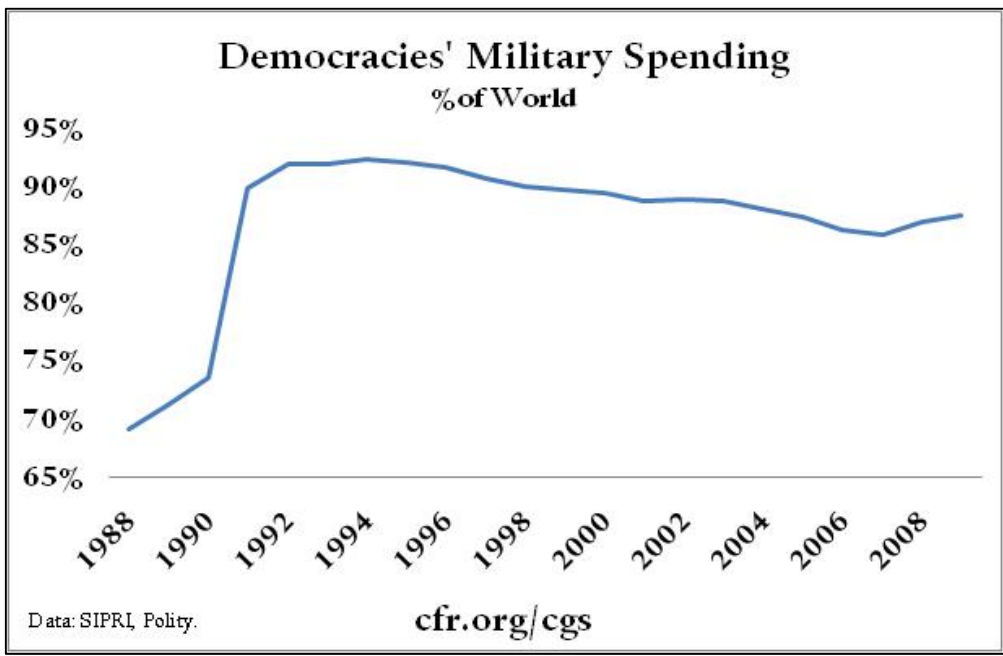


To put U.S. military spending in context, consider GDP and population shares. The pie charts demonstrate that the United States is overweighted in military spending relative to GDP or population.



As noted at the outset, military power depends on multiple factors, including the military budgets of a country's allies. To get a sense of this factor, the chart from page four was redone, with spending by NATO, Japan, South Korea, Israel and Saudi Arabia added to the analysis. The United States and these allies account for a formidable 72 percent of global military spending in 2010. However, as the black line in the chart shows, the trend is less reassuring. The United States' and its allies' share of world military spending fell from 2005 to 2010. It is projected to fall further, to 66 percent, by 2015.



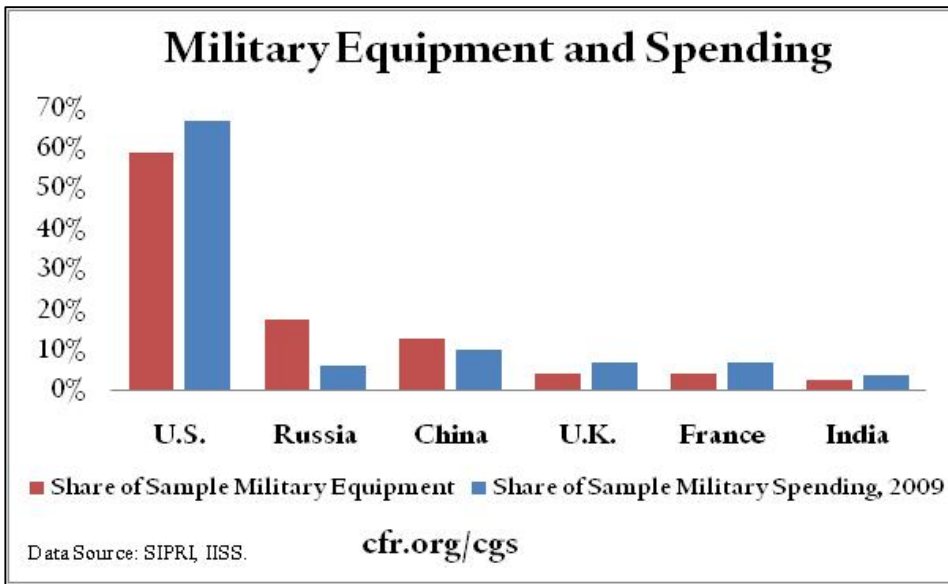


- Democracies are generally regarded as friendly to the United States, and this chart delivers a similar verdict to the last one.
- After the collapse of the Soviet Union, democracies accounted for the vast majority of the world's military spending.
- However, since the early 1990s, this share has tapered off.

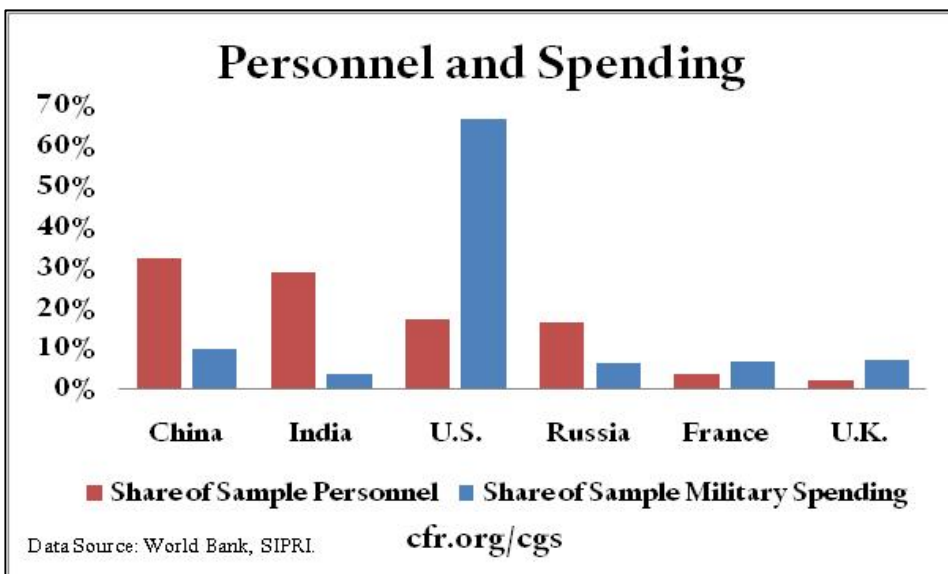


- The United States accounts for almost half of all military spending by democracies.
- A decline in U.S. military spending is therefore likely to have a large impact on democracies' military spending as a share of the global total.

Military spending tends to have a big influence on equipment procurement and a far smaller one on personnel count.

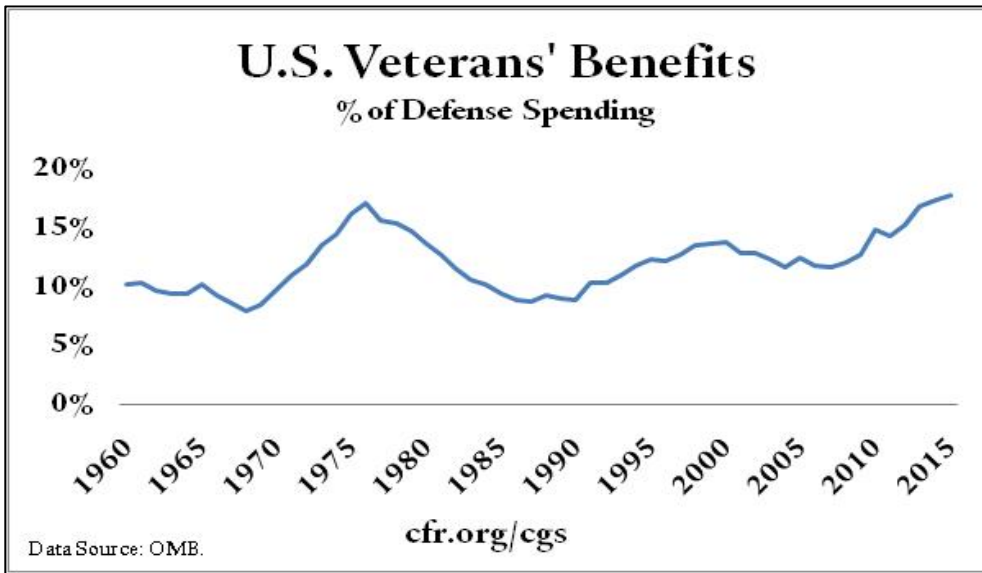


- This chart compares each country's share of spending and share of military equipment. The equipment measure includes twenty-one categories such as tanks, aircraft, and satellites.
- Spending and equipment levels are correlated. Russia is the exception, perhaps because it still has equipment left over from its period of high spending before 1990.

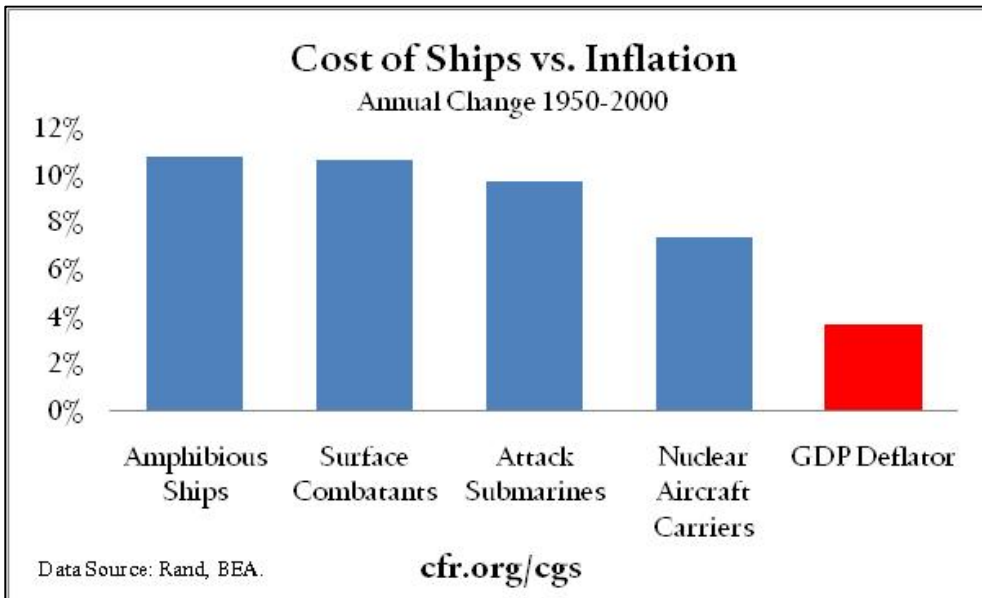


- Unlike equipment, personnel is relatively uncorrelated to spending.
- Because of differences in labor costs, \$1 million in the United States will hire fewer soldiers than \$1 million in Russia or China.
- If military budgets were compared in a way that reflected varying personnel costs, U.S. military preeminence would appear smaller than it does using straightforward comparisons based on market exchange rates.

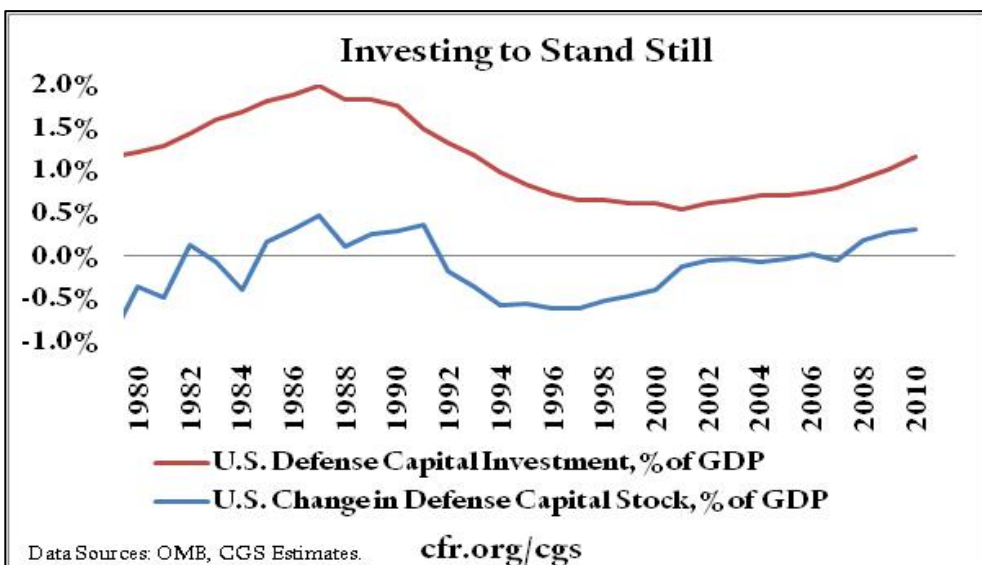
The following charts illustrate three further reasons why headline spending trends may underestimate the true erosion of U.S. military preeminence.



- About one-sixth of the U.S. defense budget is spent on benefits for veterans. These benefits are important to military recruitment and morale but do not contribute directly to power projection.
- The cost of veterans' benefits is increasing and projected to increase further, given current commitments.



- The cost of military hardware has grown more than inflation. Today's spending results in less procurement than does spending in the past.



- Countries such as the United States that have invested a substantial sum in their military must spend simply to maintain existing levels of equipment.
- The chart shows that the United States must spend about 1 percent of GDP on military hardware just to tread water.
- Spending in countries that have low military capital stocks will result in larger increases in defense stocks due to lower levels of depreciation.