IAP 2020 The Politics of Defense Spending

Lecture 1
Defense Spending, Congress, and the Militaryindustrial Complex

SUBRATA GHOSHROY
Program in Science, Technology, and Society
Massachusetts Institute of Technology
Cambridge, Massachusetts, USA

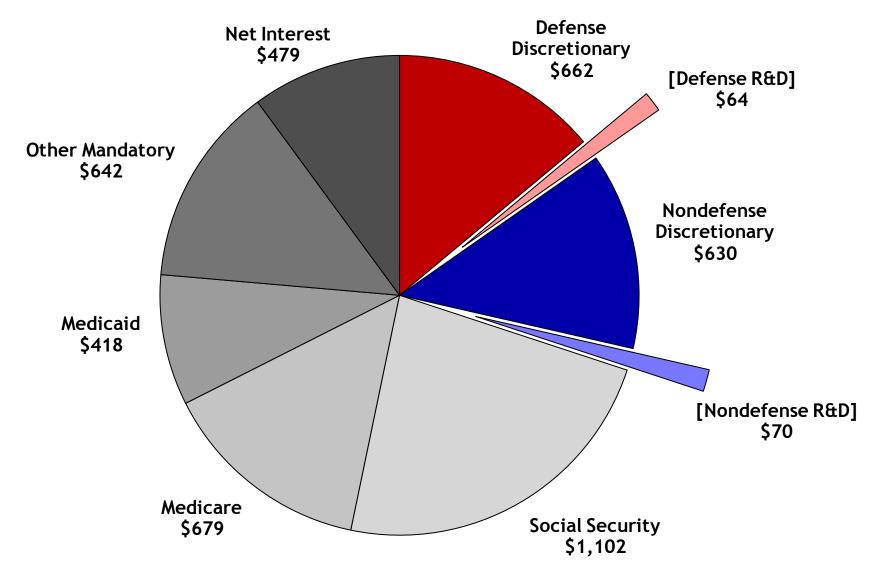
7 January, 2020

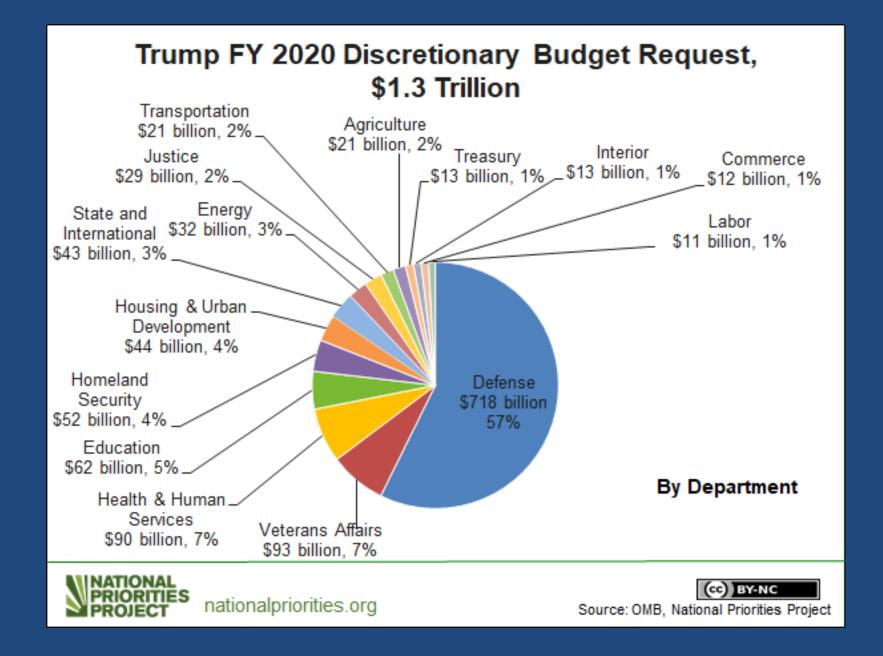
Today's discussion topics

- The federal budget process
 - U.S. federal budget
 - Defense budget and the so-called "guns vs. butter" debate
 - The annual legislative process for passing the defense bills and the politics of defense
- The "military-industrial complex" (MIC)
 - Helps sustain the unjustifiable spending
 - The "black budget"
 - Many unnecessary, but expensive weapons programs
 - The missile defense program is an example of both the power of the MIC, and extreme waste of taxpayer money

Composition of the Proposed FY 2020 Budget Total Outlays = \$4.7 trillion

outlays in billions of dollars





Two spending categories

- Mandatory Spending
 - Over \$3 trillion (\$3000 billion)
 - Mostly entitlements
 - Social Security, Medicare, Medicaid (Income Security)
 - Fixed by law, not subject to alterations
- Discretionary Spending
 - About \$1.3 trillion in 2020
 - Subject to Congressional appropriation
 - Over 50% is defense (nearly untouchable)
 - The "budget battles" every year are mostly about moving the money around smaller social programs

The legislative process

- Separate defense bills in each chamber of Congress
 - One each for Authorization and Appropriation
 - Four bills in total
 - The "Authorization Bill" describes in detail each program
 - The "Appropriation Bill" is basically a listing of all the programs and the associated funding levels.

Authorization

- The House and the Senate Armed Services Committees hold hearings on the bills and "mark up" the bills
- Appropriation
 - Similar process for the House and the Senate Appropriations committees
 - From Legislation to law
 - The House and the Senate pass its own version
 - The differences are reconciled in a joint House- Senate Conference
 - The President signs it into law and the spending frenzy starts

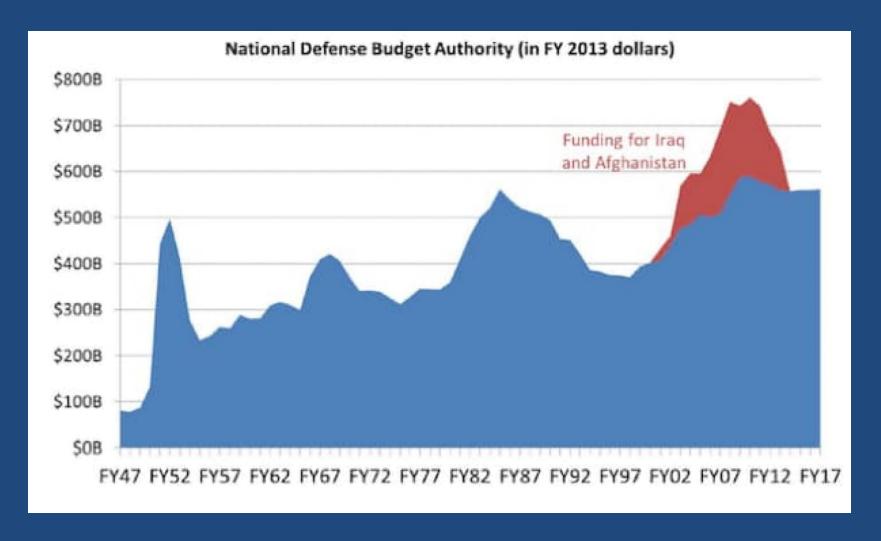
The President's Budget and the Annual Congressional Appropriation of funds

 This is where the power of Congress lies!!



Historical trend in U.S. military spending

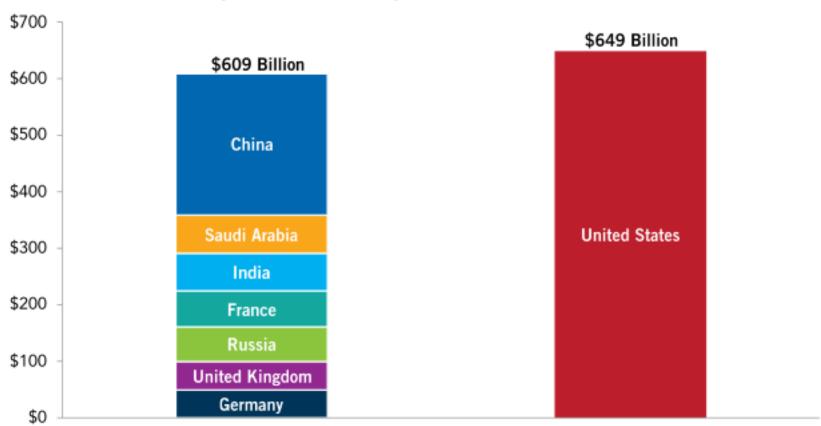
Source: Center for Strategic and Budgetary Assessments





The United States spends more on defense than the next seven countries combined

DEFENSE SPENDING (BILLIONS OF DOLLARS)



SOURCE: Stockholm International Peace Research Institute, SIPRI Military Expenditure Database, April 2019.

NOTES: Figures are in U.S. dollars, converted from local currencies using market exchange rates. Data for the United States are for fiscal year 2018, which ran from October 1, 2017 through September 30, 2018. Data for the other countries are for calendar year 2018.

© 2019 Peter G. Peterson Foundation PGPF.ORG

Military expenditure of Major US Adversaries and non-Allied Nations

			(\$ in billions)
•	China		224
•	India		55
•	Russia		44
•	Brazil		29
•	N. Korea		7
•	Pakistan		7
•	Mexico		7
•	Indonesia		7
•	Iran		6
•	Iraq		6
•	Malaysia		5
•	S. Africa		5
•	Argentina		4
•	Venezuela		4
•	Cuba		1
		TOTAL	\$411 billion

7 January 2020 Ghoshroy IAP Lec-1 10

Military expenditure of US and selected Allies

	(\$ billion)
U.SA	733
Other NATO	270
Saudi Arabia	70
Japan	47
S. Korea	38
Australia	26
Israel	20
UAE	19
Colombia	12
TOTAL	\$ 1255 billion

- US and allies together spend -
 - 4 times as much as its principal adversaries combined
 - China, Russia, Iran, N. Korea, Venezuela and Cuba
 - 3 times as much as the rest of the world

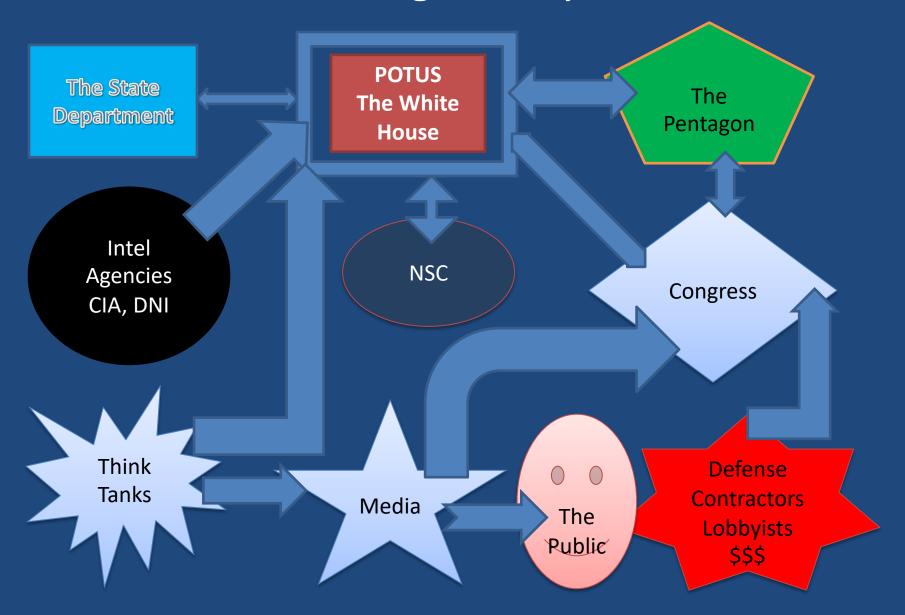
Source: Forbes/NATO



The Evolution of the Military-Industrial Complex (MIC)

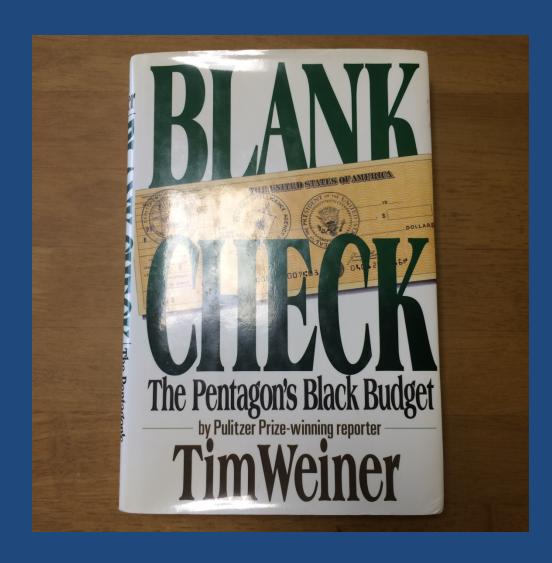
- President Eisenhower warned of the danger arising from the "conjunction" of an immense military establishment and a large arms industry
- He called it the "military-industrial complex" leaving out Congress, which is the linchpin
- The term MIC stuck, although it grew to encompass many other institutions
 - The Pentagon, military contractors, Congress and intelligence agencies (CIA, NSA), the State Department
 - The media, think tanks, lobbyists, and universities
 - It employs millions of people, including several million engineers and scientists
 - US military alone directly employs 3 million

U.S. Foreign Policy, Inc.



The "Black Budget"

- Secret programs hidden in the defense budget under code names
- Only a few people are allowed access to the programs called "Special Access Programs"
- The budget itself was completely secret until recently
- The black budget is now estimated to be over \$50 billion gathered from documents leaked by Edward Snowden



Politics of the Defense Budget: Jobs, American Hegemony, Campaign Contributions

- Contracts spread in all 50 states to ensure maximum Congressional support for programs
- Broad consensus about American hegemony and "exceptionalism"
- The "National Security State" forced Trump to alter his approach to Russia and Putin
- Strength of the defense lobby through campaign contributions and threats to members of Congress

Integrated Ballistic Missile Defense System

Sensors



Defense Support Program



Space Tracking And Surveillance System



Sea-Based Radars



Forward-Based Radar With Adjunct Sensor



Midcourse X-Band Radar



Early Warning Radar

Boost Defense Segment

Midcourse Defense Segment

Terminal Defense Segment



Airborne Laser



Kinetic Energy Booster



Aegis Ballistic Missile Defense / Standard Missile-3



Multiple Kill Vehicle



Midcourse Defense



Terminal High Altitude Area Defense



Sea-Based Terminal



Patriot Advanced Capability-3

Command, Control, Battle Management & Communications



USSTRATCOM USNORTHCOM USPACOM EUCOM CENTCOM

Designated Lead Service:

Army

Navy

Air Force

TBD

7

The Strategic Defense Initiative was a massive failure and a waste of taxpayer money

- SDI attempted to develop missile defense systems against Soviet ICBMs carrying nuclear weapons
- Both ground- and space-based high power lasers were investigated
- Science-fiction type projects like "brilliant pebbles," "brilliant eyes," etc.
- President H. W. Bush scaled it back in 1989 after the Cold War ended
- But the program survived and Congress continued to fund it at \$12 billion a year since the year 2000.
- Over \$300 billion spent since its inception in 1983
- It is yet to field a single effective operational system



ABL VISION







Table 1: Development Cost Estimates and Baselines for 20 Major Weapon System Programs

(2008 dollars in millions)

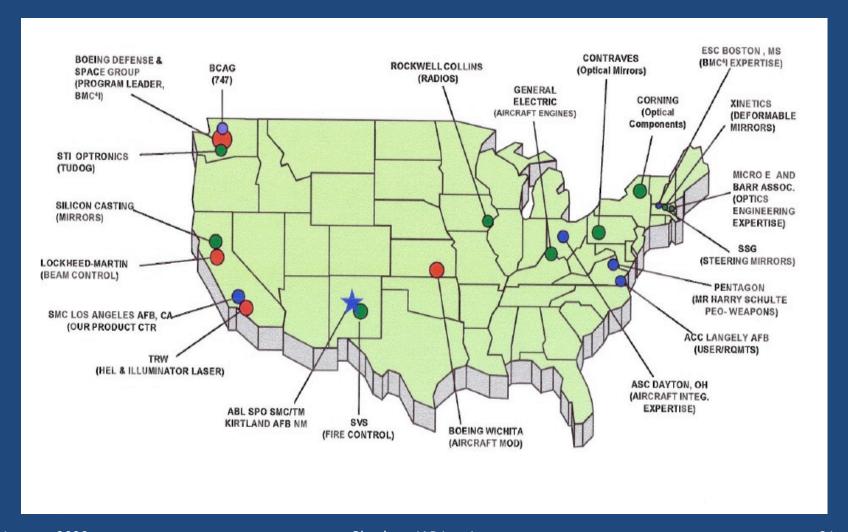
	Development cost estimate			Development cost baselines		
Program	Service	CAIG	Percentage difference	Initial	Current	Percentage change
Global Hawk	\$905	\$992	10	\$967	\$3,515	264
UH-60M helicopter upgrade	311	379	22	311	838	169
WIN-T	338*	807	139	796	2,088	162
C-130 Avionics Modernization Program	1,020	1,175	15	720	1,844	156
EFV	1,056	1,438	36	1,472	3,556	142
Advanced Extremely High Frequency Satellites	3,031	3,175	5	2,923	6,008	105
Wideband Global SATCOM	296	414	40	199	323	62
Future Combat Systems	20,248	27,184	34	20,248	27,955	38
JSF ^b	30,500	31,476	3	33,939	40,210	18
COBRA JUDY replacement	1,398	1,521	9	1,527	1,626	6
E-2 Advanced Hawkeye	3,495	3,720	6	3,589	3,796	6
EA-18G	1,707	1,795	5	1,797	1,865	4
VH-71 Presidential Helicopter Replacement Program	3,378	3,569	6	3,771	3,859	2
Joint Land Attack Cruise Missile Defense Elevated Netted Sensor	1,781	1,926	8	1,894	1,922	1
C-5 Reliability Enhancement and Reengining Program	1,454	1,583	9	1,627	1,630	0°
CH-53K Heavy Lift Replacement	3,970	4,293	8	4,149	4,095	-1
Longbow Apache III	1,155	1,382	20	1,095	1,087	-1
MMA	6,100	6,970	14	7,080	6,804	-4
Small Diameter Bomb	416	427	3	415	395	-5
Standard Missile 6	1,000	992	-1	1,009	932	-8

Source: GAO analysis of DOD data.

So, why do such programs keep going?

- The defense contractors keep the pressure on Congress to not cut defense spending
- Defense contracts create high-paying jobs for skilled workers
- Ideological reasons to fight communism, terrorism, etc.
- A belief that having technical superiority is key to US world dominance
 - The public is fooled even when the technology fails

Jobs, jobs! How Boeing protected ABL for a decade



Concluding Remarks

- Corrupting influence of money in American politics
 - Eisenhower's prescient warning about the unwanted influence of the military-industrial complex on American democracy has come true
- These programs continue with the support of both Democrats and Republicans
- Critical reports frequently published by GAO, and others point out, for example,
 - Performance failures due to immature technology, cost growth, and schedule delays
- They are routinely ignored
- Secrecy keeps information from the public view
 - Pentagon's books are unaccountable
 - Hundreds of billions of dollars are missing

Selected Reading

- 1. U.S. missile defense system is 'simply unable to protect the public,' report says
- By David Wilman 14 July 2016, the Los Angeles Times
- 2. Accountability Office Finds Itself Accused
- By APRIL 2, 2006, the New York Times
- 3. Coming not-so-soon to a theater near you: laser weapons for missile defense
- By Subrata Ghoshroy 1 November 2011, Bulletin of the Atomic Scientists
- 4. How to Prevent Theater Nuclear Warfare
- By Masako Ikegami 15 July 2016, Bulletin of the Atomic Scientists
- 5. Iron Dome: Behind the hoopla, a familiar story of missile defense hype
- By Subrata Ghoshroy
- http:
- 6. X-Ray Laser Zapped; After \$1 Billion in Research, A 'Star Wars' Project Ends
- By William J. Broad, 26 July 1992, the New York Times
- •
- 7. Military Industrial Complex Calls the Shots
- By Sherwood Ross, OpEdNews.com
- •
- 8. Major arms soar to twice pre-9/11 cost
- By Bryan Bender, 19 August 2006 The Boston Globe
- •
- 9. The Price for Blowing the Whistle
 - By Subrata Ghoshroy, IEEE Conference on Social Implications of Technology, Medford, Mass., 14 November 2019