THE PENTAGON VS. THE ECONOMY

TOM WOODS

New York Times bestselling author

If you enjoy this eBook you'll love the Tom Woods Show, which makes tens of thousands into smarter libertarians every weekday:

http://www.TomsPodcast.com

Three words guarantee the coming federal bankruptcy: "Off the table." Everyone has something he considers off the table. For most Americans, in fact, everything is off the table.

Not long ago *The Economist* polled Americans about what category of government spending they were willing to cut. The only area a majority (71 percent) would cut was foreign aid, which is about one percent of the government budget. The numbers on the other spending categories broke down like this: Social Security (7 percent of Americans would cut), national defense (22 percent), Medicare (7 percent), aid to the poor (17 percent), Medicaid (11 percent), veterans' benefits (6 percent), health research (13 percent), education (12 percent), highways (12 percent), mass transit (27 percent), unemployment benefits (19 percent), science and technology (22 percent), agriculture (27 percent), housing (27 percent), and the environment (29 percent).[1]

Well, that's pretty much all the government spends money on. And it's all off the table, according to Americans. That means the only thing on the table is default. For many conservatives, military spending in particular is off the table. That needs to be revisited, to put it delicately. It is unreasonable to expect a crisis of this magnitude to be resolved only by asking other people to rethink their cherished assumptions. We need to take a frank and unprejudiced second look at our true situation—even if it means asking hard questions not just about Alexandria Ocasio-Cortez, but about ourselves.

To get a sense of the impact the U.S. military has on the American economy, we must remember the most important lesson in all of economics: to consider not merely the immediate effects of a proposed government intervention on certain earmarked groups, but also its long-term effects on society as a whole. That's what economist Frédéric Bastiat (1801-1850) insisted on in his famous essay "What Is Seen and What Is Not Seen." It's not enough to point to a farm program and say that it grants short-run assistance to farmers. We can see its effect on farmers. But what does it do to everyone else in the long run?

The example from that essay that most people remember involves a boy who breaks a businessman's window. Some people, Bastiat says, are inclined to think of the unfortunate incident as a concealed boon, for the money spent to repair the window will "create jobs" by employing the glazier. That analysis is juvenile, since it confines itself only to what is seen—namely, the enrichment of the glazier.

What is not seen is what the shopkeeper would have purchased with his money had he not needed to replace the window. Perhaps he might have bought a new pair of shoes. In that case, the shoemaker rather than the glazier would have been enriched. But since the repair to the window is seen, while the shoes that might have been purchased had there been no window to fix in the first place are not seen, careless observers neglect the foregone purchase of shoes and conclude that destruction can actually confer economic benefit, or stimulus. From the point of view of the shopkeeper himself, of course, the

incident amounts to a total loss: whereas he might have had a window and a new pair of shoes, now he has only a window.

So it is with government spending, which is accomplished through destruction in the form of taxation. Less wealth exists, and society is worse off than it otherwise would have been. Instead of potentially expanding our capital stock (the value of the nation's plant, equipment, and infrastructure), we must devote resources to merely breaking even.

Often overlooked is the military example Bastiat uses in the essay. He discusses the demobilization of one hundred thousand soldiers from the French army—a prospect many entertain with dread, for what will these men do for a living? And what about the foregone stimulus to French businesses previously provided by the military's expenditures on wine, clothes, and weapons for these men?

Of course, Bastiat points out, such critics are focusing once again only on what is seen. They fail to consider that the money that had previously been confiscated from the taxpayers in order to support the soldiers, once returned to the taxpayers, will now be available for other purposes—including expenditures on goods that these demobilized soldiers themselves can help produce. Likewise, the money the military once spent on wine, clothing, and weapons can now be spent by the general public on other things, so here again economic activity is none the worse for the soldiers' demobilization.

Seymour Melman (1917-2004), a professor of industrial engineering and operations research at Columbia University,

focused much of his energy on the economics of the warfare and military-oriented state. Melman's work amounted to an extended analysis, in light of Bastiat's insight, of the true costs not only of war but also of the military establishment itself. As he observed,

> Industrial productivity, the foundation of every nation's economic growth, is eroded by the relentlessly predatory effects of the military economy…. Traditional economic competence of every sort is being eroded by the state capitalist directorate that elevates inefficiency into a national purpose, that disables the market system, that destroys the value of the currency, and that diminishes the decision power of all institutions other than its own.[2]

Throughout the Cold War, politicians and intellectuals all over the political spectrum could be heard warning of the catastrophic economic consequences of substantial reductions in military spending. The radical left in particular, as part of its critique of American state capitalism (which it sometimes conflated with pure laissez-faire, an altogether different system), lent important support to that position. As Marxists Paul Baran and Paul Sweezy warned: "If military spending were reduced once again to pre-Second World War proportions, the nation's economy would return to a state of profound depression, characterized by unemployment rates of 15 per cent and up, such as prevailed during the 1930s."[3]

This was the same fallacy Bastiat had refuted over a century earlier when he wrote about the French military. These politicians and intellectuals were focusing on the direct effects of

discounting a particular spending stream without considering the indirect effects—all the business ventures, jobs, and wealth creation that those funds would create when steered away from military use and toward the service of the public as expressed in their voluntary spending patterns.[4] The full cost of the military establishment, as with all other forms of government spending, includes all the consumer goods, services, and technological discoveries that never came into existence because the resources to provide them had been diverted by government.

Measurements of "economic growth" can be misleading if they do not differentiate between productive growth and parasitic growth. Productive growth improves people's standard of living and/or contributes to future production. Parasitic growth merely depletes manpower and existing stocks of goods without accomplishing either of these ends.[5] In Melman's view, productive growth involves both the production of consumer goods as well as the production of capital goods that increase the economy's capacity to produce consumer goods in the future. Both are aimed at satisfying human needs.

Beyond a certain limit, military spending constitutes the classic example of parasitic growth. Melman believed that since the nation's security demanded some kind of military establishment, military spending, up to a point, could be not only legitimate but also economically valuable. But astronomical military budgets, surpassing the combined military spending of the rest of the world, and exceeding many times over the amount of destructive power needed to annihilate every enemy city, were clearly parasitic. Melman used the term "overkill" to

describe that portion of the military budget that constituted this kind of excess, observing facetiously that it was not possible to annihilate the same city more than once. By the 1960s the U.S. government, in its strategic aircraft and missiles alone, was capable of unleashing in explosive power the equivalent of six tons of TNT for every person on Earth. "Now that we have 6 tons of TNT per person in our strategic missiles and aircraft alone," Melman wondered, "have we become more secure than when we had only 1 ton of TNT per human being on earth?"[6] The labor, time, and other resources that were used to produce this overkill material were taxed away from the productive population and diverted from the creation of civilian goods.[7]

GDP calculations do not draw this distinction between the parasitic and the productive. All government spending is simply added—as if it were something positive—to the sum of all final goods and services sold in a given year. Parasitic growth is thus a component of a figure whose magnitude is supposed to indicate a country's economic well-being. For that reason alone, GDP can obscure as much as it reveals.[8]

The scale of the resources siphoned off from the civilian sector becomes more vivid in light of specific examples of military programs, equipment, and personnel. To train a single combat pilot, for instance, costs between $5 million and $7 million.[9] Over a period of two years, the average U.S. motorist uses about as much fuel as does a single F-16 training jet in less than an hour. The Abrams tank uses up 3.8 gallons of fuel in traveling one mile. Between 2 and 11 percent of the world's use of fourteen important minerals, from copper to aluminum to zinc,

is consumed by the military, as is about 6 percent of the world's consumption of petroleum.[10] The Pentagon's energy use in a single year could power all U.S. mass transit systems for nearly fourteen years.[11]

Still other statistics illuminate the scope of the resources consumed by the military. According to the U.S. Department of Defense, during the period from 1947 through 1987 it used (in 1982 dollars) $7.62 trillion in capital resources. In 1985, the Department of Commerce estimated the value of the nation's plant, equipment, and infrastructure (capital stock), at just over $7.29 trillion. In other words, the amount spent over that period could have doubled the American capital stock or modernized and replaced its existing stock.[12]

That is a startling statistic, to be sure, but the economic costs of these expenditures extend well beyond the dollar amounts spent on the materials, the machinery, the physical plant, and the manpower involved in weapons construction. Any portion of this money that might otherwise have been devoted to investment for civilian purposes would have brought returns in excess of the amount invested, since the machinery it purchased would have increased the country's productive capacity and thus, in perpetuity, its capability for future production.[13]

Then there are the damaging effects on the private sector. Since World War II, between one-third and two-thirds of all technical researchers in the United States have been working for the military at any given time. The result has been "a short supply of comparable talent to serve civilian industry and civilian activities of every sort."[14]

> When research and development is not properly done on behalf of civilian industry, results like poor product design or poor production methods can have disastrous effects on the economic position of the industry. When as little as one and a half percent of U.S. national product is diverted to military research it seems little enough, but that accounts for more than half of the national research and development effort and has left many U.S. civilian-products industries at a competitive disadvantage due to faltering product designs and insufficient improvement in industrial-production efficiency.[15]

Government jobs, whose funding source—taxation—is unavailable to private firms, have been able to offer substantially higher salaries than those in the private sector. By the 1960s major companies were already complaining of being unable to meet their hiring targets for new researchers. The *Wall Street Journal* warned in 1963:

> Top research men in industry reason this way: Frantic bidding, by space and military contractors, for scientists and engineers is creating a big shortage for industry. This scarcity, along with the skyrocketing salaries it is provoking, is bringing almost a halt to the hitherto rapid growth of company-supported research. This development hampers efforts to develop new products and processes for the civilian economy.

"Government research programs serve as a brake on research in the private sector," added Du Pont Company vice president Samuel Lehner.[16]

This was not just a case of special pleading on the part of private firms. A study in the *American Economic Review* argued that the growth of military and space research and development (R&D) "has significantly retarded the growth of civilian R&D." The consensus among R&D directors, according to the study, was that "the growth of defense R&D, by bidding up salaries and by taking the cream of the new science and engineering graduates, has tended to reduce significantly the quantity and quality of R&D undertaken in civilian-created laboratories."[17]

Such arguments reached the general public only infrequently, as when President John Kennedy acknowledged in 1963 that the United States had "paid a price by sharply limiting the scarce scientific and engineering resources available to the civilian sectors of the American economy."[18] At a Senate committee meeting the year before, Senator Hubert Humphrey had wondered aloud,

> What is happening to our civilian economy as we plow more and more of our scientific personnel, our brains, into the military and into space and into atomic energy for military purposes? Where are we going to end up in this trade competition with these Belgians and these Dutch, who are clever, and the Germans who are very clever, who are spending more money for civilian aspects and will develop products cheaper, better, and more serviceable?[19]

Now one may object, as a mitigating factor, that military research at times has civilian uses, and that the research being done in the defense industry is therefore not altogether mislaid from the point of view of consumer welfare. In fact, though, the

number and utility of such crossover applications, and whether they would not have occurred anyway in the absence of military research, is a matter of serious dispute.[20] In the middle of the Cold War, the Engineers' Joint Council concluded that such spillovers occurred only infrequently, and that "the military program must be recognized as utilizing a large fraction of the most talented individuals in research and development in the country and of denying to the civilian economy the service of these individuals."[21]

Researchers Stephen Broadberry and Mark Harrison are skeptical of grandiose claims on behalf of military technology with civilian applications, speaking in 2005 of "how difficult it is to show that any of these wider changes were actually the results of the war and would not have occurred anyway in its absence."[22] Herbert Holloman and Alan Harger, in a 1971 study, cited spinoff estimates ranging from 5 percent to as much as 33 percent.[23] Melman himself was inclined toward the lower end of that range, having been given the estimate of 5 percent spillover from specialists in the Commerce Department.[24]

Even on those occasions when a legitimate advance in civilian well-being can be shown to have derived from military research, such research is not thereby vindicated. We always have to remember opportunity costs—in this case, what Americans would have spent their money on had it not been diverted to government research projects. There is no non-arbitrary way to determine that funds diverted from civilian use to military research, whatever its value in civilian spinoff, yield greater social utility than the purposes to which people would have

directed those funds themselves. When two parties engage in a voluntary exchange, we know they are both better off ex ante, for they would not otherwise have taken part in the exchange. One party prefers what the other party has to what he himself has, and vice versa, and thus the exchange improves each party's well-being. But if a thief, after robbing his victim, gave that victim in a moment of remorse an item he (the thief) considered valuable, we cannot say the same thing. The thief is undoubtedly better off, but since the exchange in question did not take place voluntarily, we must presume that the victim's well-being has been harmed rather than improved (otherwise, he would have entered into the exchange of his own free will). Much less can we say that something called "social utility" has been increased by this incident, since no matter how much happier we may think the thief is, or how satisfied the victim should be with the item the thief chose to give him, utility is necessarily subjective and incommensurable. In short, in the absence of voluntary action on the victim's part, we have no way of determining what exchanges would yield an individual additional utility.[25]

Therefore, given that the necessary funds were seized from them by force, it is impossible to say with certainty, as those who trumpet military crossovers typically do, that people were truly better off by being deprived of their resources in order to contribute involuntarily to new technology. Imagine the social resources that would have been necessary to bring about the production of the automobile in, say, 1800. The unspeakable sacrifice that would have been involved in order to mobilize that level of technological research at a time when the vast majority

of the component parts, much less the technology and overall design of the automobile, had neither been discovered nor conceived of, would surely not have been compensated for by the premature introduction of that important invention. It would have come at a staggering cost that no people would voluntarily have borne. The same kinds of costs, albeit to a greater or lesser degree, are necessarily at work in any involuntarily supported technological research. Any military innovation with civilian applications may serve to mitigate the harm done to consumer welfare by the existence of a vast military apparatus, but claims that such applications prove the merit of such an apparatus, or show that that apparatus is actually necessary to consumer welfare, are unfounded.[26]

Catering to the Pentagon also distorts a firm's business sense and makes it less mindful of controlling costs than it would be if its customers resided exclusively in the private sector. Since the Pentagon's funds come from involuntary taxation rather than through profits reaped by offering a useful good or service on a competitive market, it can afford to be less concerned with cost than could a private firm. Firms servicing Pentagon needs have grown almost indifferent to cost.[27] They operate outside the market framework and the price system: the prices of the goods they produce are not determined by the voluntary buying and selling by property owners that comprise the market, but through a negotiation process with the Pentagon in isolation from market exchange.

Beginning in the 1960s, the Department of Defense required the military-oriented firms with which it did business to engage

in "historical costing," a method by which past prices are employed in order to estimate future costs. Superficially plausible, this approach builds into the procurement process a bias in favor of ever-higher prices, since it does not scrutinize these past prices or the firm's previously incurred costs, or make provision for the possibility that work done in the future might be carried out at a lower cost than related work in the past. This is not nit-picking: advancing technology has often made it possible to carry out important tasks at ever-lower costs, yet rising costs are a built-in assumption of the historical cost method. Moreover, if some piece of military equipment—a helicopter, plane, or tank, for example—winds up costing much more than initial estimates indicated, that inflated price then becomes the baseline for the cost estimates for new projects belonging to the same genus.[28] The Pentagon, in turn, uses the resulting cost hikes to justify higher budget proposals submitted to Congress.

Cost-minimizing incentives that exist for civilian firms are often absent with the military-industry firm. The largest contracts are negotiated with a single supplier, and cost is not the major factor in the Pentagon's reckoning. Much more important is the Pentagon's confidence that the firm in question can actually deliver the product, interact successfully with the military community, and adapt to ongoing and sometimes quite frequent changes to the initial design. As for cost, even if the resulting military hardware exceeds the negotiated price by three or four times, the Pentagon will generally find a way to come up with the money.[29] Melman also found administrative overhead

ratios in the defense industry to be double those for civilian firms, where such a crushing burden simply could not be absorbed. He concluded:

> From the personal accounts of "refugees" from military-industry firms, from former Pentagon staffers, from informants still engaged in military-industrial work, from the Pentagon's publications and from data disclosed in congressional hearings, I have found consistent evidence pointing to the inference that the primary, internal, economic dynamics of military industry are cost-and subsidy-maximization.[30]

These incentives also supply little reason to exert the intellectual and physical effort necessary not only to control costs but also to make complex systems simpler and more user-friendly, as truly competitive firms and industries must try to do when catering to the public. "In one major enterprise," Melman reported, "the product-development staffs engaged in contests for designing the most complex, Rube Goldberg-types of devices. Why bother putting brakes on such professional games as long as they can be labeled 'research,' charged to 'cost growth' and billed to the Pentagon?"[31]

The efforts of Boeing Vertol, Rohr, and Grumman to enter the field of mass transit are revealing. In each case, their productions were simply too complex and unreliable.[32] Boeing Vertol's trolley cars, introduced on Boston's Green Line in the 1970s, broke down regularly, and were largely replaced by cars built by Japan's Kinki Sharyon. Rohr Industries' subway cards, introduced in San Francisco's Bay Area Rapid Transit (BART)

system and in the nation's capital, were enormously costly and for years suffered from chronic malfunctions. Grumman buses in New York City were so unreliable that the city ended up suing the company.

The once-vigorous American machine-tool industry can tell a sorry tale of its own. Once highly competitive and committed to cost-containment and innovation, the machine-tool industry suffered a sustained decline in the decades following World War II.[33] During the wartime period, from 1939 to 1947, machine-tool prices increased by only 39 percent at a time when the average hourly earnings of American industrial workers rose by 95 percent. Since machine tools increase an economy's productivity, making it possible to produce a greater quantity of output with a smaller input, the industry's conscientious cost-cutting had a disproportionately positive effect on the American industrial system as a whole.

But between 1971 and 1978, machine-tool prices rose 85 percent while U.S. industrial workers' average hourly earnings increased only 72 percent. The corresponding figures in Japan were 51 percent and 177 percent, respectively.

These problems can be accounted for at least in part by the American machine-tool industry's relationship with the Defense Department. Once the Pentagon became the American machine-tool industry's largest customer, the industry felt far less pressure to hold prices down than it had in the past.[34] That decreased pressure undoubtedly contributed to the negligible investment by the machine-tool industry in modern production techniques of a kind used routinely in Europe. No longer under

traditional market pressure to innovate and lower costs, the machine-tool industry saw a considerable drop in productivity.

Prior to the 1960s, the prices of machinery typically rose more slowly than did the wages of American industrial workers. (This occurred because productivity improvements occurred regularly within the machine-tool industry itself.) As a result, firms had an incentive to purchase more and better machinery to incorporate into their production processes.[35] The results for the American economy were all good: worker productivity increased, more wealth was produced, wages rose, and any labor displaced by machines could now produce other goods for which the necessity labor had not previously been available. When machine tool prices began to outpace wages, it suddenly made less economic sense for firms in the United States to invest in those tools. They became content to shift into additional labor at the current rate of productivity rather than invest in equipment that could have increased that rate.

In the short run, therefore, the American machine tool industry's rise affected U.S. productivity at large. Firms were now much more likely to maintain their existing stock of machines rather than to purchase additional equipment or even upgrade what they already possessed. By 1968, nearly two-thirds of all metalworking machinery in America's factories was at least 10 years old. The aging stock of production equipment contributed to the decline in manufacturing productivity growth after 1965.[36]

Why Americans couldn't have switched to lower-cost imported machine tools as soon as prices began to rise involved

the reluctance of machine buyers to change their suppliers—particularly to suppliers who are not close by. Not only do they prefer to deal with established firms with good reputations, but they also want to avoid unnecessary and costly downtime, so they patronize suppliers who can perform repairs and supply spare parts on short notice. In the long run, American firms did indeed begin to shift into imported machine tools, and by 1967 the United States for the first time imported more machine tools than it exported.[37]

The military-induced distortion of the American machine tool industry, and the industry's correspondingly decreased global competitiveness, is not confined to the perverse incentives created by the Pentagon's cost-maximization approach to procurement. Another factor is at work as well: the more an industry caters to the Pentagon, the less it makes production decisions with the civilian economy in mind. In the late 1950s, the Air Force teamed up with the machine tool industry to produce numerical-control machine tool technology—a technique for the programmable automation of machine tools that yields fast, efficient, and accurate results—the resulting technology was so costly that private metalworking firms could not even consider using it. The machine tool firms involved in this research thereby placed themselves in a situation in which their only real customer was the aerospace industry. Some 20 years later, only 2% of all American machine tools belonged to the numerical control line. It was western European and Japanese firms, which operated without these incentives, that finally managed to produce numerical-control machine tools at

affordable prices for small businesses. The distortion of business decisions and strategies that contributed to the decreasing competitiveness of the machine tool industry is at work at thousands of American firms in rough proportion to their alliance on Pentagon contracts.

It may be objected that this "cost maximization" model is not inherent to the weapons procurement process, and that with the firm application of political pressure these abuses might be minimized. But political pressure has already been brought to bear on the matter. We might cite the 1971 Fitzhugh Commission, the 1977 Steadman Review, the 1981 Carlucci acquisition incentives, the 1986 Packard Commission, the 1986 Goldwater-Nichols Department of Defense Reorganization Act, the 1989 Defense Management Review, the Defense Science Board, or the Air Force's Total System Performance Responsibility Initiative. These and other initiatives were supposed to look into the procurement process and recommend reforms. In October 2000, Bill Clinton signed legislation "to set up a 12-member commission with the aim of recommending improvements to the sometimes troubled relationship between the federal government and the nation's aerospace and defense companies."[38]

So unsuccessful was each of these major commissions in bringing about reform that each time a new one was established, the previous ones may as well never have occurred—the same abuses and the same proposed solutions were raised again and again. Thomas Christie, who spent half a century with the Pentagon and was the Defense Department's most senior official

for testing weapons, concluded in 2006, "After all these years of repeated reform efforts, major defense programs are taking 20 to 30 years to deliver less capability than planned, very often at two to three times the costs and schedules planned." Another expert, Ernest Fitzgerald, was only saying what many others were thinking when he observed, "Government officials, from the majestic office of the President to the lowest, sleaziest procurement office, lie routinely and with impunity in the defense of the system…. The combination of loose procurement rules and government acquiescence in ripoffs leave many a crook untouched."[39] And finally, the Center of Defense Information's Winslow Wheeler: "Despite decades of acquisition reform from Washington's best minds and Congress, the Pentagon and think-tanks, cost overruns in weapons systems are higher today, in inflation-adjusted dollars, than any time ever before. Not a single major weapon system has been delivered on time, on cost and as promised for performance."[40]

Despite reform efforts, military suppliers have two strategies for helping maximize the loot seized from the public: front-loading and political engineering. Front-loading refers to the practice of understating the monetary cost and (often) overstating the technical capabilities of a proposed project. Then, when costs rise higher—sometimes much, much higher—than initially planned, or technical problems and failures slow down the production process, political engineering is employed to keep the program running anyway. Political engineering seeks to spread the jobs and money associated with a particular program among a wide array of important congressional districts

in order to get as many influential congressmen politically invested in the program as possible. Thus once front-loading gets the money flowing, political engineering makes it all but impossible to stop.

Neither of these strategies, says a former CIA analyst, is pursued by accident or without malicious intent. They both involve "criminal intent to turn on the spigot of taxpayer money and then jam it so that it cannot be turned off."[41] Thus when a coalition developed in July 1989 to cancel the $60 billion B-2 bomber, Chief contractor Northrop Corporation wasn't exactly subtle in responding, releasing previously classified information showing tens of thousands of jobs and hundreds of millions in profit at stake in nearly 400 congressional districts and all but a few states.[42]

Front-loading also encourages complex, technologically demanding systems over simpler and more straightforward ones. The more complex a system is, the more difficult it is at the outset to anticipate difficulties, and thus easier to front load. Also, complex weapons are typically composed of numerous subsystems, which intern require subcontracts, each of which can be spread around the important congressional districts.[43] According to former Pentagon military analyst Chuck Spinney,

> Front-loading and political engineering encourage immoral behavior at all levels within the Defense Department. We exaggerate the threat to justify larger budgets. We use deceitful if not illegal accounting tricks to hide the true cost of programs. We reduce the chances of weapons being terminated for poor performance by designing success-

> oriented operational tests and by rushing weapons into production before they are fully tested. We obscure future costs behind the cloak of excessive secrecy. We tolerate cost overruns and bad management practices, some of which are spilling over into the civilian economy and damaging our international competitiveness.[44]

This is how we wind up with cases like the C130J prop plane, which was so poorly designed that none of the 50 the Air Force purchased have ever been able to be put into service. The propeller system malfunctions so badly during bad weather that the planes can be used only for training. Lockheed was paid 99 percent of the contract price for what turned out to be nearly useless planes.[45]

The F-22 raptor, also produced by Lockheed, puts the C130J in the dust in terms of impracticality. It was originally designed in the 1980s for use against the Soviet Union. Today it appears to serve no purpose at all, although with so much money and employment at stake, the reader will not be shocked to learn that production continued for decades anyway. A Senate aide put it this way: "It's showy, unimaginably expensive, fragile and utterly useless. But there's no stopping it."[46]

The F-22 was sold as a stealth fighter. But it keeps showing up on radar systems—and even if it didn't, the thing is huge: one-fifth larger than an F-16. "The only way to make the F-22 stealthy," says retired Air Force colonel Everest Riccioni, "is to tear the eyes out of the enemy pilots' heads."[47] It wasn't until 2010 that the program was finally scrapped. Over the life of the program some $65.3 billion was spent, which translates into over

$356 million per plane. (Even if R&D is written off as a sunk cost, the figure is still likely to be about $216.3 million per plane.)[48]

Meanwhile, the plane was not suited for use in Iraq and Afghanistan, so it never saw action there. It can play no role at all against non-state actors like al-Qaeda, which has no air force and no intention of acquiring one.[49]

In spite of all this the program persisted for years and years. The political engineering was obvious. More than one thousand subcontractors and 44 states had a stake in the program. Naturally congressmen spoke of the economic consequences for their districts if the program were terminated.[50]

How did the whole program get started in the first place? When President Franklin Roosevelt decided to increase and improve U.S. military capabilities beginning in 1940, he found himself faced with a major difficulty. Having spent the previous seven years punishing and demonizing business—even some in the president's own inner circle thought his attacks on business went too far and were hampering recovery from the Depression—FDR found the business sector too suspicious of Washington to cooperate with him without wide-ranging guarantees and concessions.

Those guarantees and concessions were quickly forthcoming. Procurement by solicitation and sealed bids began to be replaced by cost-plus-fixed-fee contracts. Tax breaks, government loan guarantees and other financing assistance, and direct government funding were just the thing to persuade the private

sector to accept government contracts, even if issued by their erstwhile adversary. The standard procedure for what would later become the military industrial complex—a term immortalized by Republican Dwight Eisenhower—were coming into place.[51]

The changes that took root were obvious, even glaring. Before 1940, there was no incentive for businessmen to try to woo congressmen by means of poker, prostitutes, or cash bribes. If a company did not make the lowest sealed bid on an offer on a particular project, it would not be awarded the contract. But once price was set aside as the chief consideration, to be replaced by less precise criteria like ones we have seen in this book (e.g., reputation, technical capabilities, ability to work with the military community—as Robert Higgs put it, "vaguer attributes that are easier to fudge for one's friends"), the wining and dining began in earnest.[52]

Military contractor Brent Wilkes threw poker parties at the Watergate and Westin Grand hotels for legislators and lobbyists for 15 years, beginning in 1990. Wilkes was a high school friend of Kyle (Dusty) Foggo, the third-ranking figure at the CIA. According to allegations, Wilkes provided prostitutes, limousines, and hotel suites to those who attended, though Foggo says he went "just for poker." Then CIA director Porter Goss was sacked in the scandal, though he denies having attended the parties as CIA director (leaving open whether he attended as a Republican congressman who headed the House Intelligence Committee). Also in attendance was congressman

Randall "Duke" Cunningham, who wound up going to federal prison.

For a brief moment the general public got to see a small sliver of daily life in Washington, D.C., in general and in the military-industrial complex in particular. "Evidently," notes Robert Higgs, "the daily routine there [was] not all wailing and gnashing of teeth over how to defend the country against Osama bin Laden and his horde of murderous maniacs—our country's leaders [required] frequent periods of rest and recreation. If this sort of fun and games at the taxpayer's expense is your idea of responsible government, then you ought to answer 'yes' when the pollster calls to ask whether you favor an increase in the defense budget. Our government is clearly at work—at work making chumps out of its loyal subjects and laughing at these rubes all the way to the bank."[53]

Congressman Cunningham, by the way, the future jailbird who attended the parties, wound up in prison for taking $2.4 million in bribes. Mitchell Wade, CEO of MZM, Inc., reportedly intimidated employees into donating to Cunningham's campaign, and his company's political action committee donated still more. Cunningham was even invited to live in Wade's yacht rent-free, paying only nominal dock fees (in order to evade the law that prohibits congressmen from living rent-free on someone else's property). Wade was fairly blunt about his relationship to certain influential congressmen. According to a former MZM employee, Wade said: "The only people I want to work with are people I give checks to. I own them." Cunningham, in turn, steered lucrative contracts MZM's

way, such that the once-struggling firm found itself flooded with cash by 2004.[54]

One reporter described Cunningham's demise this way:

> It's fine to live on the dole of a defense company; just don't press the point by reposing for free on their yacht. That's the kind of exposure that might spoil the game for everyone. The profligacy of an individual member of Congress must not be permitted to interfere with the grander profligacy of the munitions makers. In the end, [Cunningham] was told that he should fall on his sword, like a true Praetorian, to protect the business of the empire. In mid-July the congressman suddenly announced his retirement, saying he had decided to "conclude the public chapter of my life" and not seek re-election to a ninth term.[55]

Scholars have also uncovered a pattern of implicit bailouts, whereby particular firms are awarded contracts because they are experiencing economic difficulties and need to make a sale, as when Lockheed got the contract for the C-4 (Trident I) missile.[56] A more notorious case was the no-risk $30 billion contract awarded to Boeing, at a time when the company was encountering financial difficulties, to lease refurbished 767 passenger jets to the Air Force. These jets were supposed to serve as refueling tankers, even though 767 weren't the best choice for that purpose, and even though the Air Force said it didn't need any more tankers. On top of that, it would have been cheaper had the Air Force purchased the planes outright, rather than leasing them from Boeing.[57]

The idea for the tanker deal materialized at a meeting in September 2001 with Boeing executives and Darlene Druyun, who was then Deputy Assistant Secretary of the Air Force, and Major General Paul Essex, who headed the Air Force's Global Reach program. Soon enough, Air Force Secretary James Roche was pushing the deal vigorously. According to Winslow Wheeler, the idea actually originated with Senator Ted Stevens of Alaska, who for years had been a loyal water carrier for Boeing.

Druyun came to personify the revolving door between government and private industry when it was announced at the beginning of 2003 that she would direct the company's missile defense division. She had been negotiating the new job while still in government, helping to finalize the tanker deal. She went to jail for that (which is why we know about this particular incident), even though such things go on all the time. She became the fall guy, and the investigation stopped there.

Not helping matters is that the Department of Defense is the only federal agency not subject to audit. The seriousness of the problems with the department's books have been emphasized and acknowledged for decades. In 1990s the Defense Department actually secured from Congress a special exemption from the general audit requirement that exists for other federal agencies. So it is not that the department has failed an audit, meaning accountants tracked its expenditures and found its money misspent. With the Department of Defense, accountants cannot track the money in the first place.[60] It is not uncommon for the Pentagon not to know whether contractors have been

paid twice, or not at all. It does not even know how many contractors it has.[61] Meanwhile, so-called fiscal conservatives, who know nothing of this, continue to think the problem is excessively low military budgets. This, no doubt, is just the way the establishment likes it: exploit the people's patriotism in order to keep the gravy train rolling.

In order to tabulate the full amount of government expenditures on defense, it is not enough to glance at the budget for the Department of Defense. To that figure Winslow Wheeler adds the military-related activities assigned to the Department of Energy, the security component of the State Department budget, the Department of Veterans Affairs, non-DoD military retirement, miscellaneous defense activity spread around various agencies, and a share of the interest payments on the national debt attributed to military expenditure.[62] When in 2009 Wheeler added the roughly $155 billion for the wars in Iraq and Afghanistan he arrived at nearly $1 trillion – a figure Ron Paul would frequently cite to emphasize the true cost of the empire.

But as this eBook has shown, even that dollar figure does not fully capture the cost, because it excludes the absorption of scientific talent by the military sector, the deformation of private markets, and other harms done by the military state.

If you enjoyed this eBook you'll love the Tom Woods Show, which makes tens of thousands of people into smarter libertarians every weekday.

http://www.TomsPodcast.com

Notes

1. The poll results can be found online at http://www.economist.com/blogs/democracyinamerica/2010/04/economistyougov_polling

2. Seymour Melman, *The Permanent War Economy* (New York: Simon & Schuster, 1974), 11.

3. Paul Baran and Paul Sweezy, *Monopoly Capital* (New York: Monthly Review Press, 1966), 53.

4. Seymour Melman, "Consequences of a Permanent War Economy, and Strategies for a Conversion to a Demilitarized Society," lecture delivered at Oregon State University, October 13, 1986.

5. Seymour Melman, *Our Depleted Society* (New York: Dell, 1965), 5.

6. Ibid, 7.

7. Ibid., 42-43. Likewise, Murray Weidenbaum wrote that to convey the true cost of the military establishment in a meaningful way it was necessary to go beyond billions of dollars spent and consider also the "thousands of men and women pulled away (voluntarily or otherwise) from civilian pursuits, millions of man-years of industrial effort, millions of barrels of oil pumped from the

earth, and thousands of square yards of planet space filled with equipment and debris. In short, the real cost of military activities should be measured in human and natural resources and in the stocks of productive capital absorbed in producing, transporting, and maintaining weapons and other military equipment. It is in the sense of alternative opportunities lost that military spending should be considered—the numbers of people employed by the military, the goods and services it purchases from the private sector, the real estate it ties up, and the technology devoted to it. Not only do we lose the opportunity for civilian use of goods and services, but we also lose the potential economic growth that these resources might have brought about." Murray L. Weidenbaum, *The Economics of Peacetime Defense* (New York: Praeger, 1974), 28-29. Arthur Burns, an economic adviser to President Dwight Eisenhower and Federal Reserve Chairman in the 1970s, concurred: "The real cost of the defense sector consists not only of the civilian goods and services that are currently foregone as its account; it includes also an element of growth that could have been achieved through larger capital investment in human and business capital." John Tirman, "Conclusions and Countercurrents," in *The Militarization of High Technology*, ed. John Tirman (Pensacola, FL: Ballinger Publishing, 1984), 13.

8. Murray N. Rothbard made a similar point when suggested that GNP be replaced by Private Product Remaining, which excludes government expenditures altogether and measures only the size of the private economy. Murray N. Rothbard, *America's Great Depression*, 4th ed. (New York: Richardson & Snyder, 1983), 296-97.

9. James F. Dunnigan, *How to Make War*, 4th ed. (New York: HarperCollins, 2003), 164.

10. Asit K. Biswas, "Scientific Assessment of the Long-Term Environmental Consequences of War," in *The Environmental Consequences of War: Legal, Economic, and Scientific Perspectives*, eds. Jay E. Austin and Carl E. Bruch (Cambridge: Cambridge University Press, 2000), 306.

11. Victor W. Sidel, "The Impact of Military Preparedness and Militarism on War and the Environment," in Austin and Bruch, eds., *The Environmental Consequences of War*, 441.

12. Seymour Melman, "Economic Consequences of the Arms Race: The Second-Rate Economy," *American Economic Review* 78 (May 1988): 55-59.

13. Bruce M. Russett, *What Price Vigilance? The Burdens of National Defense* (New Haven: Yale University Press, 1970), 144; Seymour Melman, *The Permanent War Economy: American Capitalism in Decline*, rev. ed. (New York: Simon & Schuster, 1985), 66.

14. Melman, *Our Depleted Society*, 4, 7.

15. Melman, *Permanent War Economy*, rev. ed., 64.

16. Melman, *Our Depleted Society*, 72-73. Another factor is that military research can be more intellectually stimulating than

civilian work. Writes Lester Thurow: "Would the typical engineer rather work on designing a new missile with a laser guidance system or on designing a new toaster? To ask the question is to answer it. Military research and development are more interesting since they are usually closer to the frontiers of scientific knowledge and are not limited by economic considerations such as whether a product can be sold in the market. The military is willing to pay almost any premium to have a superior product. The civilian economy is not. As a result the most skilled technicians and scientists move into defense. But suppose you own a civilian computer firm in Boston and many of your best people leave to work in Boston's higher-paying and more exciting aerospace firms. How do you compete with Japanese computer firms that will not be losing their most brilliant employees? The Japanese engineer might also like to work on missiles but he does not have the opportunity to do so." John Tirman, "The Defense-Economy Debate," in Tirman, ed., *The Militarization of High Technology*, 20.

17. Richard N. Nelson, "The Impact of Arms Reduction on Research and Development," *American Economic Review* 53 (May 1963): 445.

18. "Industry: Aiming at the Market Instead of the Moon," *Time*, June 21, 1963.

19. Melman, *Our Depleted Society*, 72.

20. John Tirman writes: "One cannot say with complete confidence that the military's impact on, say, the history of aviation

has been positive, because we don't know what would have happened to aviation if the military had not played such a significant part." Tirman, ed., *The Militarization of High Technology*, xiii.

21. Melman, *Our Depleted Society*, 93.

22. Stephen Broadberry and Mark Harrison, "The Economics of World War I: An Overview," in *The Economics of World War I*, eds. Stephan Broadberry and Mark Harrision (Cambridge: Cambridge University Press, 2005), 29.

23. Herbert J. Holloman and Alan Harger, "America's Technological Dilemma," *Technology Review*, July-August 1971, 38.

24. Melman, *Permanent War Economy*, rev. ed., 134.

25. The essential text here is Murray N. Rothbard, "Towards a Reconstruction of Utility and Welfare Economics," in *On Freedom and Free Enterprise: Essays in Honor of Ludwig von Mises*, ed. Mary Sennholz (Princeton, NJ: D. Van Nostrand, 1956), 224-62. For an excellent case against state-funded science, one of the great sacred cows of public expenditure, see Terence Kealey, *The Economic Laws of Scientific Research* (New York: Palgrave Macmillan, 1997); see also Tibor R. Machan, ed., *Liberty and Research and Development: Science Funding in a Free Society* (Stanford, CA: Hoover Institution Press, 2002) and Joseph P. Martino, *Science Funding: Politics and Porkbarrel* (New Brunswick, NJ: Transaction, 1992).

26. Along these lines, John Clark suggests that "the artificial allocation of funds to this type of research could actually hamper economic progress. It concentrates on programs of special military concern, but the allotment of resources to particular segments of the industrial system so as to support these specialized projects may unduly deprive other vital sectors (housing, local transportation, and so forth) of the capital assets essential for balanced economic growth." It is "not balanced growth nor advancement in speculative knowledge that the God of War seeds; it is merely the accelerated application of the already known for immediate purposes." John J. Clark, "The New Economics of National Defense," in *The Economic Impact of the Cold War: Sources and Readings*, ed. James L. Clayton (New York: Harcourt, Brace & World, 1970), 23, 25. A recent book claiming that military research has a positive effect on economic growth, and that the diminution of such research would harm growth, is Vernon W. Ruttan, *Is War Necessary for Economic Growth? Military Procurement and Technology Development* (New York: Oxford University Press, 2006).

27. Melman, "Economic Consequences of the Arms Race," 57.

28. Melman, *Permanent War Economy*, rev. ed., 28, 30, 31.

29. Ibid., 34.

30. Ibid., 29.

31. Ibid., 39.

32. Robert DeGrasse, "The Military and Semiconductors," in Tirman, ed., *The Militarization of High Technology*, 85.

33. On the machine-tool industry, see Anthony DiFilppo, *Military Spending and Industrial Decline: A Study of the American Machine Tool Industry* (Westport, CT: Greenwood, 1986) and Melman, *The Permanent War Economy*, rev. ed.

34. Melman, *Our Depleted Society*, 53.

35. Melman, *Permanent War Economy*, rev. ed., 81-82.

36. Melman, *Profits Without Production*, 6.

37. Seymour Melman, "From Private to State Capitalism: How the Permanent War Economy Transformed the Institutions of American Capitalism," *Journal of Economic Issues* 31 (June 1997): 311-30.

38. Chalmers Johnson, *Dismantling the Empire: America's Last Best Hope* (New York: Metropolitan, 2010), 167; Robert Higgs, "The Cold War Is Over, But U.S. Preparations for It Continues," *Independent Review* 6 (Fall 2001): 292; William E. Kovacic, "Blue Ribbon Defense Commissions: The Acquisition of Major Weapon Systems," in *Arms, Politics, and the Economy: Historical and Contemporary Perspectives*, ed. Robert Higgs (New York: Holmes & Meier, 1990).

39. Robert Higgs, "Military-Economic Fascism: How Business Corrupts Government, and Vice Versa."

40. Winslow T. Wheeler, "Preface," in *America's Defense Meltdown: Pentagon Reform for President Obama and the New Congress*, ed. Winslow T. Wheeler (Stanford: Stanford University Press, 2009), x.

41. Johnson, *Dismantling the Empire*, 170.

42. Ibid., 172.

43. Chuck Spinney, "Defense Power Games," Fund for Constitutional Government report, October 1990, available at http://pogoarchives.org/m/dni/fcs/def_power_games_98.htm

44. Ibid.

45. Jeffery St. Clair, *Grand Theft Pentagon: Tales of Corruption and Profiteering in the War on Terror* (Monroe, ME: Common Courage Press, 2005), 152.

46. Ibid., 209.

47. Ibid., 211.

48. Christopher A. Preble, *The Power Problem: Tallying the Costs of Our Military Power* (Ithaca: Cornell University Press, 2009), 46.

49. Ibid., 48.

50. Ibid., 46-47.

51. Higgs, "Military-Economic Fascism."

52. Ibid.

53. Ibid.

54. St. Clair, *Grand Theft Pentagon*, 18.

55. Ibid., 21.

56. Higgs, "Military-Economic Fascism."

57. St. Clair, *Grand Theft Pentagon*, 187.

58. Robert Higgs, "Military Spending/Gross Domestic Product = Nonsense for Budget Policymaking," *Independent Review* 13 (Summer 2008): 149.

59. William S. Lind, "The Navy," in Wheeler, ed., *America's Defense Meltdown*, 235.

60. Winslow Wheeler, "Understand, Then Contain America's Out-of-Control Defense Budget," in Wheeler, ed., *America's Defense Meltdown*, 235.

61. Winslow Wheeler, "How Many More Trillions for Defense?" Center for Defense Information, October 25, 2010, available at http://www.cdi.org/program/document.cfm?documentid=4627