Social vs. Military Spending: How the Pentagon Budget Crowds out Public Infrastructure and Aggravates Natural Disasters—the Case of Hurricane Katrina

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ABSTRACT
This paper puts forth (and documents) an argument that the escalating military spending at the expense of non-military public spending is steadily undermining the critical national objective of public-capital formation (both physical and human) and that, if not stopped, the resulting trend will stint long term productivity and economic growth, as it erodes both physical and soft/social infrastructure. An equally high opportunity cost of the colossal Pentagon budget in terms of forgone or neglected public infrastructure (roads, bridges, mass transit, dams, levees, and the like) is vulnerability in the face of natural disasters, as evidenced, for example, by the recent devastation of Hurricane Katrina.

INTRODUCTION
Prosperity and progress of a people or a nation depends not only on its ability to create wealth but also on its wisdom to allocate it judiciously. Due to the unique ability of the armed forces to appropriate the lion's share of a nation's resources, close scrutiny of the division of those resources between military and civilian spending is of crucial importance. The significance of a sensible allocation of public funds between military and civilian expenditures goes beyond the immediate or short-term economic impact of such expenditure. Perhaps more importantly, a disproportionately large and escalating military apparatus tends to undermine the socio-economic and political base that is supposed to sustain that apparatus.

U.S. military spending is now the largest item in the federal budget. (Officially, it is the second highest item after Social Security payments. But Social Security is a self-financing trust fund. So, in reality, military spending is the highest budget item.) There is no question that, due to its enormous size, military spending has evolved as a crucial part of the U.S. economy. The question is whether the resulting widespread dependence on military spending by many workers and businesses is a positive development that needs to be maintained, or whether it is an unfortunate development that needs to be reversed or rectified.

In the debate over military spending, proponents of a large military establishment, especially the powerful beneficiaries of war dividends and champions of militarism, see nothing wrong or perverse about the gigantic Pentagon budget. From the fact that large military spending creates so many jobs and benefits so many businesses, they conclude that, therefore, the Pentagon's appropriation and spending of public money is an effective means of job creation and demand stimulation, and hence of economic growth and prosperity. This view has come to be known as military Keynesianism, after the renowned British economist John Maynard Keynes, who argued that under conditions of inadequate purchasing power the government should spend money in order to jump-start the stagnant economy by stimulating demand. Proponents of this view often cite the experiences of Nazi Germany in the 1930s and the United States in World War II, Korea and Vietnam as evidence of stimulating or beneficial economic effects of military spending. They also defend military spending on long-term, productivity-enhancing grounds: military spending stimulates investment and technical innovation.

While acknowledging the economic effects of military spending on job creation, demand stimulation, and technological innovations, critics of inordinately large military spending argue that such benefits are often not worth their cost in terms of opportunities forgone or sacrificed: drain or curtailment of resources that could (and should) be used for investment in both human capital (such as health and education) and physical capital (such as roads, bridges, mass transit, and schools) that could lead to larger economic gains, especially long-term growth and prosperity. In this view, the unfortunate addiction to the disproportionately large doses of military spending needs to be remedied not only because it produces too many *guns* and too little *butter*, but perhaps more importantly, a top heavy military establishment will be unviable in the long run as it tends to undermine the economic base it is supposed to nurture. Furthermore, a large military establishment tends to be baleful to democratic values, republican principles, and civil liberties. It will also corrupt politics and policies both at home and abroad. Perhaps more importantly, to the extent that jobs and livelihoods of many U.S. citizens have become dependent on military spending, it represents a regrettable dependence on a business that is geared to war, death and destruction.

THE MAGNITUTE OF THE PENTAGON BUDGET

The official defense authorization bill for the fiscal year 2004, signed by President Bush on November 24, 2003, stood at $401.3 billion. This figure exceeds the combined expenditures of the other 20 largest military spenders in the world and is about half of the world's total military spending. The figure does not include the costs of wars in Iraq and Afghanistan, which is fast approaching $300 billion. Although the official military budget already eats up the lion's share of the public money, it nonetheless grossly understates the true magnitude of the Pentagon budget. The "real national defense budget," according to Robert Higgs of the Independent Institute, is approximately 754, not 401.3, billion dollars. The reason for this understatement is that the official Department of Defense (DoD) budget excludes not only the cost of wars in Iraq and Afghanistan, but also a number of other major cost items: the Coast Guard and the Department of Homeland Security; nuclear weapons research and development, testing and storage (in the Energy budget); veterans programs (in Veteran's Administration budget); most military retiree payments (in the Treasury budget); foreign military aid in the form of weapons grants for allies (in the State Department budget); interest payments on money borrowed to fund military programs in past years (in the Treasury budget); sales and property taxes at military bases (in local government budgets); and the hidden expenses of tax free food, housing, and combat pay allowances. After adding these disguised and misplaced expenses to the official DoD budget, Higgs concludes: "Thus, the super-grand total in fiscal year 2004 will reach the astonishing amount of nearly $754 billion—or 88 percent more than the much-publicized $401.3 billion—plus, of course, any additional supplemental spending that may be approved before the end of the fiscal year." Higgs further points out: "Therefore, I propose that in considering future defense budgetary costs, a well-founded rule of thumb is to take the Pentagon's (always well publicized) basic budget total and double it. You may overstate the truth, but if so, you'll not do so by much" (Higgs 2004).

In relative terms, the official DoD budget of $401.3 billion for the fiscal year 2004 represents 18.2 percent of the total federal budget of $2200 billion for the year. The “real national defense budget” of $754 billion, on the other hand, represents 34 percent of the total federal budget. But even these inordinately high ratios under-represent the real share of the defense budget. The reason for this inaccuracy is that the Social Security budget—which is a trust fund, and should be treated independent of the federal budget—is included in the overall federal budget. To the extent that this practice overstates the size of the federal budget, it thereby also understates the share taken by the Pentagon budget. For example, if for the fiscal year 2004 we take the Social Security budget of nearly $495 billion out of the total federal budget of $2200 billion, the remainder, which is sometimes called the federal funds portion of the federal budget, will be $1705 billion. On this adjusted basis, the ratio of the official DoD budget of $401.3 billion will be 23.5 percent, up from the 18.2 percent calculated on the basis of the total federal budget. Likewise, the ratio of the “real national defense budget” of $754 billion on the adjusted basis of $1705 billion will be 44 percent, up from 34 percent (Higgs 2004; see also “Summary Federal Budget Tables, FY 2004,” http://www.whitehouse.gov/omb/budget/fy2004/tables.html).

The enormous magnitude of the Pentagon budget can be grasped more clearly through comparison and contrast. For example, in recent years the Pentagon has been spending more money than all other discretionary budget items combined. (These include education, health, housing assistance, natural resources & environment, transportation, veterans’ benefits, science and space, training/employment &social services, economic development programs, and a number of other items.) According to Carlton Meyer, Editor of *G2mil: The Magazine of Future Warfare*, “The USA now spends more money in real dollars (inflation adjusted) on its military than at the peak of the Vietnam war when some 500,000 GIs were in combat, and more than during the Cold War when the powerful Soviet Union existed” (2004). According to the Stockholm-based SIPRI Group, “The United States led the world in defence spending [in 2003], accounting for 47 per cent of the total, followed by Japan with five per cent and Britain, France and China, with four per cent each.” The 47 per cent U.S. share of total world military spending in 2003 has since gone up to nearly 50 per cent (Moore 2004).

In what it claimed to be the first comprehensive accounting of the costs of the war on the U.S., Iraq, and much of the rest of the world, the Institute for Policy Studies (IPS), reported on June 24, 2004, that “the 151.1 billion dollars that will have been spent through this fiscal year could have paid for comprehensive health care for 82 million U.S. children or the salaries of nearly three million elementary school teachers . . . the war and occupation will cost the average U.S. household at least 3,415 dollars through the end of this year.” The report further points out: “If spent on international programs, the same sum could have cut world hunger in half and covered HIV/AIDS medicine, childhood immunization, and clean water and sanitation needs of all developing countries for more than two years” (Bennis, et al. 2004).

The fact that the Pentagon appropriates and controls more than one-third of the entire federal budget has allowed it to forge the largest constituency and/or dependents nationwide. Tens of thousands of businesses, millions of jobs, and thousands of cities and communities have become dependent on military spending. While a handful of major contractors take the lion’s share of military spending, millions more have become dependent on it as the source of their livelihood. As the late Senator William Fulbright observed some 35 years ago, “millions of Americans whose only interest is in making a decent living have acquired a vested interest in an economy geared to war. Those benefits, once obtained, are not easily parted with. Every new weapons system or military installation soon acquires a constituency” (*Congressional Record*; as cited by Lens 1970, pp. 45-46).

It is not surprising then that not many people are willing to oppose the continuing rise in the Pentagon budget—even if they might philosophically be opposed to militarism and large military spending. Because of the widespread presence of military installations and production sites nationwide, few politicians can afford not to support a continued rise in military spending lest that should hurt their communities or constituencies economically. As Howard Swint, Democratic candidate for Congress in West Virginia put it, “The all-powerful cycle of military appropriations, driven by congressional district-specific military pork as rewarded with campaign contributions, prevents any meaningful effort towards demilitarization” (2004). Trade unions seeking to preserve their members’ jobs often find themselves supporting military contracts, even though they may not be in principle in favor of large military spending.

MILITARY SPENDING AS ECONOMIC STIMULUS

Military spending represents a major source of demand for the U.S. national product; indeed, it has remained the largest single source of demand since World War II. An increase in military spending is tantamount to injecting purchasing power into the economy, which will then spur production, investment and employment. Not surprisingly, major beneficiaries of military spending and their lobbyists often defend their desire for continued military buildup on the grounds that military spending stimulates demand, investment, employment, and technical innovation. Expansion of military spending, even if it is deficit spending, becomes especially more facile during times of economic recession. For, during recessionary cycles, the Pentagon’s perennially insatiable appetite for continued expansion of its budget converges with the conjunctural needs of economic policy makers to use military spending as a counter-cyclical, recession-fighting fiscal policy tool in the hope of fending off or ending economic recession. This explains why, in the post-World War II period, some of the most drastic increases in military spending have taken place during periods of economic contraction. For example, when the immediate postwar economic boom of 1947-48 turned to the 1949-50 contraction, “and business analysts almost universally predicted that serious recession was imminent,” President Truman invoked the Soviet threat and drastically increased military spending (Cypher 1981, pp. 12-13).

Likewise, the heightened Cold War hostilities of the late 1970s and early 1980s, which came to be known as the Second Cold War, and the ensuing expansion of military spending were significantly prompted by the need to end the long economic stagnation that had started earlier in the 1970s. Depressed domestic market in the 1970s, combined with powerful competitors in international markets, had seriously threatened industries such as steel, autos, shipbuilding, aerospace, and electronics. Heightened military spending in the late 1970s and early 1980 proved to be a shot in the arm of these and many other anemic industries that benefit, directly or indirectly, from such expenditures. The impact of President Reagan’s drastic increases of military expenditures on national economic recovery can perhaps be gauged by this observation: “In the second quarter of 1980 the Gross National Product fell further. . . . Speculation that the economic situation might duplicate that of 1929 was widespread. Then, almost as suddenly, the recession of 1980 was over. Few noted that one of the major reasons for this reversal was the huge jump of roughly $25 billion in new military contracts issued in fiscal year 1980.” Reflecting that close connection between military spending and economic recovery, Casper Weinberger, the Secretary of Defense at the time, remarked that arms buildup is “the second half of the administration’s program to revitalize America” (Cypher 1981, p. 15).

A similar connection can be detected between the 2000-2002 recession and the Bush administration’s drastic increases in the Pentagon budget. It is true that the increases were approved largely to finance the administration’s wars in Iraq and Afghanistan. But the ease with which they were approved was not unrelated to economic policy makers’ need to stimulate the economy. Commenting on the economic impact of the heightened military spending under

President Bush, James Cypher of the California State University at Fresno wrote, "Much of the new [military] spending will go to new technologies. The information technology sector will probably gain the most . . . according to *Business Week*, electronics and communications components accounted for 40 percent of weapons purchases. So the jump in military spending will function as an industrial policy for the information technology and communications industries, boosting these hard-hit sectors of the U.S. economy" (Cypher 2002, p. 19).

This is why (in addition to short-term demand and/or employment boosting) military spending is also defended on long-term, productivity-enhancing grounds: military spending stimulates investment and technical innovation. The idea here is that military spending enhances productivity through technological spin-off: military spending in research and development and the resulting high technology arms production will be sooner or later transmitted to the civilian sector, thereby leading to economy-wide improvement in productivity. A number of examples are frequently cited in support of this argument. For instance, in an October 1, 2001 article that credited military spending for a lot of post-World War II technological breakthroughs, *Business Week* wrote: "In fact, defense spending on research and development has sparked much innovation. Microchips, radar, lasers, satellite communications, cell phones, GPS, and the Internet all came out of Defense Dept. funding of basic research at the Massachusetts Institute of Technology, Stanford University and national laboratories. There were breakthroughs at IBM and Bell Laboratories, and all were commercialized by Intel Corp., Motorola Inc., and many other corporations."

WEAK/DUBIOUS ARGUMENTS AGAINST MILITARY SPENDING: MILITARY BUILDUP "CROWDS OUT" NON-MILITARY PRIVATE SECTOR INVESTMENT

"Crowding out" is essentially a conservative, neoclassical/neoliberal economic theory that is often invoked in economic policy debates to buttress arguments against social spending. Although the theory was originally developed by anti-interventionist, conservative economists and politicians in their campaign against public sector spending in general, it has been adopted in recent years and decades by many of their liberal counterparts to argue against large military expenditures.

The theory makes two closely linked claims. The first claim, which is sometimes called the "theory of resource diversion," maintains that public-sector expenditures, military or otherwise, lead to an equal and offsetting decrease in private investment. That is, because there is a direct competition for economic resources (financial, labor, production capacity, etc.) between the public and private sectors, any spending by the public sector is tantamount to an equal amount of lost investment by the private sector.

But this argument assumes that the Pentagon and the non-military private investors always compete over a fixed or finite pool of financial resources. This claim implicitly assumes that non-military investors are always short of funds for investment, that they constantly compete with the Pentagon for the same dollars in financial markets, and that, therefore, every dollar borrowed and spent by the Pentagon is a dollar lost in capital markets for non-military investors. Yet, many corporations and businesses often have plenty of internal financial resources as a result of their retained earnings, or undistributed profits; and what they often seek is not so much capital or credit as it is profitable outlets for investing their abundant cash (see, for example, Mandel 1975, Chapter 9).

In terms of macroeconomic categories, the "crowding out" argument implicitly assumes that the overall/national private sector investment (I) and public sector spending (G) are strictly limited by the overall/national amounts of savings (S) and tax dollars (T); that is, (I + G) = (S + T). It follows from this assumption that, given total national savings (S + T), if G is increased, I must be decreased accordingly, and vice versa. In this way, a direct trade-off is established between I and G because the combined source of their funding (S + T) is implicitly assumed to be given as a fixed and inflexible amount. But (I + G) = (S + T) is a financing or income-expenditure equilibrium condition (meaning that, ideally, one should not go beyond one's means); it is rarely an actual or real-world state of affairs. In the real world, and in the short- to medium-term, funding sources of I and G are much more flexible than S, T, or (S + T). The credit system, the money supply and, hence, the sources of funding for both I and G are quite flexible in advanced market economies. For example, during periods of expanding business cycles and optimistic economic scenarios investors would not be constrained by the existing pool of national savings, or by the financial resources of the banking system, because during such periods of optimism financial institutions' ability and willingness to extend credit becomes quite flexible—almost unlimited. As one officer of the New York Federal Reserve Bank has put it, "In the real world, banks extend credit . . . and look for reserves later. In one way or another, the Federal Reserve will accommodate them" (Heilbroner/Galbraith 1990, p. 383).

The claim that the Pentagon and the non-military private sector always chase a fixed or finite amount of dollars in financial markets may be true during cycles of economic growth and expansion, when businesses tend to expand capacity, but not so during cycles of economic decline or contraction. During periods of economic slowdown or recessionary cycles, many businesses simply opt for retrenchment and downsizing, whether they have cash or not. It is usually during such periods of depressed economic conditions and high unemployment that efforts to increase military spending have been most successful, since under such circumstances military expenditures are viewed as stimulus shots in the arm of the depressed economy. Drastic increases in military spending in the early 1950s, the early 1980s, and the early 2000s all came about on the heels of the respective recessionary cycles of those times. Obviously, the large military expenditures under such economic conditions do not push or "crowd" out non-military industrialists from capital or credit markets. On the contrary, such expenditures might spur them into action by providing both new purchasing power in the market and opportunities for profitable investment outlets (Cypher 2002; Wolf 2005; Atesoglu 2004).]

The argument that military spending diverts investment resources away from the non-military private sector is dubious on yet another ground: it assumes that increases in the Pentagon appropriations are financed by increases in taxes on corporate profits and/or high incomes (i.e., by taxing the financial resources for investment, or the so-called *investable* funds). Yet, this is not necessarily the case. In fact, increases in U.S. military spending since the early 1980s have been accompanied by decreases in taxes on corporate profits and higher earnings. The U.S. ruling class has diligently made it certain that increases in the Pentagon budget would not divert *investable* resources away from the non-military private sector. Those increases in the Pentagon budget have been financed, instead, by cuts in non-military public spending, by borrowing from the Social Security Trust Fund, and by plunging the nation into debt and deficit. Indeed, during the last three decades or so, large Pentagon appropriations have been used as a device to strengthen, not weaken, the private sector. As Richard Du Boff aptly points out: "For antigovernment conservatives, military expenditures have acted as a regulatory mechanism, expanding government support for private enterprises and limiting the expansion of the federal government for virtually all non-military purposes" (Du Boff 1989, p. 10).

The second major argument of the "crowding out" theory, in addition to "resource diversion" argument, is that the resources diverted from non-military private-sector production to military production do not generate as many positive or stimulating economic effects (in terms of employment, economic growth, and technological or productivity enhancement) as would non-military or civilian production. Robert W. DeGrasse, an exponent of this view and the author of *Military Expansion: Economic Decline,* writes, for example, "Since soldiers and arms producers do not create goods and services that can be consumed by others," military spending can be "viewed as an impediment to economic progress" (1983, p. 55).

Lloyd J. Dumas, another proponent of this view, likewise writes: "Churches are constructed and bibles are printed not to provide material well being, but to help fulfill the human need for spiritual guidance. . . . By the same token, battle tanks and missiles do not themselves add to the material standard of living . . . they do not directly contribute to the central purpose of the economy and so do not have any economic value. It is logical, then, to classify activities that result in goods or services that do not have economic value as *economically non-contributive*" (initial italics). Dumas further writes, "There is no question that the production of military goods and services is non-contributive activity. Whatever else may be said for such products, they do not add to the present standard of living as consumer goods do, or to the economy's capacity to produce standard-of-living goods and services in the future, as producer goods do" (2005, p. 4).

A detailed analysis of the theoretical weaknesses of these and similar "crowding-out" arguments is beyond our discussion here. Suffice it to say that such weaknesses stem primarily from conceptions of what constitutes productive labor or activities and what constitutes unproductive ones. Arguments that military production is "economically non-contributive," or unproductive, tend to view productive activities in an ahistorical sense; that is, in terms of their general social and economic usefulness. Yet, from a capitalistic point of view—or, more precisely, from the viewpoint of capital—any labor or activity that is profitable is also productive, regardless of what it produces or how its products are used. What defines productive labor under capitalism is *exchange value,* not *use value,* to borrow Karl Marx's felicitous words.

On empirical grounds, too, the hypothesis that economic effects of Pentagon-financed investment are smaller than those of non-military investment has never been conclusively supported by evidence. Research results of econometric studies of the relationship between military spending and economic performance, including both cross-country comparisons and time-series comparisons within the same country, are at best mixed: there are as many studies that tend to reject this hypothesis as those that tend to support it. For example while DeGrasse (1983), Smith and Smith (1983), and Ward and Davis (1992) found negative links between military spending and economic performance, Atesoglu (2002), Nordhaus (2002), and Fordham (1998) found positive links. There are yet other researchers who have found no or negligible links between military spending and economic performance (Gold 2005, Payne and Ross 1992, and Kinsella 1990).

A major part of these mixed results seems to be due to the researchers' choice of the time period, or economic cycle, for their studies. For instance, researchers who focus on the long cycle of economic slowdown of the late 1960s through the early 1980s in the United States tend to attribute the sluggish economic performance of those years to the large U.S. military spending: "Our analysis indicates that America's higher share of gross domestic product (GDP) spent on the military has contributed to the decline in manufacturing competence." By the same token, from the fact that the economies of Germany and Japan, two countries with very small military spending at the time, performed quite strongly during that period, these researchers conclude that there must be a negative correlation between military spending and economic growth, technological progress and productivity enhancement: "Nations with higher military burdens tend to have lower levels of investment and lower productivity growth" (DeGrasse 1983, p. 10).

On the other hand, researchers who have focused on the economic performance of these major industrialized countries in the 1980s and 1990s have come to the opposite conclusion because during those decades the U.S. and U.K., the two countries with large military expenditures, enjoyed stronger economic performance than did Germany and Japan, the two countries with smaller military expenditures. These researchers further invoke the experiences of Nazi Germany in the 1930s and of the United States in World War II, Korea and Vietnam as further evidence that military spending stimulates the economy (Nordhaus 2002; Wolf 2005; Atesoglu 2004).

A major claim of the "crowding out" theory is that, for equal amounts of spending, military production does not create as many jobs as civilian production: ". . . military spending does create employment, but it actually generates fewer jobs for the buck than equivalent civilian expenditures" (Bell, et al. 2004). This argument tends to stand the test of evidence better than other hypotheses of the "crowding out" theory. For example, a 2002 Congressional Budget Office report found that every $10 billion spent on weapons generates 40,000 fewer jobs than $10 billion spent on civilian programs (Gold 2002). The main reason that military production creates fewer jobs than the equivalent civilian investment is that military production tends to use relatively more capital or equipment and less labor than most other industries—although not all other industries. A study conducted in the early 1980s by the Employment Research Associates showed that military production created roughly 28,000 jobs per billion dollars of investment. The study also indicated that while (for the same billion dollars) most civilian industries such as public works projects and education services created more jobs, there were also a number of civilian industries such as oil refining and car manufacturing that created fewer jobs. Overall, the 28,000 arms production jobs were only "slightly less than the 30,000 jobs created by the median industry in the Bureau of Labor Statistics' input-output model" (DeGrasse 1983, pp. 30 and 41). The claim that military production creates "fewer jobs for the buck than the equivalent" non-military production is, of course, relevant only to the part of the Pentagon budget that is spent on its purchases for procurement purposes, the portion that is spent by its contractors for arms production. The argument is irrelevant to the part of the Pentagon budget that goes directly to pay its personnel because government employment created by military spending is comparable to other types of federal employment. Money for civil service workers creates approximately the same number of jobs whether it is spent by the Defense Department or by other departments.

In brief, the theory that military spending crowds out non-military private-sector investment and/or production and, therefore, impedes economic performance is a weak theory. At best, it is inconclusive and unconvincing; at worst, it is overwhelmed by counter arguments and evidence that military spending is more likely to be stimulating, not impeding, an advanced market economy. The argument is based on dubious assumptions that tend to downplay the "spin-off" and innovation effects of military spending. It is true that exotica like "star wars" may be diverting high tech resources, especially the highly skilled labor force such as engineers and scientists, from critical civilian resources. But it should also be remembered, once again, that it was the Cold War era military competition that brought forth the computer, and the space race gave birth to the semiconductor. Likewise, "several other key industries—aircraft and engines, composite materials, communications equipment, scientific instruments—received their initial stimulus and production runs from military contracts" (Du Boff 1989, p. 5). It is important to recall that WW II military spending brought the U.S. economy out of the lingering effects of the 1930s depression. One should likewise keep in mind that the drastic military increases of the early 1950s helped reverse the recessionary cycle of the late 1940s, and the similarly sweeping increases of the pentagon expenditures of the early 1980s helped end the 1980-82 recession.

But while the claim that military spending crowds out non-military private sector investment is dubious, there is no question that it crowds out non-military public sector spending, that is, spending on public capital formation, both human and physical capital. This will be examined next.

MILITARY SPENDING CROWDS OUT PUBLIC, NOT PRIVATE, SECTOR SPENDING: A REGULATORY MECHANISM TO REVERSE THE NEW DEAL AND REDISTRIBUTE NATIONAL RESOURCES IN FAVOR OF THE WEALTHY

It follows from the above discussion that what gets pushed out, or forgone, by military spending is often not private-sector investment spending but non-military public spending. This includes both physical capital, or physical infrastructure (such as roads, bridges, mass transit, schools, drinking water, wastewater, dams, solid waste, hazardous waste, navigable waterways and energy) and human capital, or soft/social infrastructure, such as health and education. In other words, it is often the proverbial *butter* that gets melted away when a disproportionately large share of public money is allocated to the production of *guns*.

Official macroeconomic figures show that, over the past five decades, government spending (at the federal, state and local levels) as a percentage of GNP (gross national product) has remained fairly steady—at about 20 percent. Given this nearly constant share of the public sector of GNP, it is not surprising that increases in military spending have almost always been accompanied or followed by compensating decreases in non-military public spending. This is, of course, not fortuitous because instead of financing through progressive taxation such additions to military spending have been increasingly accompanied by tax cuts on the wealthy—which have then forced cuts on non-military public spending in order to close the budget gaps that are thus created. For example, in the early 1980s, as President Reagan drastically increased military spending, he also just as drastically lowered tax rates on higher incomes. The resulting large budget deficits were then paid for by more than a decade of steady cuts on non-military spending. Likewise, the administration of President George W. Bush has been pursuing a similarly sinister fiscal policy of cutting social spending while increasing military spending and granting the wealthy huge tax breaks.

The trade-off between military and civilian components of public spending was also confirmed by the fact that when, for example, by virtue of FDR's New Deal reforms and LBJ's metaphorical War on Poverty, the share of non-military government spending rose significantly the share of military spending declined accordingly. From the mid-1950s to mid-1970s, the share of non-military government spending of GNP rose from 9.2 to 14.3 percent, an increase of 5.1 percent. During that time period, the share of military spending of GNP declined from 10.1 to 5.8 percent, a decline of 4.3 percent. (Of course, this did not mean that military spending declined in absolute terms; it declined only as a ratio of a bigger and bigger GNP, and in relation to social spending.) That trend was reversed when President Reagan took office in 1980 (Du Boff 1989, p. 6).

As Reagan embarked on his "rearming of America," as he put it, and successfully put into effect his notorious *supply-side* tax cuts for the wealthy, he also cut non-military public spending to make up for the resulting budget shortfalls. From 1978 through 1983, real military spending climbed more than 28 percent, from $161 billion to $207 billion. During that period, real federal grants to state and local governments—a major source for investment in public works projects—dropped 25 percent, from $109 billion to $82 billion. From 1983 through 1988, military spending jumped another 27 percent in real terms, while federal grants to state and local governments "were practically unchanged. Thus, in the late 1980s only 13 percent of state and local government spending was going to public capital formation compared with an average of 30 percent in the 1950s and 1960s" (Ibid. p. 8).

Although President Reagan’s military spending hikes and his supply-side tax cuts helped turn the stagnant economy of the 1970s into the expanding cycle of the 1980s, by the same token it also helped create an imbalance in the opposite direction: insufficient investment in, hence insufficient formation of, physical public capital such as highways, bridges, mass transit, waste water facilities, hazardous waste sites, and the like. The resulting imbalance, or gap, between the expanding economy and the shrinking investment in public works/capital “produced a crunch, in the form of an expanding private economy generating greater demands for public services that cannot be supplied by a public sector becoming relatively smaller. Its manifestation is the dilapidated state of the public infrastructure—streets and highways, bridges, mass transit and railways” (Ibid. p. 7).

In March 2001, the American Society of Civil Engineers (ASCE) issued a “Report Card for America's Infrastructure,” grading 12 infrastructure categories at a disappointing D+ overall, and estimating the need for a $1.3 trillion investment to bring conditions to acceptable levels. In September 2003, ASCE released a Progress Report that examined trends and assessed the progress and decline of the nation’s infrastructure. The Progress Report, prepared by a panel of 20 eminent civil engineers with expertise in a range of practice specialties, examined 12 major categories of infrastructure: roads, bridges, mass transit, aviation, schools, drinking water, wastewater, dams, solid waste, hazardous waste, navigable waterways and energy. The report concluded: “The condition of our nation's roads, bridges, drinking water systems and other public works have shown little improvement since they were graded an overall D+ in 2001, with some areas sliding toward failing grade.” Thomas L. Jackson, ASCE President, pointed out: "Time is working against our nation's infrastructure. . . . Since we graded the infrastructure in 2001, our roads are more congested than ever, the number of unsafe and hazardous dams has increased, and our schools are unable to accommodate the mandated reductions in class size" (http://www.asce.org/reportcard/index.cfm?reaction=news&page=5).

Commenting on this ominous trend of the nation’s infrastructure, Seymour Melman, emeritus professor of industrial engineering at Columbia University, wrote, “All this is an important indicator of the opportunity cost, of what has been forgone, as a consequence of the Permanent War Economy” (Melman 2003).

Proponents of laissez-faire economics—interchangeably called neoclassical, neoliberal, or supply-side economists—tend to view government spending on public capital as a burden on the economy. Instead of viewing public sector spending on infrastructure as a long-term investment that will help sustain and promote economic vitality, they view it as an overhead. In other words, they seem to lose sight of the indirect, long-term returns to the tax dollars invested in the public capital stock by focusing on the current, short-term balance sheets. Yet, evidence shows that neglect of public capital formation can undermine long-term health of a market economy in terms of productivity enhancement and sustained growth.

For example, a 1987 study by the Chicago Federal Reserve Bank concluded that “the rates of return are now higher on public than on private investment.” The study pointed out that there had been a drastic decline in public capital formation since the 1960s (an ominous trend that continues to this day): “public investment was as high as 2.3 of GNP in 1965-69, but by 1980-84 it had fallen to a mere 0.4 percent.” The study argued that the decline in public capital formation paralleled a decline in the rate of profit on private investment. The reason for this correlation is that as the public investment on infrastructure is cut, private investors find that their costs are higher for transportation, water, and so on. Thus a deficiency of public investment hurts the private sector: “If public capital formation were to return to its 1953-1969 average of 2.1 percent of GNP, private profitability would rise by over 2 percentage points. The total national capital stock would be higher, and the economy would be more productive" (Heilbroner/Galbraith 1990, pp. 299-300).

Continued increase in military spending at the expense of non-military public spending has undermined more than physical infrastructure. Perhaps more importantly, it has also undercut public investment in soft/social infrastructure such as health care, education, nutrition, housing, and the like—investment that would help improve quality of life, human creativity and labor productivity, thereby also helping to bring about long-term socioeconomic vitality. Investment in human capital—anything that improves human capacity and/or labor force productivity, such as education and health care—is a major source of social health and economic vitality over time.

Sadly, however, public investment in such vitally important areas has been gradually curtailed during the past quarter century or so in favor of steadily rising military spending. Evidence of this regrettable trend is overwhelming. To cite merely a few examples: "The war priorities have depleted medical and education staffs. U.S. medical planning now includes programs to recruit large numbers of nurses from India." And again: "Shortages of housing have caused a swelling of the homeless population in every major city. State and city governments across the country have become trained to bend to the needs of the military—giving automatic approvals to its spending without limit. The same officials cannot find money for affordable housing" (Melman 2003). The *New York Times* columnist Bob Herbert reported on 6 February 2003 that, at the time, some 5.5 million young Americans, age 16 to 24, were undereducated, disconnected from society's mainstream, jobless, restless, unhappy, frustrated, angry and sad. Commenting on this report, Professor Seymour Melman of Columbia University wrote: "This population, 5.5 million and growing, is the product of America's national politics that has stripped away as too costly the very things that might rescue this abandoned generation and train it for productive work. But that sort of thing is now treated as too costly. So this abandoned generation is now left to perform as fodder for well-budgeted police SWAT teams" (Ibid.)

Ever since the Great Depression (and the concomitant social pressure from below) forced the New Deal reforms on the U.S. ruling elite, opponents of social spending were on the lookout to undermine those and other reforms that were put into effect in the 1950s and 1960s as part of what came to be known as the "war on poverty." That opportunity arrived when President Reagan arrived in the White House. As the opponents of social spending began to put into effect their supply-side economic policies through the Reagan administration, it soon became clear that their strategy to roll back the New Deal and other poverty-reducing reforms was not very far from cynical: drastic tax cuts for the wealthy along with drastic hikes in military spending. As this combination created big budget deficits, it forced cuts in non-military public spending as a way to fill the budget gaps that were thereby created. Thus, for example, a frustrated but powerless Senator Ernest Hollings bitterly complained in 1984 that the combination of raising the Pentagon budget and lowering tax rates on high incomes had "intentionally created a deficit so large that we Democrats will never have enough money to build the sort of government programs we want" (Du Boff 1989, p. 10). David Stockman, President Reagan's budget director and one of the main architects of his supply-side tax cuts, implicitly confirmed this cynical policy of simultaneously raising military spending and cutting taxes on the wealthy in order to force cuts in non-military government spending: "Cutting defense had never been my real ideological agenda. My aim had always been to force down the size of the domestic welfare state to the point where it could be adequately funded with the revenues after the tax cut" (Ibid.).

With minor exceptions, the trend that was thus set in motion in the early 1980s—sustained increases in military spending financed primarily by sustained cuts in non-military public spending—continues to this day. The resulting steady decline in social spending has had dire consequences: increased economic insecurity for many, further deepening of class divisions, and a considerable slowdown or reversal of the so-called upward social mobility that appeared so promising in the immediate few decades after World War II.

Opponents of social spending tend to justify these policies in terms of market mechanism: that all they want is to keep "government hands off the people's pocket" and to let the "invisible hand of the market mechanism" regulate the economy. Yet, their twin policy of tax break for the wealthy and lion's share of public money for military industries seems more akin to an iron fist that is designed to redistribute national resources in favor of the wealthy than the invisible hand of market mechanism. Aptly calling this strategy a "regulatory mechanism," Richard Du Boff of Bryn Mawr College, author of *Accumulation & Power*, writes:

> For over four decades now, the "iron triangle"—Congress, the Pentagon, and the prime arms contractors—has kept the double-edged sword of military spending well honed. One edge bolsters aggregate demand and corporate profits in the economy; the other keeps resources away from a potentially vigorous and attractive civilian government sector. For antigovernment conservatives, military expenditures have acted as a regulatory mechanism, expanding government support for private enterprises and limiting the expansion of the federal government for virtually all non-military purposes (1989).

An ominous—though logical—consequence of the use of the Pentagon appropriations as a redistributing mechanism of national resources in favor of the wealthy has been further exacerbation of economic inequality. Calling this insidious mechanism of resource allocation in favor of the affluent "redistributive militarism," James Cypher of California State University at Fresno wrote: "Redistributive militarism functioned to transfer income from those in the bottom 80 percent of income distribution to those within the top 20 percent through: (1) an expansion in military procurement of unprecedented proportions; (2) increasingly lax procurement practices, which permitted both higher profit margins and a greater volume of business for arms contractors; (3) a substantive increase in the relationship between arms buildups and federal deficits." The last point of this quotation refers to the fact that when military buildup is financed not through progressive taxation but through borrowing, as has been done in the U.S. since the early 1980s, it serves to transfer increasing amounts of public money to the lenders or bondholders of federal debt "who, overwhelmingly, are to be found within the top 20 percent of the distribution of income." That is, partisans of militarism tend to finance their continued military buildup not by paying their "fair" share of taxes but by lending what they do not pay in taxes to the federal government and, of course, earning interest (Cypher 1991, pp. 609-610).

When military spending escalated during World War II, President Franklin D. Roosevelt told the American people, "Not a single war millionaire will be created in the United States as a result of this world disaster" (Bell, et al. 2004). Today, however, war and militarism have become major vehicles to the land of millionaires and billionaires. Major Pentagon contractors and their CEOs are among the richest corporations and individuals nationwide. Today's earnings of the CEOs of major Pentagon contractors, once roughly the same as their counterparts in other industries, are significantly higher. From 200l to 2002, defense spending rose by l4 percent, but median total compensation of CEOs at the 37 largest publicly traded defense contractors leaped by nearly 79 percent. In 2002, CEOs of major defense contractors raked in an average of $11.3 million—577 times as much as the annual earnings of an Army private of $19,600 risking his or her life in Iraq. These soldiers are obviously not winners, nor are persons in the reserves and National Guard who are called to protracted active duty overseas. The real winners are war industries, their CEOs, and their lobbyists, who are bilking the American taxpayers. This is a clear vindication of President Dwight Eisenhower's prescient warning that the "military-industrial-complex [would] cause military spending to be driven not by national security needs but by a network of weapons makers, lobbyists and elected officials” (Ibid.).

Another ominous consequence of the escalating defense appropriations, combined with deep tax cuts for the wealthy, has been fiscal difficulties at all levels of government. At the federal level, budget deficit is fast approaching half a trillion dollars and the national debt (which is essentially accumulated deficit over time) is now over seven trillion dollars. This has greatly contributed to the fiscal crises in many state and local governments and forced drastic cuts in social and infrastructural spending. As noted earlier, this is not altogether fortuitous; it is a direct result of the strategy of simultaneously increasing the Pentagon budget while at the same time lowering taxes for the wealthy in order to deliberately create budget deficits and, thereby, force cuts on non-military public spending. Deliberate and cynical or not, the fact is that this warped fiscal policy has been devastating to tens of millions of poor and working people. It has also placed middle and lower-middle classes under financial stress.

Cuts in federal spending have meant a greater burden on state governments to meet their budgetary obligations. And while states are required to make up the shortfalls, they have faced their own greatest fiscal crises in decades—crises that have been caused by reduced federal grants, increased costs for homeland security, the general economic downturn, and federal and state tax cuts. The National Conference of State Legislatures estimated that between 2001 and 2003 states had to close a cumulative budget gap approaching $200 billion. Because many state income tax rates are linked to federal rates, state revenues fell in tandem with the federal cuts. But unlike the federal government that can run large deficits, virtually all states are required either by their constitutions or laws to have balanced budgets. Thus, to make up for the shortfalls, states have been forced to dip into reserve funds, slash basic services and/or raise taxes and user fees. Typically, states have cut services and shifted the burden onto cities and towns, adding to the urban crisis that already afflicts many of them. Hardest hit by cuts in services are vulnerable populations who are often concentrated in urban areas—families with disabled members, senior citizens, single mothers and their children, the working poor and the precarious middle class that is one paycheck or unpaid hospital bill away from poverty. Moreover, when state and local budgets are cut, not only are vital programs affected, but so is a major source of employment: state and local governments employ one in seven U.S. workers and have been a major source of job growth (Bell, et al. 2004).

POLICY DISASTERS COMPOUND NATURAL DISASTERS: THE CASE OF HURRICANE KATRINA

The fact that neglect of public infrastructure can inflict heavy socio-economic tolls, especially on the economically-vulnerable social strata, was tragically demonstrated by the destruction wrought by Hurricane Katrina. In light of the steady cuts of the infrastructural funding for the city of New Orleans, especially of the funds that would maintain and/or reinforce the city’s levee system, catastrophic consequences of a hurricane of the magnitude of Katrina were both predictable and, indeed, predicted. Engineering and meteorological experts had frequently warned of impending disasters such as Katrina. Government policy makers in charge of maintaining public infrastructure, however, remained indifferent to (at times, even indignant of) those warnings. They seem to have had other priorities and/or responsibilities: cutting funds from public infrastructure and social spending and giving them away (in the form of tax cuts) to the wealthy supporters who had paid for their elections. It is not surprising, then, that many observers and experts have argued that Katrina was as much a policy disaster as it was a natural disaster.

It is important to point out here that not all the policy or government failures in the face of the Katrina disaster can be painted as the exclusive product of the Bush administration. Undoubtedly, the administration played a major role in compounding the destructive effects of the disaster; but, as pointed earlier, the roots of government irresponsibility and the origins of the policies of neglecting public infrastructure descend far back into the past, into President Reagan's supply-side economics, also known as Reaganomics. The core of Reaganomics has been to undermine social safely net programs, to reverse the New Deal and other anti-poverty programs, and to redistribute national resources in favor of the wealthy. As noted earlier, simultaneous escalation of the Pentagon budget and drastic tax cuts for the wealthy has been used as a cynical strategy in pursuit of this objective: as this combination creates big gaps in the federal budget, social spending is then slashed to close such gaps.

The moral of Katrina disaster, as pointed out by George Lakoff of *AlterNet*, can be summarized as follows:

> It was not just a failure of execution (William Kristol), or that bad things just happen (Laura Bush). It was not just indifference by the President, or a lack of accountability, or a failure of federal-state communication, or corrupt appointments in FEMA . . . or the inexcusable absence of the National Guard off in Iraq. It was all of these and more, but they are the effects, not the cause. . . . The cause was political through and through—a matter of values and principles. . . . Eliminating as much as possible of the role of government accounts for the demotion of FEMA from cabinet rank, . . . for the budget cuts in levee repair, for placing more responsibility on state and local government than they could handle, . . . and for the lax regulation of toxic waste dumps contributing to a 'toxic stew'. . . . This is a failure of moral and political philosophy—a deadly failure (2005).

More specifically, the primary cause of the Katrina destruction must be sought in the political and philosophical outlook of supply-side economics, in the ominous legacy of (extended) Reaganomics—a philosophy that views government spending in public infrastructure not as investment in the future of the nation but as an overhead that needs to be cut as much as possible, a philosophy that ever since the days of President Reagan has systematically curtailed spending on public works, thereby making them susceptible to collapse and destruction.

As noted above, in light of the steady curtailment of the non-military public spending since the advent of the Reagan administration, and the resulting erosion of public infrastructure, engineering and meteorological experts had over the years issued a number of warnings regarding the vulnerability and the likely collapse of the New Orleans levee system. But expert advices to head off the calamity by proactive and/or preventive measures were ignored. For example, in 1998, after a close call with Hurricane Georges, a sophisticated computer study by Louisiana State University warned of the "virtual destruction" of the city by a category four storm approaching from the southwest. Indeed, ever since the nasty experience of Hurricane Betsy in September 1965 (a category three storm that inundated many eastern parts of Orleans Parish that were drowned by Katrina), the vulnerability of the city to hurricanes has been intensively studied and widely publicized.

The New Orleans project manager for the Army Corps of Engineers, Alfred Naomi, had warned for years of the need to shore up the levees, but corporate representatives in the White House and the Congress kept cutting back on the funding. The most recent cutback was a $71.2 million reduction for the New Orleans district in fiscal year 2006. "I've never seen this level of reduction," Naomi told the New Orleans City Business paper on June 6. His district had "identified $35 million in projects to build and improve levees, floodwalls, and pumping stations," the paper said. But with the cuts, "Naomi said it's enough to pay salaries but little else."

Naomi wasn't the only one who warned of this disaster. In 2001, the Federal Emergency Management Agency (FEMA) "ranked the potential damage to New Orleans as among the three likeliest, most catastrophic disasters facing the country," wrote Eric Berger in a prescient article in the *Houston Chronicle* on December 1, 2001, entitled "Keeping Its Head Above Water: New Orleans Faces Doomsday Scenario." In that piece, Berger warned: "The city's less-than-adequate evacuation routes would strand 250,000 people or more, and probably kill one of ten left behind as the city drowned under twenty feet of water. Thousands of refugees could land in Houston" (as quoted in Rothschild 2005).

Shortly afterwards, the magazine *Scientific American* published an account of the flood danger ("Drowning New Orleans", October 2001) which, like the award-winning series ("The Big One") in the local newspaper, the *Times-Picayune*, in 2002, was chillingly accurate in its warnings.

In June 2003, Civil Engineering Magazine ran a long story by Greg Brouwer entitled "The Creeping Storm." It noted that the levees "were designed to withstand only forces associated with a fast-moving" Category 3 hurricane. "If a lingering Category 3 storm—or a stronger storm, say, Category 4 or 5—were to hit the city, much of New Orleans could find itself under more than twenty feet of water." One oceanographer at Louisiana State University, Joseph Suhayda, modeled such storms and shared his findings with "emergency preparedness officials throughout Louisiana," the article noted. "The American Red Cross estimates that between 25,000 and 100,000 people would die" if the hurricane floods breached the levees and overwhelmed the city's power plants and took out its drainage system (Rothschild 2005).

On October 11, 2004, *The Philadelphia Inquirer* ran a story by Paul Nussbaum entitled "Direct Hurricane Hit Could Drown City of New Orleans, Experts Say." It warned that "more than 25,000 people could die, emergency officials predict. That would make it the deadliest disaster in U.S. history." The story quoted Terry C. Tuller, city director of emergency preparedness: "It's only a matter of time. The thing that keeps me awake at night is the 100,000 people who couldn't leave."

But government representatives of big business in the White House and the Congress were not moved by these ominous predictions; the warnings did not deter them from further cutting non-military public spending in order to pay for the escalating military spending and for the additional tax cuts for the wealthy. "The Bush administration's response to these frightening forecasts was to rebuff Louisiana's urgent requests for more flood protection: the crucial Coast 2050 Project to revive protective wetlands, the culmination of a decade of research and negotiation, was shelved and levee appropriations, including the completion of defenses around Lake Pontchartrain, were repeatedly slashed" (Davis 2005).

More than precious dollars were diverted to Iraq. In addition, much of the Louisiana and Mississippi National Guard personnel were also tied to the war: "Some 6,000 National Guard personnel in Louisiana and Mississippi who would be available to help deal with the aftermath of Hurricane Katrina are in Iraq," Pete Yost of AP reported on August 29. "The war has forced the Guard into becoming an operational force, far from its historic role as a strategic reserve primarily available to governors for disasters and other duties in their home states" (Ibid.)

Not only did the Bush administration and its corporate allies in the Congress not finance urgent requests for the repair of the deteriorating public infrastructure, but at times the administration even punished dedicated civil servants who insisted on the necessity of such repairs. For example, Mike Parker, the former head of the Army Corps of Engineers, "was forced to resign in 2002 over budget disagreements with the White House." Parker drew media attention (and the White House's ire) in 2002 by telling the Senate Budget Committee that a White House proposal to cut just over $2 billion from the Corps' $6 billion budget request would have a "negative impact" on the national interest. After Parker's Capitol Hill appearance, Mitch Daniels (former director of the Office of Management and Budget, which sets the administration's annual budget goals), wrote an angry memo to President Bush, writing that Parker's testimony "reads badly . . . on the printed page," and that "Parker. . . [was] distancing [himself] actively from the administration." Parker "was forced to resign shortly thereafter" (Vest/Root 2005).

The amount of investment that could reinforce the New Orleans levee system and save the city from death and destruction pales by the magnitude of the loss in terms of lives and property. For example, Alfred Naomi, The New Orleans project manager for the Army Corps of Engineers, who had drawn up plans for protecting New Orleans from a Category 5 storm, pointed out soon after Katrina hit: "It would take $2.5 billion to build a Category 5 protection system, and [now] we're talking about tens of billions in losses, all that lost productivity, and so many lost lives and injuries and personal trauma you'll never get over" (Ibid.).

Some disasters cannot be prevented from occurring. But, with proper defenses, they can be contained and, therefore, prevented from destroying lives and property. Katrina was not. It was not "because of a laissez-faire government that failed to bother to take warnings seriously," and because of a skewed government fiscal policy "that is stingy when it comes to spending on public goods but lavish on armaments and war" (Rothschild 2005). More fundamentally, because, driven by powerful especial interests, the government has ever since the advent of Reaganomics in the 1980 been steadily diverting non-military public spending to military spending and tax cuts for the wealthy, thereby bringing about a steady erosion of the infrastructural defense systems against natural disasters.

The fundamental moral of Katrina disaster is unmistakable: contrary to the dogma of neoliberalism, governments bear vital responsibilities. These include provision of essential services and critical public goods that individuals and the private sector would not provide. They also include the building of a robust public infrastructure that is necessary for a vibrant economy and a civilized society. These responsibilities sometimes mean setting standards and instituting regulations in order to protect citizens against both natural disasters and failures of a market economy (such as making buildings earthquake proof, or having basic housing codes, or requiring factories and cars to limit pollution). Perhaps most importantly, government responsibilities include investment in vital public capital formation, both physical capital (such as roads, bridges, dams, levees, and public transit) and soft, social, or human capital (such as education and education). Myopic supply-side calculations, prompted by powerful special interests, tend to view these expenditures as redundant overheads that need to be curtailed as much as possible. Sensible, judicious or responsible governments, however, would view such expenditures as vital investments in the long-term economic vitality and social prosperity that would more than offset the short-term costs of those investments.

REFERENCES

Atesoglu, Sonmez H (2004). "Defense Spending and Investment." *Journal of Post-Keynesian Economics* Volume 27, Number 1, pp. 163-169.

Atesoglu, Sonmez H (2002). “Defense Spending Promotes Aggregate Output in the United States—Evidence from Cointegration Analysis.” *Defense and Peace Economics* Volurme13, Number 1 (February): 55-60.

Bell, Charles et al. (2004). “The Permanent War Economy: Real Security or False Promise?” National Jobs for All Coalition, Special Report 4 (January), <http://www.njfac.org/sr4.htm>.

Bennis, Phyllis et al. (2004). “Paying the Price: The Mounting Costs of the Iraq War.” *Common Dreams* (24 June), <http://www.commondreams.org/cgi-bin/print.cgi?file=/headlines04/0624-01.htm>.

Cypher, James (2002). “Return of the Iron Triangle: The New Military Buildup.” *Dollars and Sense*, Number 239 (January/February): 16-19 and 37-38.

Cypher, James (1991). “Military spending after the Cold War.” *Journal of Economic issues* Volume 25, Number 2 (June): 607-615.

Cypher, James (1981). “The Basic Economics of Rearming America.” *Monthly Review*, Volume 33, Number 6, pp. 11-28.

Davis, Mike (2005). “Catastrophic Economics: The Predators of New Orleans.” *Le Monde Diplomatique* (October), <http://www.mltoday.com/Pages/Commentary/Davis-Catastrophic.html>.

DeGrasse, Robert (1983). *Military Expansion, Economic Decline*. New York: Council on Economic Priorities.

Du Boff, Richard (1989). “What Military Spending Really Costs.” *Challenge* 32 (September/October): 4-10.

Dumas, Lloyd J (2005). “Bang for the Buck: The real Effects of Military Spending on Security.” paper presented at the Allied Social Sciences Association, Philadelphia, PA (January).

Dumas, Lloye J. (1986). *The Overburdened Economy*. Berkeley and Los Angeles: University of California Press.

Heilbroner, Robert and James Galbraith (1990). *Understanding Macroeconomic*. Englewood Cliffs, New Jersey: Prentice Hall.

Fordham, Benjamin O (1998). *Building the Cold War Consensus: The Political Economy of U.S. National Security Policy*. Ann Arbor, MI: Michigan University Press.

Gold, David (2005). “Does Military Spending Stimulate or Retard Economic Performance? Revisiting an Old Debate.” Paper presented at the annual meeting of the Allied Social Science Association, Philadelphia, PA (8 January).

Gold, David (2002). “Fewer Jobs, Slower Growth: Military Spending Drains the Economy.” *Dollars and Sense* (July-August), <http://www.thirdworldtraveler.com/Military_Budget/MilitaryBudget_Economy.html>.

Higgs, Robert (2004). “The Defense Budget Is Bigger Than You Think.” *antiwar.com* (January 25), <http://www.antiwar.com/orig2/higgs012504.html>.

Kinsella, David (1990). “Defense Spending and Economic Performance in the United States: A Causal Analysis.” *Defense Economics* Volume 1, Number 4, pp. 295-309.

Lakoff, George (2005). “The Post-Katrina Era.” *AlterNet.org* (September 6), <http://www.alternet.org/story/25099/>.

Lens, Sidney (1970). *The Military-Industrial Complex*. Kansas City, Missouri: Pilgrim Press & the National Catholic Reporter.

Mandel, Ernest (1975). *Late Capitalism*. London: New Left Books, Chapter 9.

Melman, Seymour (2003). “They Are All Implicated: In the Grip of Permanent War Economy.” *Counterpunch.com* (15March), <http://www.counterpunch.org/melman03152003.html>.

Meyer, Carlton (2004). “Freeze the Military Budget.” *G2mil, the Magazine of Future Warfare* (March), <http://www.g2mil.com/Mar2004.htm>.

Moore, Matt (2004). “Global Military Spending Soars.” <http://cnews.canoe.ca/CNEWS/World/2004/06/09/pf-492268.html>.

Nordhaus, William D (2002). “The Economic Consequences of War in Iraq.” *New York Review of Books* Volume 49, Number 19 (December 5), <http://www.nybooks.com/articles/article-preview?article_id=15850>.

Payne, James E. and Kevin L. Ross (1992). “Defense Spending and the Macroeconomy.” *Defense Economics* Volume 3, Number 2, pp. 161-168.

Rothschild, Matthew (2005). “Katrina Compounded.” *The Progressive* (September 1), <http://progressive.org/?q=node/2377>.

Smith, Dan and Ron Smith (1983). *The Economics of Militarism*. London: Pluto Press.

Swint, Howard (2004). “The Pentagon Ruled by Special Interests.” <http://www.swintforcongress.us/Pentagonpercent20Wastepercent20Oppercent20Ed.htm>.

Vest, Jason and Justin Root (2005). “Ex-Army Corps officials say budget cuts imperiled flood mitigation efforts.” *GovExec.com* (September 1), <http://www.govexec.com/dailyfed/0905/090105jv1.htm>.

Ward, Michael D. and David R. Davis (1992). “Sizing Up the Peace Dividend: Economic Growth and Military Spending in the United States, 1948-1996.” *American Political Science Review* Volume 86, Number 3 (September): 748-755.

Wolf, Martin (2005). “Outpaced: Why Are the Big Euro-Zone Countries and Japan Doing Worse than English Speaking Nations.” *Financial Times* (January).