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Chapter Author: Arthur F. Burns

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THIRTEEN

Economic and Social Impact of the Defense Sector

IN HIS FAMOUS farewell address, President Eisenhower warned the nation to remain vigilant of what he called "the military-industrial complex." This warning needs to be remembered and pondered by thoughtful citizens. An age of nuclear weapons leaves no time for assembling the military and industrial forces needed to repel an aggressor. Once a nation is attacked, it can be practically destroyed in a matter of minutes. For this reason, as well as because of the unhappy state of our relations with the Communist bloc, "normalcy" for us has come to include since 1950 a formidable military establishment in a state of constant readiness, if need be, for war. But "the conjunction of an immense military establishment and a large arms industry," as President Eisenhower has observed, "is new in the American experience. The total influence —economic, political, even spiritual—is felt in every city, every statehouse, every office of the Federal government." My purpose today is to consider with you some of the ways in which the emergence of a massive and permanent defense sector has

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already changed and is continuing to change our economic and social life.

I

To begin with, the defense sector has revolutionized governmental finances in our generation. In fiscal year 1948, federal expenditures came to $36 billion. In fiscal 1964, well before Vietnam became a significant financial burden, spending on national defense alone amounted to $54 billion, or half as much again as the total budget in 1948. In the current fiscal year, the defense budget may amount to about $80 billion, but this huge sum still does not indicate the full financial cost of defense activities. The federal government expects to spend another $5 billion on international programs and also $5.25 billion on space research and technology. These activities, of course, are mainly pursued in the interests of our national security. Moreover, the federal budget allows $10.5 billion for interest on the public debt and over $6.5 billion for veterans' benefits, the former being preponderantly and the latter entirely a legacy of past wars. Thus, defense-related expenditures will probably come this year to over $100 billion—a sum that represents more than $500 for every man, woman, and child of our population.

The large and rising cost of defense activities would have caused financial problems even if other costs of government had not changed. In fact, as we all know, the range of governmental activities has greatly increased. Since the end of World War II, the American people have come to expect their government to maintain economic conditions that are generally conducive to full employment. The federal government has been also under increasing pressure to enlarge social services—that is to say, improve the nation's schools, help support uni-

versities, improve hospitals and medical facilities, facilitate home ownership, reduce urban slums, promote safer and faster air travel, raise social security and related welfare benefits, train manpower for the needs of industry, seek ways of reducing air and water pollution, and even concern itself with problems of traffic congestion and police protection. These expanding interests of the federal government are a political response to the increasing urbanization of modern life, the new opportunities opened up by advances in technology, and the growing impatience for better living on the part of many citizens who have been left behind by the march of progress. Thus, at the very stage of history when demographic, technological, and political trends have been releasing powerful forces to raise the costs of government, the defense sector likewise became an increasing burden on the Treasury. The inevitable result has been a vast growth of federal spending—from $36 billion in fiscal 1948 to $120 billion in 1964, and probably $175 billion, if not more, this fiscal year.

The upsurge of federal spending on defense and on civilian activities has naturally resulted in much higher taxes. To be sure, we have recently become accustomed to deficits when the economy is booming as well as when the economy is depressed. The role of deficits in governmental finance, however, is commonly exaggerated. From mid-1946 to June, 1967, the cumulative revenue of the federal government covered all but 2 per cent of its expenditures, so that federal taxes have in fact grown just about as rapidly as expenditures. Our economy has also grown substantially during this period, but not enough to prevent taxes from siphoning off an increasing portion of the national income. In fiscal 1940, federal revenues came to about 7 per cent of the gross national product, in 1950 to 15.5 per cent, in 1960 to 19 per cent, last year to 20 per cent. Meanwhile, state and local taxes have also moved up—indeed, they

have grown even more rapidly during the past ten or twenty years than federal taxes. According to the national income accounts, the combined revenue of all governmental units amounted in the past fiscal year to about 29 per cent of the gross national product and 32 per cent of the net national product; and even the higher figure may understate the tax burden, since it makes inadequate allowance for the capital used up in the process of producing goods and services.

This year, with the war in Vietnam escalating and social expenditures also rising, the federal budget deficit may well exceed $20 billion unless steps are taken to raise taxes and curb expenditures. To reduce the enormous deficit now in sight, President Johnson has proposed a 10 per cent surcharge on income taxes, but the Congress has thus far failed to adopt the proposal. Some members of Congress feel that the tax burden is already so heavy that it would be wiser to cut governmental expenditures than to raise taxes. Others would be willing to accept higher taxes provided substantial reductions in expenditures were simultaneously made. With financial markets disturbed and interest rates rising above last year's abnormally high level, a great debate is now raging both within and outside governmental circles about the relation of the federal budget to economic activity, interest rates, and inflation. What is critically at issue in this debate is not whether federal spending should be permitted to rise, but the size of the reduction—if any—in the projected scale of spending on nondefense programs. No matter how this issue is resolved, spending in the aggregate will still go up, and—if history is any guide—taxes will follow; so that we now face the prospect of higher income taxes besides higher social security taxes and assorted increases of state and local taxes.

We also face the prospect of paying more for foodstuffs, clothing, automobiles, and whatever else we buy. The causes

of inflation are complex, and it is never strictly true that an increase in spending on defense or on business equipment or on any other category is the sole cause of inflation. In principle, the government can always adjust its monetary and fiscal policies to economic conditions so as to keep the price level reasonably stable. If the government had foreseen how rapidly the cost of the Vietnam war would mount and if it had taken promptly the restraining measures needed to keep the aggregate demand for goods and services from outrunning the nation's capacity to produce, the new round of inflation that we have experienced since 1964 could have been prevented. But if we blame the government for its lack of foresight or courage in this instance, we should also bear in mind that the theoretical ideal of price stability has rarely, if ever, been closely approximated under wartime conditions.

When demand presses hard on a nation's resources, as it generally does at a time of war, it becomes very difficult to adjust tax, credit, and expenditure policies on the scale needed to prevent advances in the price level. The doubling of wholesale prices between 1940 and 1950 was obviously linked to the enormous expansion of military spending during World War II. Since then, the trend of prices has continued upward at a much slower pace, and no single factor stands out so prominently among the causes of inflation. Indeed, prices have risen less in our country since 1950 than in most others, despite our exceptionally large military burden. It is nevertheless true that the greater part of the recent advance in both wholesale and consumer prices came in three spurts—between 1950 and 1952 when the Korean war was raging, between 1955 and 1957 when a fairly rapid increase of military contracts for newly developed weapon systems paralleled a booming trend of business investment in new plant and equipment, and since mid-1965 when our ground forces shifted to an active role in

Vietnam. It thus appears that the sudden surges within the defense sector have contributed to the inflationary trend which has been gradually eroding all savings accumulated in the form of bank deposits, life insurance, savings bonds, and other fixed-income assets, besides complicating life for everyone whose money income fails to respond to the rising cost of living.

The defense sector has also contributed to the deficit in our balance of payments. Since 1950 the receipts from our sale of goods, services, and securities to foreign countries have run considerably below the sums that we need to pay foreign countries. One reason for this persistent deficit is the large expenditure that is required, year in and year out, to maintain our military forces abroad. Foreign assistance programs have also been adding to the deficit, although their foreign exchange cost is now much smaller. Since the revenue derived from our foreign transactions has been insufficient to cover the required payments, our stocks of gold have shrunk from $24.5 billion at the beginning of 1950 to about $13 billion at present. Meanwhile, the dollar balances that are held here by foreigners have also grown, so that the United States finds itself in the position of a banker whose short-term liabilities are steadily rising while his reserves keep dwindling. In order to check the deterioration in our international financial position, the Department of Defense has lately been favoring domestic over foreign suppliers even at cost differentials of 50 per cent. More disturbing still, the government has found it necessary to impose restrictions on the outflow of capital—an interference with private investment that is contrary to our national traditions. Even so, the deficit in the balance of payments has persisted, and—at least partly as a result of the war in Vietnam—it is larger this year than last. International confidence in the dollar, which is of such immense importance to America's

political leadership as well as to our economy and that of the rest of the world, is still strong, but we can no longer count on it as we did ten or twenty years ago.

II

I have been concerned thus far with the financial aspects of national defense—its impact on governmental expenditures, taxes, the price level, and the balance of payments. Financial transactions and the price system, however, are merely mechanisms for putting a nation's resources to work and for distributing what is produced among people and their government. The resources that we devote to national defense are not available for making consumer goods or for adding to the stock of industrial equipment or for public uses in the sphere of education, health, or urban redevelopment. To the extent that we allocate labor, materials, and capital to national defense, we cannot satisfy our desires for other things. The civilian goods and services that are currently foregone on account of expenditures on national defense are, therefore, the current real cost of the defense establishment.

This cost has become very large, as my observations on governmental finance have already suggested. Its magnitude can perhaps be grasped best by considering the amount of labor devoted to national defense. In fiscal 1965, the armed forces numbered close to 2.75 million. They were supported by over 900,000 civilian workers attached to the Department of Defense and by another 2.1 million civilians employed in private industry who worked, directly or indirectly, on military supplies. Thus the total employment on defense goods and services amounted to 5.75 million, or to 86 out of every 1,000 employed workers in the country. Two years later—that is, during the fiscal year which ended June, 1967—the number was

nearly 7.5 million, or 103 out of every 1,000 employed workers. The employment currently attributable to national security expenditures is still larger; for the figures that I have cited, besides not being fully up to date, take no account of the activities of the Atomic Energy Commission, the National Aeronautics and Space Administration, or other defense-related efforts.

A mere count of numbers, moreover, does not convey adequately the drain of the defense establishment on the nation's work force. Men differ in quality, and we need to take account of the fact that those involved in the defense effort are, on the average, superior from an economic viewpoint to workers engaged in civilian production. Military technology and operations have become very sophisticated in our times. The armed forces now have a highly skilled core and are very selective in accepting men for service. Indeed, the proportion of personnel who completed high school is much larger in the armed forces than in the comparable age group of the civilian population, while the proportion of college graduates is not materially lower. Training and skill count even more heavily among the civilians involved in defense activities. Last year, professional workers accounted for nearly 16 per cent and skilled blue-collar workers for 21 per cent of the civilians employed on defense work, in contrast to about 13 per cent for each of these groups in the total working population. One out of every five of the nation's electrical and mechanical engineers in civilian jobs, two out of every five airplane mechanics, two out of every five physicists outside of teaching, and three out of every five aeronautical engineers were employed on defense goods during the past year. And even these figures understate the skill dimension of defense employment, for they again leave out of account the highly technical activities originating in the Atomic Energy Commission and the Space Administration.

The heavy emphasis on skill and brainpower in defense employment reflects, of course, the explosion of military technology to which modern science has been contributing so much of its finest energy. Since the Korean war, defense contractors have been devoting themselves not only to the production of extremely complex weapons but also to developing entirely new weapon systems that no one as yet knew how to produce. Much of the defense sector of our economy has come to consist, therefore, of research and development work. The President's budget for this fiscal year, for example, allots about $16 billion to research and development, of which $9 billion is to be devoted to defense and another $5 billion to space activities. Since 1960 defense and space programs have consistently accounted for over 80 per cent of the rapidly increasing federal funds devoted to research and development. More important still, they have amounted to about 54 per cent of the expenditure on research and development carried out in the entire nation—that is, by the federal government, industry, universities and colleges, research centers affiliated with universities, and other nonprofit institutions. During the 1950's the proportion of the nation's research and development effort devoted to defense-related activities was only a little lower.

By diverting to its interest so much manpower, especially scientific and engineering skills, the defense establishment has left its mark on both the structure and the functioning of our economy. The effects are all around us. Some defense-oriented industries—notably, the aerospace group, electronics, and communications—have become a major factor in the economy, and their development has favored many communities—for example, Los Angeles, San Diego, Seattle, Baltimore. Some large firms have acquired marvelous technological competence from their work on defense or space contracts and this rather than any immediate profit has commonly been their chief reason for

wanting the contracts in the first place. Not a few of the scientists and engineers who received their training in the more sophisticated enterprises have moved into traditional lines of activity, bringing something of the spirit of research and innovation with them. Many of the men released by the armed forces have been able to put the technical skills acquired during their military service to effective use in civilian jobs. Nondefense activities have shared in the increased supply of engineers, scientists, and technicians that has been stimulated by the defense-related demand. And not a few of the processes or products developed for the military have found application in civilian life—for example, jet transports, advanced computers, radar, miniaturized components, and nuclear power plants.

But if the defense sector has stimulated economic development in some directions, it has retarded growth in others. Many civilian-oriented laboratories of business firms have found it difficult to match the salaries or the equipment that subsidized defense firms offer to scientists and engineers. Research and development work in behalf of new products and processes for the civilian economy has therefore been handicapped. Small firms have derived little benefit from military or space contracts. The draft has added to the labor turnover of all businesses, large and small. The lack of opportunity in the defense sector for poorly educated and unskilled workers has not helped the rural Negroes who have flocked into the cities in recent years in search for jobs and a better life. Moreover, a new class of business executives has arisen, consisting of men whose understanding of marketing and cost controls is often deficient, but who know how to negotiate effectively with government officials handling military or scientific problems. While knowing the right people or having friends in the right places can sometimes advance the interests of an enterprise

better than plain business ability, the nation's economic efficiency is not likely to reap a corresponding advantage.

In any event, the economic growth of a nation is a blind concept unless we consider what is produced as well as the rate of growth of what happens to be produced. During the decade from 1957 to 1966, our nation spent approximately $520 billion on defense and space programs. This sum is almost two-and-one-half times as large as the entire amount spent on elementary and secondary education, both public and private. It is two-and-three-quarter times as large as the amount spent on the construction of new housing units. It exceeds by over a fourth the expenditure on new plant and equipment by the entire business community—manufacturing firms, mining concerns, transportation enterprises, public utilities, and all other businesses. To be sure, an extra billion dollars' worth of bombs or missiles will increase current production just as much as an extra billion of new equipment for making civilian goods. Bombs or missiles, however, add nothing to the nation's capacity to produce, while new equipment serves to augment production in the future. The real cost of the defense sector consists, therefore, not only of the civilian goods and services that are currently foregone on its account; it includes also an element of growth that could have been achieved through larger investment in human or business capital. But even if we assumed that the conflicting influences of the defense sector on economic growth canceled out, its real cost is still enormous.

Unhappily, we live in dangerous times which make large national security expenditures practically unavoidable. Nevertheless, there are always some options in a nation's foreign and military policy, and we therefore must be alert to the opportunities that our military establishment forces us to forego. For example, if the resources devoted to military and space activities during the past decade had been put instead to civilian

uses, we could surely have eliminated urban slums, besides adding liberally to private investment in new plant and equipment as well as to both public and private investment in human capital.

III

It follows from our analysis that the military-industrial complex, of which President Eisenhower spoke so perceptively in his farewell address, has not only been enlarging the scale of governmental operations and thereby complicating financial problems. By changing the thrust of economic activity and by making the economy more dependent on government, it has also been affecting profoundly the character of our society. Nor have the social effects been confined to the kinds of goods that we produce. Hopefulness about the future, optimism about success of new undertakings, impatience to complete satisfactorily whatever is begun—these psychological qualities have been peculiarly American characteristics, and they account in far greater degree than we may realize for the remarkable achievements of our economic system and the vigor of our political democracy. These qualities are deep-rooted in American experience and they continue to sustain us. Nevertheless, the development and spread of thermonuclear weapons, the frustrations of the cold war, and now the brutal struggle in Vietnam have left us, despite our awesome military power, more anxious about our national security than our fathers or grandfathers ever were.

Adults whose habits were formed in an earlier generation may put the dangers of nuclear catastrophe out of mind by losing themselves in their work or by seeking solace in religion. That is more difficult for our children who increasingly wonder what kind of world they have inherited by our doings. There

can be little doubt that the lively competition among the great powers in devising instruments of terror is one of the underlying causes of the restlessness of modern youth.

Moreover, young men of military age are bearing a disproportionately large part of the defense burden. That is unavoidable at a time of war, but our generation has institutionalized compulsory military service even when the nation is at peace. It is undoubtedly true that many young men derive deep satisfaction from helping to protect their country by serving as soldiers, sailors, or aviators. Not only that, many have also found useful careers in the armed forces, or have benefited in their civilian jobs from the skills and discipline acquired during military service, or have gained a larger understanding of life by associating with men of widely different backgrounds or by being stationed abroad for a time. But just as these benefits deserve recognition, so too does the fact that the draft has by and large proved to be a seriously upsetting factor in the lives of young people. Not knowing when they would be called up for military service or whether they would be accepted, many have found themselves marking time. Those who are accepted have often had to interrupt their schooling or careers, perhaps alter plans with regard to marriage, and in any event be content with substantially lower pay than they could earn as a rule in civilian work. Moreover, the administration of the draft over the years, particularly the handling of student deferments, has raised troublesome moral questions in the minds of young people—and, for that matter, in the minds of older citizens as well.

The emergence of our country as a great military power, having world-wide political responsibilities, has also affected our educational system. Greater emphasis on science, mathematics, and modern languages in secondary schools and colleges, new area institutes and schools of international affairs in

the universities, advanced courses in the esoteric languages and customs of the Far East and Africa—these educational developments not only reflect the widening scientific and geographic interests of modern business; they are also a response to urgent requirements of national security. But it is in the area of research, rather than teaching, where the impact of the defense establishment on our universities has been particularly felt. Colleges, universities, and research centers associated with universities spent in the aggregate $460 million on the performance of research and development in 1953, with something over half of this sum financed by the federal government. Last year, the sum so spent was six-and-one-half times as large, and the federally-financed portion rose to 70 per cent. Clearly, federal funds are mainly responsible for the extraordinary growth of research activities in universities, and the chief—although by no means the sole—reason for this governmental involvement is the intensive search for new knowledge on the part of defense-related agencies. During 1963–1966, the Department of Defense, the Atomic Energy Commission, and the Space Administration together accounted for five-eighths of the dollar value of federal grants for research and development to institutions of higher learning, and their proportion in immediately preceding years was even larger.

The huge influx of governmental research funds has served to enrich the intellectual life of numerous colleges and universities, especially in the larger institutions where the grants have been mainly concentrated. By virtue of research grants, professors have better equipment to work with and more technical assistance than they had in former times. They also travel more, keep in closer contact with their counterparts in other universities, and mingle more freely with government officials, business executives, and scientists working for private industry. The gulf that previously separated a university from

the larger interests of the community and the nation has therefore narrowed very significantly.

However, governmental research grants have created problems for universities as well as new opportunities for useful service. The greater interest of a faculty in research is not infrequently accompanied by lesser devotion to teaching. No little part of the time set aside for research may in practice be consumed by travel and conferences of slight scientific value. However welcome grants from military and space agencies may be, their concentration on the physical and engineering sciences makes it more difficult for a university to maintain the balance among various branches of learning that is so essential to the intellectual and moral improvement of man. Some military contracts involve classified research, and the secrecy which attends such work introduces an entirely foreign note in institutions that have traditionally taken a strong pride in completely free and uninhibited communication among scholars. Not less serious is the tendency, which appears to be growing among university scholars, to forsake the research to which they are drawn by intellectual curiosity in favor of projects that have been designed by, or contrived to suit the tastes of, government officials or others who take care of the financing. All universities and many of our colleges are struggling with this and other problems that the defense sector has created or accentuated.

The danger of diminished independence is not confined to research activities. If college or university presidents no longer speak out as vigorously on national issues as they did a generation or two ago, one major reason is that the institutions over whose destiny they preside have become heavily dependent on federal contracts and subsidies. Even professors who are benefiting from federal research grants or consulting relationships, or who expect to be able to do so in the future, have been

learning the occasional value of studied reticence. And if discretion is tempering the spirit of forthright questioning and criticism in our universities, its power is all the stronger in the business world. It is hardly in the interest of businessmen to criticize their customers publicly, and by far the largest customer of the business world is clearly the federal government itself. Some firms sell all and many sell a good part of what they produce to the federal government, and there are always others that hope to be in a position to do likewise in the future.

To be sure, the great majority of business executives, even those who manage very large enterprises, prefer commercial markets to governmental business; but they have become so sensitive nowadays to the regulatory powers of government that they rarely articulate their thoughts on national issues in public. Trade union leaders are typically more candid and outspoken on governmental issues than business executives; but they too have become dependent in varying degrees on the goodwill of government officials and therefore often deem tact or reticence the better part of wisdom. Not only that, but it is no longer unusual for the government in power, whether the administration be in Democratic or Republican hands, to suggest to prominent businessmen, trade union leaders, attorneys, journalists, or university professors that they support publicly this or that administration proposal. And men of public distinction at times comply regardless of their beliefs, perhaps because they are flattered by the attention accorded them, or because they vaguely expect some advantage from going along, or simply because they feel that they dare not do otherwise. Thus the gigantic size to which the federal government has grown, for which the defense sector bears a heavy but by no means exclusive responsibility, has been tending to erode perceptibly, although not yet alarmingly, as the open discussion of

the war in Vietnam indicates, the spirit of rational and constructive dissent without which a democracy cannot flourish.

The huge size of military budgets and incomplete disclosure concerning their management carry with them also the danger of political abuse. Since money spent in the interest of national security necessarily has economic effects, the government in power may sometimes be tempted to ease domestic problems by adjusting the scale or direction of military spending. For example, raw materials may be stockpiled beyond the minimum military target, or the target itself may be revised upward, in order to grant some relief to a depressed industry. Or at a time of general economic slack, the government may begin to look upon military spending as if it were a public works program. Worse still, considerations of political advantage may play a role in deciding whether contracts are placed in one area rather than another, or with this firm instead of that. Such practices confuse military officers, lead to waste, and might even exacerbate international relations. Nevertheless, they are not entirely unknown to history, including our own. Fortunately, our government officials have generally been reluctant to tamper with something so fundamental to the nation as its defense establishment; and even on the rare occasions when they have strayed from virtue, the sluggishness of a governmental bureaucracy in carrying out any plan has kept down the scale of mischief. But if politics is ever effectively computerized, as some students believe it will be, we may have less protection against political abuse within the defense sector in the future.

Any enlargement of the economic power of government, whether brought about by military expenditures or through other causes, can eventually result in some infringement of liberty. However, because of the sense of urgency in troubled

times, the requirements of national security may lead more directly to restriction of freedom. Necessary though the draft may be, it still constitutes compulsion of the individual by the state. Necessary though security clearances may be, they still constitute an invasion of privacy. Necessary though passport regulations may be, they still restrict the freedom of individuals to travel where they choose. Fortunately, the vitality of our democracy has thus far proved sufficient to limit restrictions of freedoms such as these. Not only that, it has enabled us to put an end to the nightmare of McCarthyism, to suppress the interest of the Central Intelligence Agency in our colleges and universities, and even to fight the war in Vietnam without imposing price and wage controls. We cannot take it for granted, however, that our formidable defense establishment will not give rise to more serious dangers to our liberties and the democratic process in the future.

IV

Throughout the ages, philosophers and religious teachers have lamented the horrors of war and searched for the keys to peace. Yet their noblest thought has been frustrated by the course of human events. Our country has been more fortunate than most, but we have had our share of the destruction of life and property that is the universal coin of warfare. Every American of age fifty or over has lived through two world wars, the Korean war, and now the smaller but still very costly and protracted struggle in Vietnam. When this war ends, military expenditures will probably decline for a while, as they have in fact after every war in our history. We cannot look forward, however, to demobilization on anything like the scale experienced after World War I or World War II, when the military budget was reduced by about 90 per cent within three years.

The reason for the difference, of course, is that the cold war is still with us, just as it was when the Korean hostilities ended. After the cessation of that conflict, the defense budget was reduced merely by a fifth. If the cost of the Vietnam war remains at approximately the current rate, it is doubtful whether a cease-fire will be followed by a reduction of even the Korean magnitude. A return to the defense budget of fiscal 1964 or 1965 would indeed involve a cut of roughly 35 per cent from this year's expenditure; but in the absence of a dramatic change in our international relations, this is quite unlikely. In the first place, prices are higher at present than they were in 1964 or 1965, and they will probably be higher still when the war phases out. In the second place, it may well be necessary for us to keep many more troops in Vietnam after a cease-fire than was the case in Korea and also to become more heavily involved in the task of reconstruction. In the third place, while stocks of military equipment were built up during the Korean war, they have been seriously depleted—particularly for the Reserve and National Guard units—by Vietnam. They will need to be rebuilt when hostilities come to an end, and this demand will be reinforced by the deferred procurement of newer models to replace equipment now in inventory.

Nevertheless, a sizable reduction of military spending will take place in the year or two after the cease-fire, and we will have the opportunity to concentrate more of our resources on the arts of peace. In the past, the American economy has demonstrated a remarkable ability to adjust speedily to cutbacks in military spending, and we can be confident of doing so again. After World War I the conversion from war to peace was carried out with only a mild and brief setback in total economic activity. The like happened after World War II, despite the fact that more than two-fifths of our nation's resources were devoted to military uses at the peak of the war. Between 1945

and 1946, spending on the manufacture of defense goods dropped drastically and the number of men in the armed forces declined from 11.5 million to 3.5 million. Nevertheless, the unemployment rate remained below 4 per cent. The termination of the Korean war was followed by a recession but the return of peace was not its sole cause. In any event, unemployment during this recession was less serious at its worst than during the recession which came just before or just after it. With the experience that our country has gained during the past two decades in coping with economic fluctuations, with both the Executive and the Congress obviously eager to prevent unemployment, and with plans for dealing with post-Vietnam problems already beginning to take shape, there should not be much difficulty in adjusting federal tax, expenditure, and credit policies so as to maintain aggregate monetary demand at the level needed to assure reasonably full employment when hostilities cease. Some sizable adjustments will still need to be made by numerous communities and industries; but even they should prove manageable since the military cutbacks are likely to be largely concentrated on items produced by business firms that are closely oriented to our diversified and resilient civilian markets.

The highly specialized aerospace, electronics, and communications industries will probably not bear much of the burden of post-Vietnam cutbacks. Indeed, once the curve of military spending turns upward again, as it well may two or three years after the cease-fire, these are the very industries that are likely to benefit most from the dynamism of modern technology. To maintain a sufficient strategic superiority to deter any aggressor, we have been devoting vast sums to research and development, as I have already noted. The fantastic new weapons and weapon systems devised by our scientists and engineers soon render obsolete some of the existing devices, which

themselves were new and revolutionary only a short time ago. But until the new devices are ready, those that were only recently new cannot be abandoned and may even need to be augmented. Meanwhile, strategic concepts may shift, as they did during the sixties from reliance on massive nuclear deterrents to developing a capability for limited warfare and counterinsurgency operations. One way or another, therefore, costs tend to multiply all around. The Soviet Union, of course, will not stand still while our military prowess increases. On the contrary, it is striving through a remarkably enterprising and inventive military-industrial complex of its own to establish military parity, if not actual supremacy. For example, we have recently learned of the deployment of an anti-ballistic missile system around Moscow and Leningrad, of a novel ship-to-ship missile of Russian origin fired in the Mediterranean, and of the apparent development of an orbital bomb capability by the Soviet Union. Communist China has also been developing, and with greater speed than was generally anticipated, the ability to make and deliver sophisticated weapons. In turn, our military establishment, besides innovating vigorously on its own, keeps devising countermeasures to what the Russians or Chinese have or may have in hand. Both its reaction and its fresh challenge to potential aggressors can be expected to become stronger once Vietnam no longer requires top priority.

As we look beyond the cessation of hostilities in Vietnam, we therefore need to recognize that the scale of defense expenditures has, to a significant degree, become a self-reinforcing process. Its momentum derives not only from the energy of military planners, contractors, scientists, and engineers. To some degree it is abetted also by the practical interests and anxieties of ordinary citizens. Any announcement that a particular defense installation will be shut down, or that a particular defense contract will be phased out, naturally causes concern

among men and women who, however much they abhor war and its trappings, have become dependent for their livelihood on the activity whose continuance is threatened. With a large part of our economy devoted to defense activities, the military-industrial complex has thus acquired a constituency including factory workers, clerks, secretaries, even grocers and barbers. Local politicians and community leaders may not find it easy to plead for the extension of activities that no longer serve a military purpose. Many, nevertheless, manage to overcome such scruples. Indeed, candidates for the Congress have been known to claim that they are uniquely qualified to ward off military closings or even to bring new contracts to their districts, and their oratory has not gone unrewarded by the electorate. The vested interest that numerous communities have acquired in defense activities may therefore continue to run up costs on top of the rising budgets generated by the momentum of competing military technologies.

If this analysis is at all realistic, the military-industrial complex will remain a formidable factor in our economic and social life in the calculable future. It will continue to command a large, possibly even an increasing, part of our resources. It will continue to strain federal finances. It will continue to test the vigor of our economy and the vitality of our democratic institutions. It will continue to confuse understanding by suggesting to many foreign citizens, as it sometimes does even to our own, that our national prosperity is based on huge military spending, when in fact we could be much more prosperous without it. For all these reasons, while we need to recognize the high and honorable national purpose of our military-industrial complex, we also need to remain continually vigilant of its activities and seek to protect ourselves against its possible abuses, just as we long ago learned to guard the public interest against

business monopolies and as we are beginning to protect ourselves against labor monopolies.

V

The scale and activities of our defense sector are now being subjected to a searching public discussion. Two major schools of political thought have become locked in a contest for the mind and soul of America. One school draws much of its strength from the revolution of military technology, the other from the revolution of rising expectations. One school tends to regard communism as a centrally directed conspiracy that threatens our survival as a free people. The other school believes that communism is breaking up into independent national movements, and sees the main threat to free institutions in the deterioration of our cities and the sickness of our society. One school seeks overwhelming military power to deter fresh Communist adventures, and is willing to risk war in order to prevent the geographic expansion of communism. The other school seeks wider social justice and better economic conditions for Negroes and others who have not participated fully in the advance of prosperity, and holds that the force of moral example can contribute more to our national security than additional bombs or missiles.

Both schools have focused attention on the federal budget and neither has been satisfied by the treatment accorded its claims. From 1955 to 1965, federal spending on nondefense activities increased faster than spending on defense. Since then, defense expenditures have gone up more rapidly, though not much more rapidly. Looking to the future, professional economists never tire of pointing out that our growing economy will make it possible to have more butter and, if they are

needed, also more guns, even as we have been managing to do while the war in Vietnam is being waged. Their reassurance, however, does not satisfy those who feel that our national security requires not just more guns, but many more guns, and that we therefore need to give up some of our butter. Nor does it satisfy those who feel that we need not just more butter, but much more butter, and that our statistics of the gross national product are misleading us by their failure to allow for the pollution of our water, the poisons in our air, the noise of our streets, the rats in our slums, the rioting in our cities, and the destruction of life on our highways. Debate along these lines has reached a high pitch of intensity and even bitterness as the war in Vietnam has dragged out. It has become a divisive force, and it has brought anguish to our people. Its effect on the conduct of the war, however, is likely to count for less than its effect on the general direction of our foreign and military policy in the future.

For the debate is demonstrating to thoughtful citizens that our national security depends not only on awesome military forces. It depends also on the strength of our economic system, on the wholesomeness of our social and political life, and particularly on how well governmental objectives express the national will and purpose. As this lesson sinks in, we will want to try far harder than we ever have, both in our personal capacity and through our government, to bring the armaments race under decent control. And if the cracks of freedom within the Communist system of tyranny widen, as they well may in coming decades, we can count on being joined in this quest by the people of the Soviet Union and eventually by the people of mainland China as well. That, at any rate, is the only real basis for hope of saving ourselves and the entire human family from catastrophe.