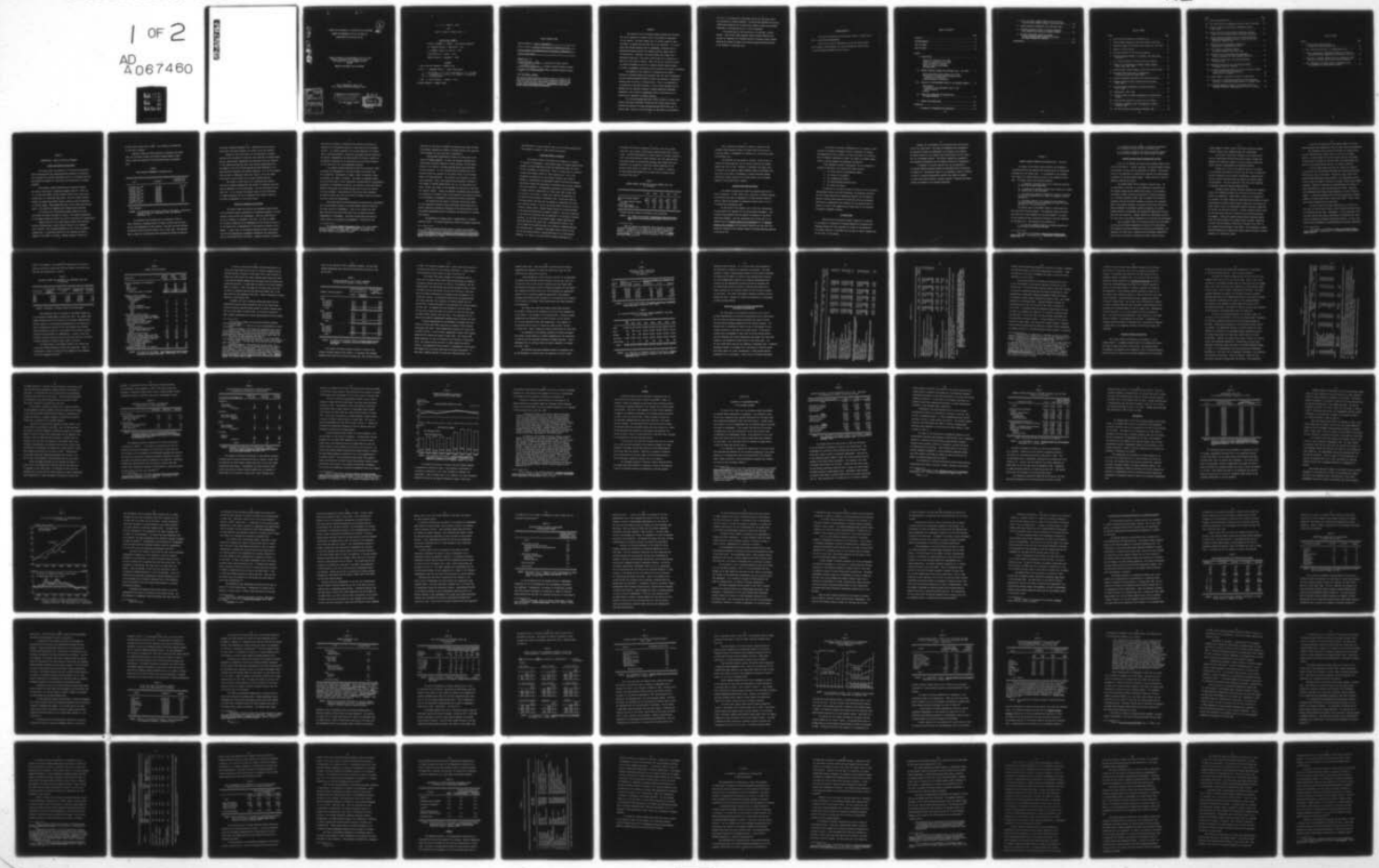
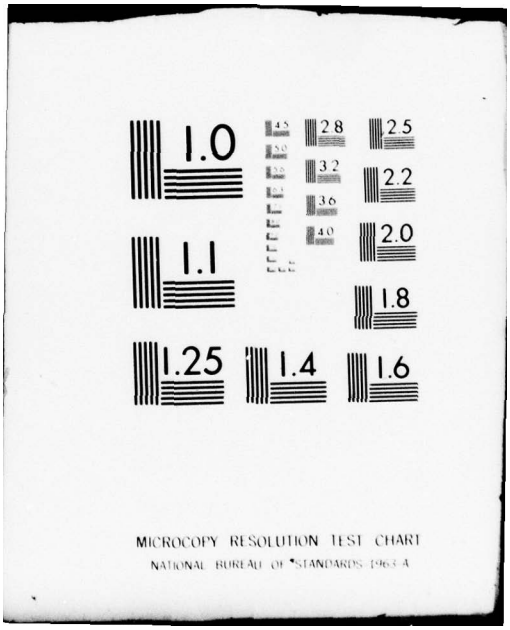
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LEVEL II

A STUDY OF THE EFFECT OF A REDUCTION IN THE MILITARY BUDGET FOR SOUTHEAST ASIA ON THE LEVEL OF EMPLOYMENT IN THE UNITED STATES

A thesis presented to the Faculty of the U.S. Army Command and General Staff College in partial fulfillment of the requirements of the degree

MASTER OF MILITARY ART AND SCIENCE

by

Phil K. Bomersheim, Major, USA
B.S., Central Michigan University, 1960

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Question & Answer Period - Board Members

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Date: 19 MAY 1970

The opinions and conclusions expressed herein are those of the individual student author and do not necessarily represent the views of either the U.S. Army Command and General Staff College or any other governmental agency. (References to this study should include the foregoing statement.)

ABSTRACT

The reduction in United States defense spending for Southeast Asia can be expected to create a rise in the number of unemployed in this country. The exact number will, of course, depend on many variables, to include the size and rate of the reduction. It is estimated that 374,000 persons would be unemployed, resulting from an assumed $20 billion reduction in defense spending, spread over an 18 month period. Therefore, the United States must prepare for a successful transition. This must be well-timed and is essential to maintain a high level of demand. After the initial transition period it should be possible to plan for a moderate federal budget surplus in order to supplement the private savings available for private investment.

The purpose of this study is to investigate what effect a decrease in defense spending for Southeast Asia will have on employment and what measures should be taken to offset any decrease in employment brought about by an end to the hostilities. This is accomplished by an evaluation of the sharp increase in United States expenditures for Vietnam and the resultant increase in defense generated employment. Conversely, this is also the employment which is most likely to be affected by a reduction in defense spending.

The military expenditures rose to $75.4 billion in fiscal 1968, thereby creating an estimated 74,000 jobs per billion dollars spent. Directly attributed to Vietnam was approximately $30 billion and 1.5 million jobs. Four out of ten of these new jobs were in the ordnance,

aircraft, and transportation industries and are the ones most likely to be affected by reduced spending. The nation has suffered from strong inflationary pressures and an unfortunate impact on plant and equipment investment, on housing and on the balance of payments.

The primary goal in the transition is to maintain a stable economy. The initial offset measures should include promptly terminating the temporary tax increases enacted to finance current defense spending and update the public and private programs deferred because of the conflict in Southeast Asia.

ACKNOWLEDGEMENTS

The advice and patience of my advisor, Philip J. Riede, Major, USAF, is gratefully acknowledged.

Most of all I wish to aknowledge my wife, the person whose moral support, understanding, and typing contributed significantly to the successful completion of this thesis.

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CHAPTER I

INTRODUCTION: SCOPE AND METHOD OF RESEARCH

Origin and Purpose of this Study

This study traces the expansion of the United States defense effort resulting from the changing American commitment in Southeast Asia, analyzes the resulting employment level in the defense industry, and examines the impact of a reduction and de-escalation in defense programs.

Historically, defense expenditures for national security have been a minor factor in American economic activity. World War II, the Cold War, Korea, and the Vietnam conflict have raised these expenditures to a relatively high level. With the Vietnam conflict, defense has become the nation's largest industry, directly employing 8.5 million people. Many communities rely on the income from military bases or the payrolls of companies with defense prime contracts.

The overall size of the Federal budget reflects the needs and demands for public services as a whole. The changing composition of the budget reveals much about the nation's priorities for expenditures.

Between 1967 and 1970, annual budget outlays have increased by $76.7 billion--from a total of $118.6 billion to an estimated $195.3 billion. This increased spending was due in part to defense expenditures. A significant portion of this spending has been in support of our effort in Vietnam. Defense spending in 1970 will

be $28 billion higher than in 1964. This increase is largely due to the cost of Vietnam.

American troops have been stationed in Southeast Asia since 1954, but the major increase in military strength began in 1965. Table 1 shows the expansion of United States forces in Southeast Asia.

TABLE 1

TOTAL MILITARY PERSONNEL IN SOUTHEAST ASIA

Date	Strength	% Change From Previous Date
December 31, 1964	23,300	0.00 %
June 30, 1965	103,000	4.40
December 31, 1965	185,000	.79
June 30, 1966	323,000	.75
December 31, 1966	385,000	.13
June 30, 1967	463,000	.22
December 31, 1967	486,600	.05
June 30, 1968	534,700	.10
December 31, 1968	536,100	.03
April 30, 1969	543,400[a]	.02

[a]Peak Strength

SOURCE: U.S. Department of Commerce, Bureau of the Census. Statistical Abstract of the U.S., September, 1969, 90th Edition, Washington, D.C.

The Southeast Asia expenditures are estimated to drop in 1970, reflecting a changing pattern of combat activity and the cessation of the bombardment of North Vietnam. This fact was first outlined by President Nixon during his Pacific trip in July 1969. The President made it clear the United States would redesign and reduce its military

commitment throughout Southeast Asia. Negotiations are currently taking place with North Vietnam in an effort to end the conflict.

Because of the dollar amount of the Department of Defense contracts and the number of states and areas affected by defense spending and, specifically, expenditures for Southeast Asia, any reduction in this spending pattern may well cause economic repercussions for the segment of the United States population whose employment is at least partially dependent upon defense spending. It is in this respect that the topic of employment comes into being as one of the major socioeconomic issues brought on by reduced defense spending.

The purpose of this study is to investigate what effect a reduction of defense spending for the conflict in Southeast Asia will have on employment in the United States. The two objectives of this study are: (1) to discover the general impact of such reductions in defense spending; and (2) to determine their specific impact on the level of employment in the United States.

Review of Literature in the Field

The United States Arms Control and Disarmament Agency (ACDA) is the government agency responsible for conducting research in fields related to arms control and disarmament. ACDA was established by an act of Congress on September 26, 1961. The ACDA is headed by a Director (appointed by the President with the advice and consent of the Senate) who is responsible for the executive direction of the agency. A major share of the agency's efforts has gone into nuclear test ban and comprehensive disarmament discussions and negotiations both at the United Nations and Geneva. Research occupies an important

role since the agency is responsible for insuring the conduct of research into the manifold problems of arms control and disarmament through: (1) studies performed with its own resources; (2) arrangements, including contracts, agreements, and grants for the conducting of research, development, and other studies by private or public institutions or persons; and (3) coordination of activities conducted in this field by or for other government agencies.

The research studies conducted by ACDA on the economic impact of defense and disarmament in the United States are divided into four categories: measurement of impact, impact on industry, impact on manpower, and impact on regions. The impact on manpower studies cover the broad area of labor readjustment problems-such as re-employment, geographic and occupational mobility, job referral, income maintenance, manpower retraining, and proposed programs and policies for dealing with such problems. Approximately $5 million have been requested by ACDA for fiscal year 1969 to be used for research projects connected with arms control and disarmament.

Many other works have been published on arms control, disarmament, and the socioeconomic effects of reduced defense spending resulting from arms control or disarmament.[1] Most of the studies that have been reviewed by the author have dealt with the general economic consequences of disarmament. Additional studies have been made on timing, phasing, and duration of disarmament. Studies have also

---

[1]See Regional Federal Procurement Study, for a more complete listing of published studies. Report prepared for the Office of Economic Research, U.S. Department of Commerce, Washington, D.C., by Consad Research Corporation, May 1967.

been made to find ways to minimize the hardships and waste of human and material resources now devoted to defense efforts that would become available for other uses after disarmament.[2]

Considerable Congressional interest has been shown on the impact of defense spending. In 1964, for example, hearings were held before the Select Committee on Small Business, United States Senate, on the impact of defense spending shifts and curtailment of small business. In 1967, hearings were held before the Joint Economic Committee, Congress of the United States, on the economic effect of Vietnam spending. The Committee was interested in three basic questions: First, was Congress being adequately informed on the changes of defense expenditures; that is, are they going up or down? Second, what impact on our manpower and resources is the Vietnam conflict having? Third, are adequate contingency plans available for conversion of "wartime" uses of our resources into peaceful pursuits, if the President is successful in terminating Vietnam hostilities?

The chairman of the Council of Economic Advisors was asked by the President to organize a major coordinated effort among the executive agencies to review the readiness of the United States to make the economic adjustments which a termination of hostilities in Vietnam will require.

The Department of Defense bears a responsibility in defense spending shifts. The Defense Department's Office of Economic Adjustment

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[2]Current research efforts on ways to negate the hardships and waste of human resources now devoted to defense efforts are listed in Research Sponsored by the United States Arms Control and Disarmament Agency on the Economic Impact of Defense and Disarmament in the United States, Washington, D.C., 1967.

has been active in recent years as many of our military installations have closed as a result of cost reduction decisions.

Scope and Method of Research

The economic effect of Southeast Asia spending is a subject of concern to policymakers. The economic impact of defense expenditures assumes a special importance during and immediately after the United States' involvement in hostilities. There is a great deal of uncertainty about the economic effects of these expenditures. Due to the complexity and magnitude of this economic problem, this study is limited to investigating the employment impacts resulting from defense expenditures supporting hostilities in Southeast Asia by major companies with prime contracts. The employment generated by the Department of Defense military expenditures in fiscal years 1965 through 1969 is studied in this thesis. Fiscal year 1965 was the beginning of the major military buildup in Southeast Asia; fiscal year 1967 was an interim period used here for the purpose of comparison; and fiscal year 1969 was assumed in fact as the period where the military buildup reached a maximum level. Federal budget outlays for national defense in the years mentioned here are shown in Table 2. The end or reduction in the level of hostilities will be reflected in the decline of defense spending. On the basis of the latest budget, defense spending was nearly $80 billion for fiscal 1969 - actually $78.8 billion - and this is taken as the starting point for a decline in defense spending for Southeast Asia. According to the budget, $28.8 billion of this was for the Vietnam conflict, leaving $50 billion for other defense spending. To return to the real level of defense spending as it

was before mid-1965 and allowing for inflation that has occurred since that time, however, would require spending about $57.5 billion a year. Continued maintenance of reduced forces in Vietnam, construction of the anti-ballistic missile defense, and other possibilities could easily make the post-Vietnam spending level higher than that. Therefore, the assumption is made that defense spending will be reduced to $60 billion in fiscal 1971. This implies a reduction of approximately $20 billion in the annual rate of spending from the fiscal 1969 level.[3]

TABLE 2

FEDERAL BUDGET OUTLAYS FOR NATIONAL DEFENSE 1965-1969
(in billions)

	1965	1966	1967	1968	1969
National Defense Budget[a]	49.6	56.8	70.1	77.6	78.8
GNP	684.9	749.9	793.5	865.7	923.3
% of Total Federal Budget	41.9	42.2	44.3	45.0	44.1
% of GNP	7.6	7.9	9.1	9.8	9.1
Special SEA Budget	.1	6.1	20.6	26.8	28.8
% of Total Defense Exp.	.2	10.7	29.3	33.3	36.0

[a] Includes special support for Southeast Asia Operations.

SOURCE: U.S. Bureau of the Budget, The Budget of the U.S. Government, Fiscal Year Ending June 30, 1970, Washington, D.C., 1969.

[3] Several sources of information were utilized to determine the possible magnitude of the reduction in Southeast Asia defense spending. Indicative of the current thinking are the remarks of Charles L. Schultz, "Budget Alternatives After Vietnam," in Agenda for the Nation, ed. by Kermit Gordon (Washington, D.C.; Brookings Institute, 1969), pp. 16-20.

Such a reduction, amounting to about 2.2 percent of the estimated Gross National Product in fiscal 1969, will be used to trace the effect on employment of a reduction in the military budget for Southeast Asia.

The objective of this thesis is twofold. First of all, to analyze the size, magnitude, and the causes affecting the defense budget from 1965 to 1969. Secondly, to determine the impact that a reduction in the special support defense budget for Southeast Asia will have on the level of employment in certain selected defense industries, various regions of the United States, and the general aspects of the United States' economy.

Research Questions and Design

Two research questions are posed for analysis based on the above discussion: (1) What effect will a decrease in defense spending for Southeast Asia have on employment? (2) What measures should be taken to offset any decrease in employment brought about by an end to hostilities in Southeast Asia?

By the nature of the subject, most of the data investigated was generated by the agencies of the United States Government. Additionally, data gathered from the Chamber of Commerce of the United States was analyzed. The most significant data source used in the research were the Economic Report of the President and the Manpower Report of the President, both published annually, and the Joint Congressional Hearings on the Economic Effect of Vietnam Spending conducted during April 1967.

In addition, the author corresponded with Mr. Samuel C. Zark, director, Procurement Management Division, Department of Defense. Correspondence was also utilized to contact officials of the Department of Commerce, Department of Labor, and Office of Economic Opportunity to gather research and background information.

Other reference material investigated, but not necessarily utilized in the study, was obtained from these sources:

1. U.S. Arms Control and Disarmament Agency.
2. U.S. Bureau of the Budget.
3. U.S. Congressional Reports.
4. U.S. Small Business Administration.
5. U.S. Bureau of Census.

In addition to the above sources, the works of various research laboratories, such as the Rand Corporation, the Brookings Institute, the W.E. Upjohn Institute for Employment Research and the Battelle Memorial Institute were examined for pertinent data, and philosophy pertaining to unemployment were examined for data bearing upon the subject, as well as for suggestions and plans used for the solution of specific employment problems.

The Study Plan

Following this introductory chapter, Chapter II is devoted to an analysis of Department of Defense spending for Southeast Asia. Spending changes that have occurred as a result of the escalation of military activity in Southeast Asia, as well as current expenditures for the area, are discussed.

Chapter III is addressed to the characteristics and problems of the U.S. labor force. The trends in employment and unemployment and some basic causes of unemployment are included in the chapter. The second section of the chapter deals specifically with the employment in the defense industry. The nature, composition, geographic and industrial distribution of the defense industry are investigated.

A discussion of various impacts that are attributable to the reduced defense spending program for Southeast Asia are discussed in Chapter IV. The specific impact on the employment level is examined in detail to include de-escalation policies that might be applied to offset any adverse effects. Finally, Chapter V contains the thesis summary and answers to the research questions.

CHAPTER II

DEFENSE SPENDING PROGRAM FOR SOUTHEAST ASIA: 1961-1969

The budget of the United States presents the President's recommendations for the programs and financial plans of the Federal Government for each fiscal year. It is presented to the Congress each January, six months before the start of the respective fiscal year. The budget serves the following purposes:

1. It presents a proposed allocation of financial resources to serve the national objectives.

2. It serves as an economic document which relates the revenue and expenditures of the Government.

3. The budget sets forth the President's request to Congress for action on appropriation of funds, new programs, and tax legislation.

4. The budget reports to the Congress and the people of the United States on how the Government has spent the funds entrusted to it in the past year.

The largest part of the Federal budget in recent years has been marked for national defense. The Government dollar for fiscal year 1969 has 43 cents budgeted for national defense.[3] One third of this expenditure may be directly attributed to military spending for Southeast Asia. The purpose of this chapter is:

1. To show the increasing pattern of defense expenditures for Southeast Asia between 1961-1969.

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[3] U.S. Bureau of the Budget, Budget of the United States, Fiscal Year 1969. (Washington, D.C.: Government Printing Office, 1968), p. 6.

2. To explain such an increase in spending by describing the historical military buildup in Southeast Asia.

3. To discuss in general, the immediate economic impacts of the military buildup on the United States' economy.

Defense Spending Pattern Between 1961 To 1969

First, let us examine the United States defense budget during the 1961-1969 period. Narrowly construed, the defense budget consists of the amount of money spent by Department of Defense. Past expenditures of the Department of Defense have accounted for approximately 45 percent of the total federal budget. Recent outlay for national defense is $402.08 per person.

The defense budget can be analyzed in several ways. One of these ways is to divide it up by Congressional appropriation, the largest single item of defense being shown to be procurement. Procurement outlays finance the acquisition of capital equipment, i.e., aircraft, missiles, ships, items of support of the capital equipment, and end facilities necessary to produce that equipment. Most of the capital equipment is procured from private contractors. Some is produced in government arsenals, shipyards, and plants. Closely related to procurement are outlays for research and development test and evaluation. Defense research and development accounts for about half of all federal expenditures for research and development.

The two largest items in the defense budget after procurement are the cost of military personnel and operation and maintenance. The category of military personnel includes pay and allowances, subsistance, and other costs. Operation and maintenance expenditures pay for day to day costs of operating aircraft, missile forces,

troops engaged in combat, airlift and sealift logistical support training, medical care, communications, and intelligence.

The military construction category is for acquisition of land and construction of facilities such as those to deploy the Safeguard anti-ballistic missile, as well as medical facilities, service schools, troop housing, and bachelor quarters.

Another way to look at the defense budget is by program. In this approach the budget is divided into the costs of supporting the major missions, such as forces, intelligence, communications, airlift, sealift, National Guard, and Reserve and central supply and maintenance. The most significant item under this breakdown is strategic forces and general purpose forces.

Strategic forces includes strategic offensive and defensive forces, civil defense programs, and constitute the United States' nuclear war capability. These annual outlays pay the expenses of our inventory of manned bombers and Intercontinental Ballistic Missiles. Expenditures for general purpose forces include most Army combat and combat support units, all Navy except ballistic missiles, submarines, all Marine, and tactical Air Force. In short, general purpose forces are the type forces used for a limited war and counter-insurgency environment. Outlays for general purpose forces increased sharply after 1962 while outlays for strategic forces declined, reflecting the shift from the "massive retaliation" strategy of the 1950's to the "balance force" strategy of the 1960's. This represents a change from the planned use of large-scale nuclear weapons systems to planned response of a conventional force.

A third way of breaking down the defense budget is by separating Southeast Asia expenditures from all other military expenditures.

The relatively minor American involvement in Vietnam during the 1954-1963 period was hardly visible in the military budget. However, a rough estimate of the total annual cost may be obtained by multiplying the number of American troops in Vietnam during that period by the average annual cost per U.S. soldier ($23,000).

If this average annual cost per U.S. soldier was computed we would find that the American commitment was costing approximately $18 million a year in 1961 alone. During this time, total United States defense spending was $43.2 billion. By multiplying cost per soldier times the number of soldiers in Vietnam, United States defense spending in Vietnam is computed to be approximately $31 million in 1962, $227 million in 1963, and $381 million in 1964. These are still relatively small amounts when compared to the total military budget. An official estimate of $103 million was given for "special support of Vietnam operations" in fiscal year 1965.[4] Table 3 shows the estimated expenditures for 1961-1964.

The last figure still seems relatively low in view of the fact that the United States troops in South Vietnam rose from 23,201 to 103,000 during that year. Presumably, a high proportion of the cost was financed from regular operations or by drawing down inventories of weapons and supplies previously purchased. By this time, United States investment in national defense had enabled substantial

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[4] U.S. Bureau of the Budget, Budget of the United States, Fiscal Year 1968. (Washington, D.C.: Government Printing Office, 1967), p. 77.

support of our effort in Vietnam. Defense spending in 1970 will

forces to be amassed. The strength and composition of the active forces at the end of fiscal year 1965 are compared with fiscal year 1961 and 1963 respectively in Table 4.

TABLE 3

ESTIMATED SUPPORT FOR SOUTHEAST ASIA OPERATIONS 1961-1964
(in millions)

Fiscal Year	Total Defense Budget (billions)	Number personnel in SEA	Estimated SEA Expenditure	Percentage of Change
1961	47,491	1,340	18,000	----
1962	51,179	9,870	31,000	.58
1963	52,211	16,300	227,000	7.30
1964	53,651	23,300	381,000	1.60

SOURCE: Department of Defense, Office of the Secretary.

The significant impact of Vietnam on the Federal Budget and on the American economy began in fiscal year 1966. The January 1966 budget estimated that $14.0 billion of the requested appropriations and $4.4 billion of the estimated expenditures for the fiscal year then in progress-year ending June 30, 1966-resulted from Vietnam. The actual amounts turned out to be greater, $14.9 billion in appropriations and $5.8 billion in expenditures. A review of the data in Table 1 confirms the fact that the fiscal year 1966 was the period of major expansion of American armed forces in Vietnam.

The basic detail in the defense budget is not broken down to show the Vietnam components of each item separately. Thus, it is necessary to infer the amount of this commitment from movements in the more aggregate figures.[5]

TABLE 4

SUMMARY OF ACTIVE FORCES

Description	Actual June 30 1961	Actual June 30 1963	Actual June 30 1965
Military Personnel (in thousands):			
Army	858	975	968
Navy	627	664	671
Marine Corps	820	869	824
Air Force	820	869	824
Total, Department of Defense	2,482	2,698	2,653
Selected military forces:			
Strategic retaliatory forces:			
ICBM Squadrons:			
Minuteman	---	2	16
Titan	---	7	6
Atlas	4	13	---
Polaris submarines	5	12	29
Strategic bombers (wings):			
B-52	13	14	14
B-58	1	2	2
B-47	20	13	5
Continental defense forces:			
Manned fighter interceptor squadrons	42	42	39
Interceptor missile squadrons (BOMARC)	7	8	6
General purpose forces:			
Army divisions (combat ready)	11	16	16
Army special forces groups	3	6	7
Warships:			
Attack carriers	15	15	16
Antisubmarine warfare carriers	9	9	9
Nuclear attack submarines	13	16	21
Other	328	326	331
Amphibious assault ships	110	132	135
Carrier air groups (attack and ASW)	28	28	28
Marine Corps divisions/aircraft wings	3/3	3/3	3/3
Air Force tactical forces squadrons	93	109	117
Airlift and sealift forces:			
Airlift aircraft (squadrons):			
C-130 through C-141	16	26	38
C-118 through C-124	35	31	19
Troopships, cargo ships, and tankers	99	101	106

SOURCE: U.S. Bureau of the Budget. The Budget of the United States Government for Fiscal Year 1965. (Washington, D.C., 1966).

both at the United Nations and Geneva. Research occupies an important

The data on total United States defense expenditures on a fiscal year basis show that the nation's military spending was declining from $54.2 billion in fiscal year 1964 to $50.2 billion in fiscal year 1965 and did not take an upturn until fiscal year 1966. A more precise pattern emerges when the annual data are divided into three-month periods. It shows that the decline in military spending ended by January 1, 1965, the middle of the fiscal year, and that the last two quarters (January-June 1965) were higher than in the same period of the preceding fiscal year. Table 5 illustrates military spending in 1964 through 1966.

Moreover, the data on defense obligations--which include commitments currently being incurred for pay of the armed forces as well as defense contracts being awarded to private industry--show that the upturn began in January 1965. By the fourth quarter of 1965, defense obligations were running approximately $9 billion higher

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[5]This point is brought out by Defense Secretary McNamara and Senator Karl Mundt.

Senator Mundt: "... What is it you are recommending in terms of Vietnam?"

Secretary McNamara: "We talked some yesterday about Vietnam cost estimates, and I said then it was very difficult to make them on any rational basis. The best we can give you is a range of something between $17 billion and $22 billion for fiscal year 1968, the $22 billion being the more commonly used figure.

"Now if it is $22 billion for the year, it is on the order of $2 billion a month for fiscal year 1968, and we are, I would guess..."

Senator Mundt: "You can tell us how much per month is being spent now, though?"

Secretary McNamara: "Not really for Vietnam alone, sir. It is almost impossible to do it on a yearly basis and it is really impossible to do it on a monthly basis. I can tell you how much we are spending in total for defense per month of course, but splitting that into Vietnam and non-Vietnam is honestly almost impossible." Military Procurement Authorizations for Fiscal 1968. (See: Hearings Before the Committee on Armed Services and the Committee on Appropriations, U.S. Senate, 1967, p. 265).

than the last quarter of 1964, seasonally adjusted. By June 1966, defense obligations were running $22 billion above the rate at the end of 1964.

TABLE 5

SELECTED MEASURES OF U.S. MILITARY SPENDING
(in billions of dollars at annual rates)

Calendar year and quarter	Defense obligations		Defense expenditures (budget basis)
	Actual	Seasonally adjusted	
1964:			
1st quarter	52.0	55.2	49.2
2d quarter	61.0	54.8	56.8
3d quarter	55.0	53.3	43.1
4th quarter	51.8	53.3	48.1
Total	55.0	54.2	49.3
1965:			
1st quarter	48.2	51.0	46.8
2d quarter	62.2	55.0	51.6
3rd quarter	60.6	59.0	48.6
4th quarter	62.1	62.1	54.1
Total	58.3	56.8	50.3
1966:			
1st quarter	60.5	64.6	56.4
2d quarter	86.4	75.9	62.4
3rd quarter	77.0	75.2	63.4
4th quarter	68.9	72.9	65.8
Total	73.2	72.0	62.0

SOURCE: The Center for Strategic Studies, Economic Impact of the Vietnam War. Georgetown University, Washington, D.C., June 1967.

The January 1967 budget greatly clarified the pace of the military buildup resulting from Vietnam. It estimated that Vietnam spending would reach $19.4 billion in fiscal year 1967 and $21.9 billion

Agency on the Economic Impact of Defense and Disarmament in the United States, Washington, D.C., 1967.

in 1968. The Pentagon estimated that it would spend $72.3 billion in the fiscal year 1968, for all military operations: a figure larger than any earlier period except the peak of World War II.

The January 1966 budget message of the President made it clear that the United States would simultaneously wage the domestic war against poverty and the war in Vietnam. Of necessity, the 1967 defense budget was constructed upon working assumption--made in October 1965--about how big the war will get and how long it will last. Given all these uncertainties, the budget cannot be expected to coincide with reality. In estimating expenditures and appropriations for fiscal year 1967, the Department of Defense assumed that the United States "combat operations" in Vietnam would not continue beyond June 30, 1967. In keeping with that assumption, the 1967 budget did not provide funds for orders of aircraft or other military goods to replace combat losses after that date. This assumption was the cause of the need for supplemental appropriations in fiscal year 1967.

Military expenditures of the Department of Defense were $70.1 billion in fiscal year 1967, which was an increase of $19.3 billion from fiscal year 1966. Total obligational authority for fiscal 1967 was $72.5 billion. A $12.2 billion supplemental (fiscal 1967) defense money bill for Vietnam was passed in March 1967. The January 1966 budget projected the cost of Vietnam at $10.2 billion in fiscal year 1967. The current offical estimate is nearly double that--$19.4 billion. The explanation for the need of a supplemental to the fiscal 1967 budget lies in the long lead time of military procurement. In many cases, weapons required in fiscal year 1968 would need to be

billion for other defense spending. To return to the real level of defense spending as it

ordered during 1967. This also helps to explain why the military appropriations requested for 1967 were lower than those for 1966 ($58.9 billion versus $61.8 billion).

Total expenditures for the military function of the Department of Defense were estimated at $72.3 billion in fiscal year 1968, $5.4 billion more than in 1967 and $17.9 billion more than fiscal 1966. New obligation authority of $74.7 billion was proposed for the Department compared with $72.0 billion for 1967 including the supplemental request of $12.3 billion transmitted separately to the Congress. Although uncertainties still remained as to the duration and intensity of the conflict in Vietnam, these uncertainties were less pronounced than previously.

The fiscal year 1969 total budget outlays were estimated to be $186.1 billion by the President at the time of his presentation of the budget to the Congress of the United States. National Defense expenditures were estimated to be $79.8 billion, or 43.7 percent of the total estimated fiscal 1969 expenditure. This compares to an estimated $76.5 billion in fiscal year 1968 and $70.1 billion in fiscal 1967. Table 6 summarizes defense expenditures for 1965-1969.

The expansion of the military services in Vietnam throughout this period is also useful as a further explanation of the escalation in activity and the resultant increases in defense spending. Table 7 summarizes the U.S. military forces by service component in Vietnam from 1961 - 1969.

The planning programing-budgeting concept of management used by the Department of Defense plans the resources in terms of major

Institute, 1969), pp. 16-20.

TABLE 6

ESTIMATED SPECIAL SUPPORT FOR
SOUTHEAST ASIA OPERATIONS
(in millions)

Fiscal Year	Defense Expenditures Excluding SEA	Special Southeast Asia Expenditures			
		Defense	Economic Assistance	Total	Increase
1965	$46,070	$ 103	$---	$ 103	$ ---
1966	48,597	5,812	282	6,094	5,991
1967	47,333	20,133	424	20,557	14,463
1968	50,826	26,547	292	26,839	5,282
1969	48,978	28,812	380	29,192	2,254
1970	53,074	25,397	336	25,733	(-)3,359

SOURCE: U.S. Bureau of the Budget, The Budget of the U.S. Government Fiscal Year 1970, Washington, D.C., 1969.

TABLE 7

U.S. MILITARY FORCES IN VIETNAM BY SERVICE COMPONENT, 1961-1969
(as of December 31)

	1961 1962	1963	1964	1965	1966	1967	1968	1969
Army	10,000	10,100	14,700	116,800	239,400	319,500	359,800	361,500
Navy	600	800	1,100	8,400	23,300	31,700	36,100	35,500
Marine	500	800	900	38,200	69,200	78,000	81,400	79,900
Air Force	3,400	4,600	6,600	20,600	52,900	55,900	58,400	60,800
Coast Guard	---	---	---	300	500	500	400	500
Total	14,500	16,300	23,300	185,300	385,300	485,600	536,100	538,200

SOURCE: U.S. Department of Commerce, Bureau of the Census. Statistical Abstract of the U.S., September 1969, 90th Edition Washington, D.C.

mission-oriented programs. It is in this manner that resources of the Department of Defense are summarized and reviewed. The funds required to support these programs during the fiscal period 1965-1969 are summarized in Table 8 in terms of total obligational authority. The total obligational authority is a financial measurement which includes the new obligational authority enacted by Congress plus the obligational authority granted in previous years which is no longer required for its original purpose and can be used to finance the new needs. This table additionally summarizes authority by Component and Title. Outlays for defense are presented as a percentage of Gross National Product.

Background of Increased Defense Expenditures: Southeast Asia Escalation

The first step in the process of arriving at our level of military expenditures is the initial determination of our commitments. Over the years the United States has entered into eight bilateral and multilateral defense agreements with 43 foreign countries. The United States is committed by treaty to come to the defense of each of these countries in the event of an armed attack. Of particular interest here is September 8, 1954, when the United States entered into the Southeast Asia Treaty Organization and agreed that they would respond to any agression by armed attack in the treaty area. How did the United States get into the fighting in Southeast Asia? (President Eisenhower refused to go beyond aid to the French in 1954 and turned down French pleas for direct intervention.) Three reasons greatly contributed to our involvement. First, the U.S. Military Assistance

TABLE 8

SUMMARY OF THE DEPARTMENT OF DEFENSE BUDGET PROGRAM: 1965-1969 FISCAL YEARS
(in millions of dollars)

	1965	1966	1967	1968	1969	Percent of Increase
Summary of Total Obligational Authority by Program						
Strategic Forces	6,855	6,502	6,532	7,615	9,116	.33
General Purpose Forces	18,899	28,801	31,916	32,411	33,246	.75
Intelligence and Communications	4,480	4,998	5,350	5,683	6,007	.34
Airlift and Sealift	1,342	1,610	1,857	1,860	1,629	.22
Guard and Reserve Forces	1,943	2,318	2,673	3,185	2,673	.37
Research and Development	4,719	4,778	4,737	4,427	4,703	NS
Central Supply and Maintenance	4,728	5,940	7,721	8,217	8,811	.87
Training, Medical, etc.	5,870	7,439	8,973	9,969	10,245	.75
Administration and Associated Activities	1,191	1,487	1,335	1,347	1,491	.25
Support of Other Nations	1,149	2,040	2,358	2,376	3,459	2.00
Unfunded (-) Current Service Retirement Pay	-517	-465	-409	-272	-79	----
Total Obligational Authority b/	50,657	65,449	73,042	76,816	81,302	.61
Summary of Total Obligational Authority by Component						
Department of Army (including Civil Defense)	12,361	18,633	22,600	25,447	26,684	1.16
Department of Navy	14,731	19,190	21,339	21,242	22,458	.53
Department of Air Force	19,505	23,054	24,602	25,287	26,670	.36
Defense Agencies	2,485	2,917	3,320	3,641	4,206	.69
Defense Family Housing	576	609	439	600	536	-.07
Military Assistance	1,000	1,046	743	600	748	-.34
Total Obligational Authority b/	50,657	65,449	73,042	76,816	81,302	.61
Summary of Total Obligational Authority by Title						
Military Personnel	14,816	17,047	20,067	22,055	23,996	.62
Operation and Maintenance	12,572	15,018	19,434	20,950	22,516	.79

for the area, are discussed.

TABLE 8--continued

	1965	1966	1967	1968	1969	Percent of Increase
Procurement	14,081	22,154	23,743	23,743	23,610	.68
Research, Development, Test and Evaluation	6,452	6,907	7,266	7,303	7,647	.18
Military Construction	1,060	2,562	1,245	1,613	1,332	.26
Defense Family Housing (incl. Homeowners Assist.)	576	609	439	600	536	-.07
Military Assistance	1,000	1,046	743	600	748	-.34
Other (Civil Defense; Spec. Fgn Currency Prog.)	102	105	105	86	72	-.41
Total Obligational Authority b/	50,657	65,449	73,042	76,816	81,302	.61
Financing Adjustments	-164	-1,916	-50	-413	-4,304	
Budget Authority (NOA) a/	50,493	63,533	72,992	76,403	76,998	
Outlays a/	47,401	55,377	68,331	78,207	78,400	
Outlays as Percent of Gross National Product	7.3	7.8	9.0	10.5	8.8	
Unobligated Balance, End of Year	11,051	13,865	13,737	13,499	10,627	

NS-Percent of change not relevent or significant.

a/ Includes, for FY 1967 and subsequent years, adjustment for trust fund and receipts transactions.

b/ Detail may not add to rounded totals.

SOURCE: U.S. Bureau of the Budget. The Budget of the United States Government for Fiscal Year June 1965; The Budget of the United States Government for Fiscal Year June 1967; The Budget of the United States Government for Fiscal Year June 1969. Washington, D.C., 1968. Department of Defense. The 1970 Budget and Defense Program for Fiscal Years 1970-74. Washington, D.C., 1969.

Fiscal Year 1969. (Washington, D.C.: Government Printing Office, 1968), p. 6.

Program initially provided equipment and advisors in Vietnam. Secondly, the commitment under the SEA Treaty Organization was honored. Third, the inability of the South Vietnamese government to keep from being submerged by the Viet Cong.

The fourteen years of the buildup in Vietnam and the start of the de-escalation contain several important milestones in this "limited war." The United States military advisors took over training of the South Vietnamese forces from the French on February 12, 1955. Subsequently, in May 1960, President Eisenhower doubled the number of advisors in South Vietnam, bringing the number to 685. This number increased to 1,364 during 1961. President Kennedy increased the advisory group to 3,200 by the end of 1961 and to 11,320 by the end of 1962. In November 1963 when President Johnson began his term of office, he increased the number of U.S. advisors to 23,300 during the next year.[6] Up to this time, the United States involvement had been primarily an advisory effort. A major milestone in the buildup occurred in August 1964. The Tonkin Gulf incident brought a congressional resolution authorizing all measures to prevent further aggression in Vietnam, inclusive of retaliation against North Vietnam.[7] In February

[6]These figures are taken from a tabulation provided by General Harold K. Johnson, Chief of Staff of the U.S. Army and published in U.S. House of Representatives, Committee on Appropriations, Department of Defense Appropriations for 1967, Part 1, 1966, p. 378.

[7]On August 2, and again on August 4, U.S. naval vessels operating in international waters in the Gulf of Tonkin off the coast of North Vietnam were attacked by Communist North Vietnamese torpedo boats. The U.S. vessels took appropriate retaliatory action and, following the second attack, air units of the 7th Fleet fired on gunboats and on certain supporting facilities on the North Vietnamese shore. See The Department of State Bulletin, Vol. LI, August 24, 1964, p. 258-270, for a complete discussion of U.S. measures to repel the attack against U.S. forces in the Gulf of Tonkin.

of 1965 the United States started regular bombing of North Vietnam and on March 9 of that year the first U.S. ground units landed in Vietnam. An increased troop ceiling of 400,000 troops was set by President Johnson in December 1965. By the end of 1965 the United States was deeply involved in an intensified escalation of the war. Table 8 on the preceeding page describes this increased response in terms of a percentage increase in material, manpower, and research and development. When President Johnson announced he would not run for another term of office on March 31, 1968, he also set a new troop limit of 549,500. The United States reached a peak troop strength of 543,000 in April 1969. The initial step in de-escalation occurred on June 8, 1969 when President Nixon announced 25,000 Americans would be pulled out of Vietnam before the end of August 1969. Subsequently, two more reductions in U.S. troop strength have been announced to date. The United States has scheduled a total reduction of the armed forces of 300,000 - to be completed by mid-1970. A chronology of selected significant events in Southeast Asia is presented in Appendix A showing some of the important political and military actions from 1950-1969.

Economic Effects of Escalation

The economic effect of Southeast Asia spending is a very complex subject. A complete economic study of the spending for Southeast Asia is beyond the scope of this study. The economic effect of Southeast Asia spending can be compared to that of selected previous years and Korea by comparing the defense expenditures for the purchase

of goods and services and express the expenditures as a percentage of the Gross National Product. This is shown in Table 9.

Although the military buildup started in 1964, the first real economic impact was not felt until fiscal 1966. Prior to this time, the Bureau of the Budget estimated that the additional costs of Vietnam were at most $100 million per year compared to a total military budget of $50 billion. This is where a miscalculation occurred. The Administration believed that despite the indicated increase in defense spending there would be no inflationary strain on the nation's economy. The increases in spending by all sectors of the economy exceeded the capacity of the economy to produce goods and services at the then prevailing prices. The result in 1966 was the most rapid inflation in the history of the United States since the Korean War.

The cause of the miscalculation of the economic impact was the result of two key factors. First was the underestimate of spending for Vietnam by assuming termination of Vietnam spending needs by mid-1966. Second was an oversight of how a military buildup affects the economy. The substantial increase in military orders in fiscal 1966 was not reflected in the Government budget immediately because the budget figures were on a bills paid rather than on an orders placed basis. However, the private sector which received the military orders, was stimulated immediately. Consequently, the most rapid expansion of military orders took place in the fully employed economy of 1966. It is understandable that this expansion was accompanied by inflation. This same kind of oversight contributed in the inflation that occurred during Korea. Table 2 in Chapter I shows the size and rate of buildup of expenditures for Vietnam. This substantial

TABLE 9

DEFENSE BUDGET, FEDERAL BUDGET, AND GNP FOR SELECTED YEARS
(Amounts in Billions of Dollars)

Fiscal Years		GNP	Federal Budget Outlays: Net Total	Dept. of Defense	Other	Offsets[b]	DoD Outlays as % of: GNP	Federal Budget
1950	Lowest year since World War II[a]	$ 263.3	$ 43.1	$ 11.9	$ 31.2	NA	4.5%	27.7%
1953	Korea Peak[a]	358.9	76.8	47.7	29.1	NA	13.3%	62.1%
1961	Ten years ago	506.5	97.8	44.6	55.7	-2.5	8.8%	44.5%
1964	Last prewar year	612.2	118.6	50.8	70.7	-2.9	8.3%	41.8%
1968	SEA peak[a]	822.6	178.9	78.0	105.5	-4.6	9.5%	42.5%
1969	Last actual year	900.6	184.6	78.7	111.0	-5.1	8.7%	41.5%
1970	Johnson Budget	960.0	195.3	[c]/81.6	119.4	-5.7	8.5%	40.6%
1970	Current estimate	960.0	197.9	77.0	127.0	-6.1	8.0%	37.7%
1971[e]	Budget estimate	1,020.0	200.8	71.8	135.6	-6.6	7.0%	34.6%
1971	In 1964 dollars			54.6				
Changes:								
	1964 to 1971	+407.8	+82.2	[d]/+21.0	+64.9	-3.7		
	1969 to 1971	+119.4	+16.2	-6.9	+24.6	-1.5		

[a] As a percentage of GNP and the Federal Budget
[b] These amounts are undistributed intragovernmental transactions deducted from Government-wide totals. These include Government contribution for employee retirement and interest received by trust funds.
[c] Includes $2.6 billion cost of the July 1, 1969 pay raise. The pay raise costs were not shown in the agency totals, but were included in a Government-wide contingency estimate in the FY 1970 Johnson budget.
[d] 5.2% of the GNP growth during this period and 24.4% of the increase in the Federal budget.
[e] Lowest % of GNP since 1951; lowest % of Federal Budget since 1950.

SOURCE: Office of the Assistant Secretary of Defense (Comptroller).

and rapid expansion in Vietnam military spending in combination with rapid rising Federal non-defense spending affected the economy in many ways. It allocated more of our resources into the government sector and away from the private sector. Federal spending amounted to 20 percent of the Gross National Product at the end of 1964. This ratio increased to 23 percent by June 1967.

Other effects caused by the sharp rise in Vietnam spending include aggregate economic problems, structural shifts in the makeup of the military budget, related greater impacts on industries producing war material, a changed geographic distribution of defense orders, and a worsening of out balance payments.

Inflation was the principal aggregate economic effect of the rapid buildup from mid-1965 to mid-1966. Late in 1966 some steps were taken to curb the inflation, including the moves of the Federal Reserve to halt the rise of the money supply and the temporary suspension of the tax credit for new investment. Combined with the leveling out of the rate of placement of new defense orders after mid-1966, these measures, and possibly other factors, brought about an abatement of the pressure of demand and a sharp decline in inventory accumulation during the first half of 1967. Unfortunately, at the first signs that inflationary pressure was abating at the end of 1966, the government's anti-inflation efforts were relaxed.

Prices and wages continued to rise through this period. A major factor in the inflation of 1966 and 1967 was the sharp rate of increase in unit labor costs. As indicated in Table 10, this resulted from the fact that the large increases in hourly compensation were accompanied by a marked slowdown in the growth of output per

man-hour. The economy inherited a continuing cost-push pressure that threatened a profits-squeeze in 1968. Even though taxes were increased, a substantial budget deficit arose. Other problems include a persistent balance of payments deficit and a tightening of credit.

TABLE 10

PRECENTAGE CHANGE PER YEAR IN COMPENSATION, PRODUCTIVITY, AND UNIT LABOR COSTS

	1961-1965	1965-1966	1966-1967
TOTAL PRIVATE:			
Average hourly compensation	4.4	6.9	6.0
Output per man-hour	3.8	3.1	1.4
Unit labor cost	.5	3.7	4.5
MANUFACTURING:			
Average hourly compensation	3.6	4.9	6.1
Output per man-hour	4.6	2.2	.9
Unit labor cost	-1.0	2.7	5.1

SOURCE: Council of Economic Advisors, Economic Report of the President together with the Annual Report of the Council of Economic Advisors: 1968 (Washington, D.C.: Government Printing Office), 1968.

The changing industrial composition of military procurement is indicated in Table 11. In contrast to the Cold War mix that emphasized sophisticated equipment, the current mix is much more like that of Korea, with the emphasis on conventional equipment and material. The traditional industries, including automotive, mechanical, textile, and rubber are becoming important suppliers of war material. Especially affected have been ammunition (up 270 percent in fiscal 1967 over fiscal 1966), clothing and textiles (up 240 percent), tanks and vehicles (up 80 percent), and food (up 60 percent).[8]

[8]U.S. Department of Defense, Military Prime Contract Awards and Subcontract Payments, July 1965-June 1966. (Washington, D.C.: Office of the Secretary of Defense, 1966).

TABLE 11

CHANGING GEOGRAPHIC DISTRIBUTION OF DEFENSE CONTRACTS
(Percentage Distribution of Dollar Volume)

Census Region (See page 60)	Korean War FY 1952	Cold War FY 1962	Vietnam FY 1966
Northeast:			
New England	8	11	12
Middle Atlantic	25	19	17
Subtotal	33	30	29
Mid West:			
East North Central	27	12	15
West North Central	7	7	8
Subtotal	34	19	23
South:			
South Atlantic	8	10	13
South Central	6	8	12
Subtotal	14	18	25
Far West:			
Mountain	1	5	3
Pacific	18	28	20
Subtotal	19	33	23
TOTAL	100	100	100

SOURCE: Computed from Department of Defense data. Murray L. Weidenbaum, Peace in Vietnam: Possible Economic Impacts and the Business Response, September 1967.

The demands of Vietnam have resulted in many smaller contracts involving many and varied medium-sized firms as supplier, rather than the contracts for large weapons systems that only a few of the larger corporations could supply. Consequently, the small business firms raised their share of defense contract awards from 19.6 percent in fiscal 1965 to 21.4 percent in fiscal 1966. Small business firms

received 16.4 percent of the value of military prime contracts awarded to all United States business firms during the first quarter of fiscal 1970 compared with 15.6 percent for the first quarter of fiscal 1969.

The trend in military procurement reached a total of $44.6 billion in fiscal 1967 and established a new high since the Korean War peak in 1952. The increase in military activity in Southeast Asia brought about a sharp increase in procurement which reached $38.2 billion in fiscal 1966 and a high of $44.6 billion in fiscal 1967. Since then, procurement has fallen slightly to $43.8 billion in fiscal 1968 and to $42.0 billion in fiscal 1969. The trend in military procurement for 1961-1969 is shown in Chart 1. Chapter III continues this particular discussion as well as setting forth the geographic distribution of defense orders.

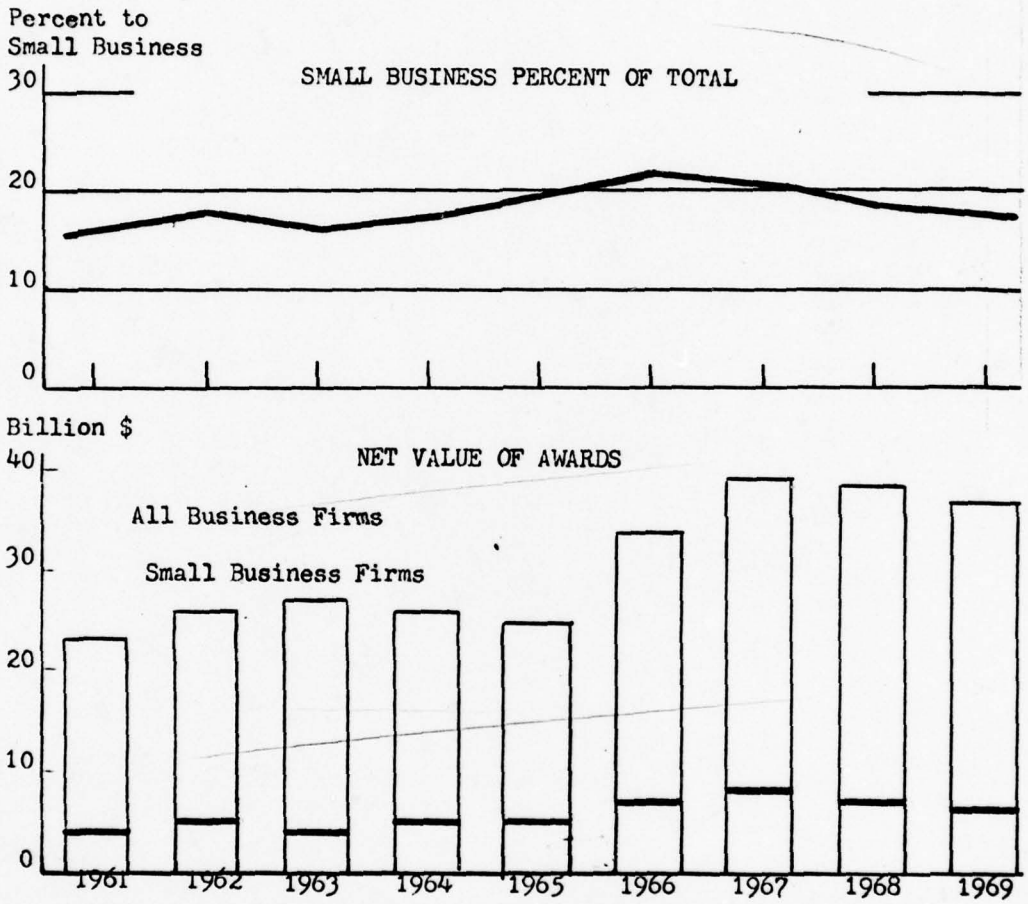
Another special economic aspect of Vietnam spending is the adverse impact on our balance of payments. Vietnam-related foreign exchange costs in fiscal 1967 apparently ran at least $1 billion higher than in the pre-buildup year of fiscal 1965; and, when the indirect effect of such spending is also taken into account--in the form of more induced imports resulting from higher domestic incomes--the total adverse effect is estimated to be in the neighborhood of $2 billion yearly.[9] The de-escalation would lessen this payments deficit and help move the United States international accounts toward equilibrium, which would in turn bolster international confidence in the dollar and discourage speculative purchases of gold with dollars.

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[9]Murray L. Weidenbaum, Peace in Vietnam: Possible Economic Impacts and the Business Response, Report to the U.S. Chamber of Commerce Committee on the Economic Impact of Peace in Vietnam, Washington, D.C., September 1967 (Washington, D.C.: U.S. Chamber of Commerce, 1967), p. 7.

CHART 1

MILITARY PRIME CONTRACT AWARDS TO
SMALL AND OTHER BUSINESS FIRMS



SOURCE: U.S. Department of Defense. Prime Contract Awards and Subcontract Payments or Commitments. (Washington, D.C.: Office of the Secretary of Defense, December 17, 1969).

The primary conclusion to be drawn from the economic effects of escalation in Vietnam is clear. The production requirements of the scale of operations at that time, although not enormous, was appreciable. Based on these facts, it is apparent that peace adjustment plans must be made by the Federal Government, states, localities,

and business itself which are adapted to the rate of decline in defense spending and to the state of the economy at that time. Nevertheless, the economy could be distorted needlessly by de-escalation.

Charles L. Schultze, former Director of the Bureau of the Budget summarized the economic impact of increased Vietnam spending during his testimony before the Joint Economic Committee of the Congress of the United States on April 24, 1967.

> Although the number of men and the amount of material devoted to the Vietnam operation is large, the military effort there has quite obviously caused far less economic disruption to the American economy than World War II, and substantially less than the Korean War. Defense purchases of goods and services have risen by some $20 billion (at seasonally adjusted annual rates) since mid-1965, when the buildup in Vietnam started. While this figure seems large, it represents less than 3 percent of our gross national product. Defense outlays constituted 9 percent of GNP in fiscal 1962 and 1963. They fell to 8.3 percent of GNP in mid-1965. The additional spending for Vietnam has simply restored this percentage to its 1962-63 level.
>
> In contrast to the present situation, defense purchases during the Korean period rose from 4.5 percent of GNP in mid-1950 to 12.5 percent in the first quarter of 1952. In that period the increase in defense purchases absorbed nearly one half of the increase in GNP. In the present case, the rise in defense purchases has taken only one-fifth of the increase in national output. During the first year and a half of the Korean buildup we added 2 million men to the Armed Forces, almost exactly equal to the total increase in the labor force over the same period. In the comparable Vietnam period, the size of the Armed Forces increase was only one-third as large as during Korea, while the rise in the labor force was 50 percent larger. The point is that the economic impact of the present conflict has not caused anywhere near the economic reorientation and disruption that the Korean conflict did--and Korea followed quickly on the World War II period of shortages in non-defense investment and consumer goods, while Vietnam follows a period of great prosperity and productivity. [10]

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[10] U.S. Congress, Joint Economic Committee, Hearings on Economic Effect of Vietnam Spending, Vol. I., 90th Cong., 1st Sess., (Washington, D.C.: Government Printing Office, 1967), p. 31-32.

Summary

American troops have been stationed in Southeast Asia for many years but the major buildup started in mid-1965. Table 1 in Chapter I showed the expansion of the United States military forces. The budgetory programs presented in this chapter had a similar expansion pattern. The bulk of the expansion of United States resources to support the fighting in Southeast Asia occurred during the period of July 1, 1965 to June 30, 1967. Table 6 on page 21 shows that the estimated expenditures for fiscal year 1968 had a much slower rate of increase. The allocation of the nation's resources between the private sector and the public sector have been altered as a result of the large and rapid expansion of Southeast Asia spending, but not on as large a scale as during World War II and Korea when expressed as a percentage of the Gross National Product.

It may be said that while the Vietnam effort was not so large as to cause any severe hardship in the domestic economy, the consequences of the policy actions and inactions of the buildup period up to early 1967 were serious. There was an upsurge of inflation and a concentration of the real impact of the military buildup on fixed investment, especially housing, and on net exports.

The employment impacts of increased defense spending during the fiscal years 1961-1969 and a discussion of some of the peculiarities of the defense industry are presented in the next chapter.

CHAPTER III

ANALYSIS OF THE EMPLOYMENT LEVEL IN THE DEFENSE INDUSTRY

The labor force itself must be understood before the effects of reduced defense spending can be assessed. This includes a study of the size, composition and regional distribution of the labor force when considering employment within the United States. Another important subject is that of unemployment and the programs aimed at reducing the cause of unemployment. This chapter will deal with the factors of composition, size, and distribution of the labor force as well as employment and unemployment trends. This discussion of the total labor force deals with one of the most economically active segments of the economy. The total labor force is composed of those working in both the public and private sector.

It is important to consider the composition of the labor force which provides the manpower for the industrial community of the United States as it is broken down from the national level to the regional level. Table 12 provides a limited breakdown by general work category for both the male and female worker.[11]

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[11]The composition of the major occupational groups is as follows: White-collar workers-Professional, technical, and kindred workers; Managers, officials, and proprietors except farmers; Clerical and kindred workers; Sales workers. Blue-collar workers-Craftsmen, foremen, and kindred workers; Operatives and kindred workers; Laborers, except farm and mines. Service workers-Private household workers, Service workers, except private household. Farm Workers-Farmers and farm managers, Farm laborers and foremen.

TABLE 12

EMPLOYED PERSONS, BY MAJOR OCCUPATIONAL GROUP & SEX: 1960-1969
(in thousands of persons, 14 yrs. old or over)

Major Occupational Group and Sex	1960	1965	1969
Total	66,681	72,179	76,520
White-collar workers	28,726	32,104	36,458
Blue-collar workers	24,211	26,466	27,340
Service workers	8,349	9,342	9,672
Farm workers	5,395	4,265	3,050
Male	44,485	47,034	47,907
White-collar workers	16,596	17,964	19,412
Blue-collar workers	20,573	22,314	22,594
Service workers	2,918	3,287	3,288
Farm workers	4,398	3,466	2,613
Female	22,196	25,145	28,613
White-collar workers	12,129	14,137	17,047
Blue-collar workers	3,637	4,153	4,746
Service workers	5,431	6,057	6,348
Farm workers	998	799	437

SOURCE: U.S. Department of Commerce, Bureau of the Census. Statistical Abstract of the United States - 1969, Washington, D.C.: September 1969.

The changes within the labor force in 1966 are indicative of the everchanging complexion of labor in the United States. The requirement for qualified civilian workers was such that the labor force had to make a number of remarkable adjustments. This was due to the relatively small number of adult men of prime working age and because of the Armed Forces requirement. The changes in the labor force were both external and internal. Inside the work force, many of the formerly unemployed found new jobs. Others, who were already gainfully employed, worked longer hours. Externally, women entered the active labor force in greater numbers than in any year since World War II. They accounted for 1.1 million of the 1.7 million civilian

labor increase in 1966.[12] The pattern of the economic growth of the United States is measured by examination of the additional manpower requirements generated by the various segments of the goods and service-producing industries. As the growth of the country continues, the demand for additional manpower has continued to remain concentrated primarily in the privately owned enterprises.

Employment in the goods-producing sector of the economy--manufacturing, mining, and construction continues to lead the other sectors in employment growth. In 1965, manufacturing added 750,000 new jobs; in 1966, it added another one million. The overall increase during the 1961-1968 period was almost 4 million, bringing goods-producing total employment to more than 23½ million workers in 1968, as shown in Table 13.

The impact of the Vietnam war on employment expansion in the durable-goods industries was greatest in 1965 and 1966, and is especially apparent in industries oriented heavily toward defense--ordnance, communications equipment, electronic components, aircraft and parts, and shipbuilding and repairing. After growing slowly in the early sixties, aggregate employment in these industries increased rapidly from 1965 forward, accounting for almost one half of the total job growth in durables between 1965 and 1968.[13]

The industries in the service-producing sector--trade services, transportation and public utilities, finance, insurance, real estate,

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[12] U.S. Department of Labor, Manpower Report of the President, (Washington, D.C.: Government Printing Office, 1969), p. 23.

[13] Ibid. p. 31.

TABLE 13

NONFARM PAYROLL EMPLOYMENT BY INDUSTRY DIVISION, 1961 AND 1968
(Numbers in thousands)

Industry Division	1961	1968	Change, 1961-68 Number	Change, 1961-68 Percent
Total	54,042	67,930	13,888	25.7
Goods-producing industries	19,814	23,571	3,757	19.0
Mining	672	622	-50	-7.4
Contract construction	2,816	3,245	429	15.2
Manufacturing	16,326	19,704	3,378	20.7
Durable goods	9,070	11,556	2,486	27.4
Nondurable goods	7,256	8,148	892	12.3
Service-producing industries	34,229	44,359	10,130	29.6
Transportation and public utilities	3,903	4,338	435	11.1
Trade	11,337	14,067	2,730	24.1
Finance, insurance and real estate	2,731	3,341	610	22.3
Service and miscellaneous	7,664	10,461	2,797	36.5
Government	8,594	12,152	3,558	41.4
Federal	2,279	2,735	456	20.0
State and local	6,315	9,417	3,102	49.1

NOTE: Detail may not add to totals due to rounding.

SOURCE: U.S. Department of Labor. Manpower Report of the President, Washington, D.C., January 1969.

and government--continued to provide the bulk of new employment opportunities. Indicative of the potential job-bearing climate in this sector is the notable growth which took place in 1966. This was the largest gain in employment increases for any single year since World War II. In fact, the jobs added by this sector accounted for every three out of five jobs added to payrolls in 1966. Employment in these industries rose by 10 million during the 1961 - 1968 period, about twice the increase of the previous eight years.

The increase in demand for labor was met by persons who were previously unemployed, by those shifting from the farm to higher

paying non-farm jobs, or by increased use of overtime. Even with overtime increases in manufacturing, the average work week of production and other nonsupervisory workers on private payrolls declined from 38.6 to 37.7 hours between 1961 and 1969. Average overtime hours in manufacturing also rose over the period - from 2.4 to 3.6 hours - with the peak occuring in 1966 at 3.9 hours. Average hourly earnings rose from $2.14 in 1961 to $3.04 in 1969.

Unemployment

The ultimate goal of the stated manpower policy of the United States is to enable every American to realize his full employment potential and fully utilize this potential in his own and the nation's best interest. The desire for the achievement of a high level of employment was first made a national objective more than two decades ago by the passage of the Employment Act of 1946. This important act stated, with the support of the American people, that the high socioeconomic costs of unemployment require the intervention of the Federal Government in order to head off depressions and to speed the expansion of employment and income.

The unemployment rate continued to slowly increase in the late 1950's and early 1960's and it became evident that something more than just limited fiscal and monetary measures were necessary to prevent recessions and/or to stimulate business recovery. The information presented in Table 14 indicates the various increases and decreases in unemployment which have occurred and which created the requirement for corrective action to reduce the increasing unemployment rate.

TABLE 14

UNEMPLOYMENT, 1953-1969
(In thousands of persons 16 years old or over)

Year	Employment Total Incl. Armed Forces	Unemployed	
		Number	Percent
1953	66,560	1,834	2.9
1954	66,993	3,532	5.5
1955	68,072	2,852	4.4
1956	69,409	2,750	4.1
1957	69,729	2,859	4.3
1958	70,275	4,602	6.8
1959	70,921	3,740	5.5
1960	72,142	3,852	5.5
1961	73,031	4,714	6.7
1962	73,442	3,911	5.5
1963	74,571	4,070	5.7
1964	75,830	3,786	5.2
1965	77,178	3,366	4.5
1966	78,893	2,875	3.8
1967	80,793	2,975	3.8
1968	82,272	2,817	3.6
1969	84,239	2,831	3.5

SOURCE: Council of Economic Advisors, Economic Report of the President together with the Annual Report of the Council of Economic Advisors: 1969 Washington, D.C.: February 1970.

The knowledge gained by the government in analyzing the cause for growing unemployment indicated that in the complicated economy of the United States, the job market forces and partially controlled business cycles would not achieve full employment. This being understood, the government started a program which was geared not only to speed up economic and employment growth, but also to attack the problem at its root. This program was aimed at the employment and training needs of workers who had outmoded or inadequate labor skills and the economy's requirement for trained manpower.

Manpower policies, regardless of their size and scope, cannot reach the basic objective of fuller utilization of human resources without a strong, sustained expansion of the economy. The present degree of prosperity as measured in terms of the Gross National Product has been outstanding in both length and scope. The GNP has increased 48 percent in the last 9 years for an average 3.4 percent a year. During this same period, the unemployment rate was reduced 44 percent, or from less than 7 percent to less than 4 percent -- as is shown from 1961 to 1969 in Table 14.

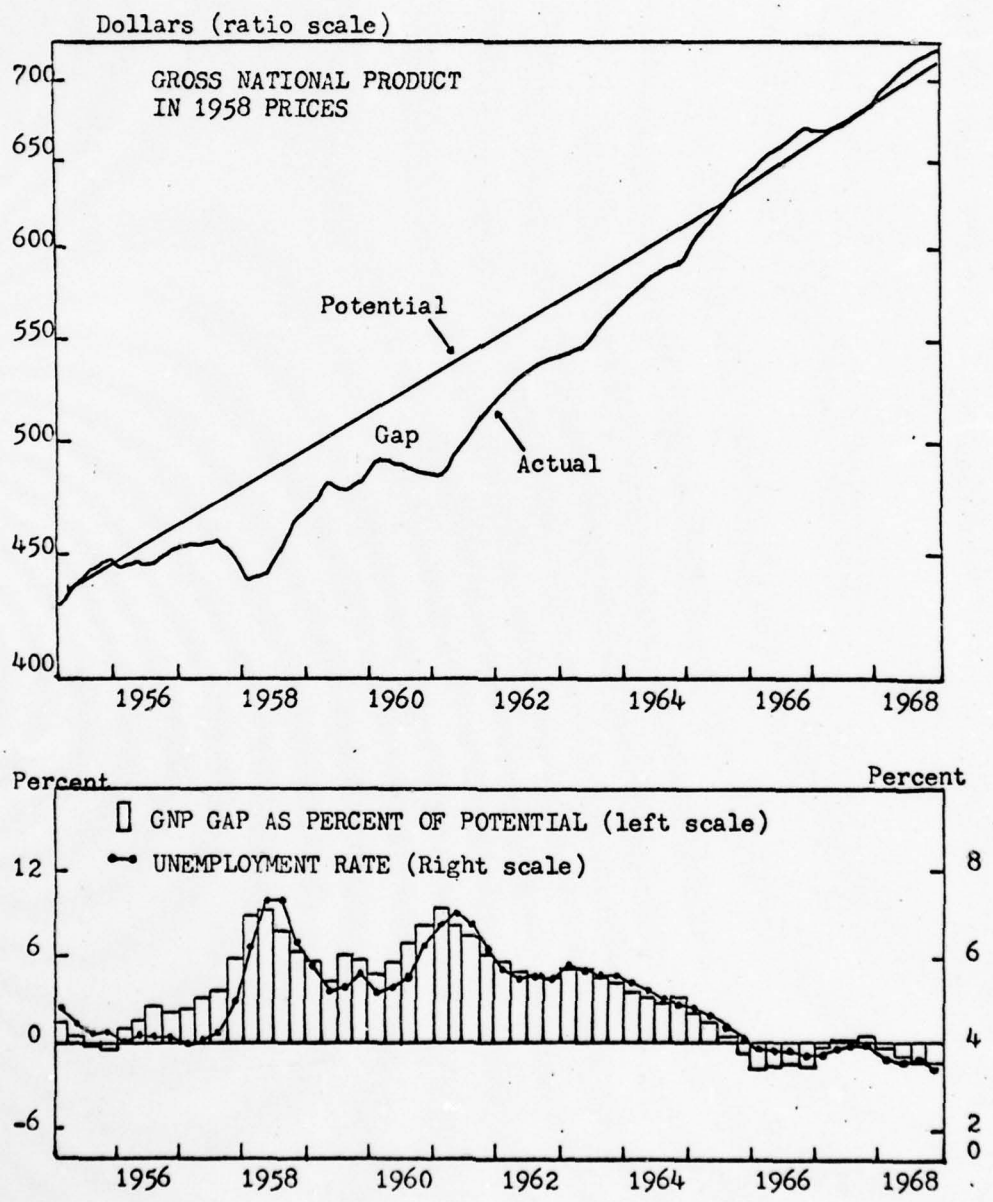
When the Gross National Product is examined in terms of the large recent gains in output, the fact that the overall demand has caught up with the economy's rising productive capacity is evident. Chart 1 reveals that in the late 1950's and early 1960's, the country was not consuming or investing the output it was capable of producing.

The "Potential" GNP line reflects the possible output of the country at the 3.8 percent unemployment level. The "gap" between the potential GNP line and actual GNP line reflects lost output, or the difference between the potential and actual use of valuable manpower resources. The unemployment rate and the potential GNP line may also be correlated. When the actual GNP line approached and crossed the potential GNP line in 1964, the effects of increased economic activity and a subsequent reduction in unemployment is evident.

Even though less than 4 percent of the labor force was without employment in an average week of 1968, the individuals who compose the rank of the unemployed deserve consideration at this point. Unemployment falls most heavily on blue-collar and service workers.

CHART 2

GNP, ACTUAL AND POTENTIAL, AND UNEMPLOYMENT RATE
(In 1958 Prices)



SOURCE: Council of Economic Advisors, Economic Report of the President together with the Annual Report of the Council of Economic Advisors: 1968, Washington, D.C.: January 1969.

The unemployment rate for nonwhite men continued with the steady decrease that has been in progress since 1961, although the rate is still more than twice that of white men. Teenage unemployment rates have remained at an unsatisfactorily high level throughout the current period of sustained economic growth. Although there has been improvement in the employment rate, Negro teenagers fail to share in this improvement. The number that were unemployed rose by 25 percent, and their unemployment rate remained virtually unchanged at about 25 percent.[14] Consequently, the gap between the unemployment rates for Negro and white teenagers widened, since the unemployment rate for white youth has decreased substantially since 1961.

The nation has reached a point where the most serious remaining unemployment problems are as much personal as they are economic. Presently, the primary need is to develop people's ability so they can take advantage of the opportunities which are around them. Historically, the problem was that there were not enough jobs to go around. Today the problem is that where the jobs exist, there is a shortage of skilled applicants to fill the vacancies. One of the reasons for the increased requirement for skilled personnel is due to the increased use of automatic machinery and to the increasing array of instruments that have forced many processes to use fewer semi-skilled laborers.

Joblessness and poverty in the United States are now most concentrated and intense in the slums of the nation's cities. The wide disparity in employment conditions between the urban cores and

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[14] Ibid, pp. 43-44.

the remainder of the metropolitan area emerges more clearly from recent data that contrast the poorest one-fifth of the neighborhoods in these area. Such data, tabulated from the Current Population Survey in 1967[15], showed that the inhabitants of urban poverty neighborhoods had a much higher incidence of unemployment and weaker labor force attachment than the residents of other urban neighborhoods, and when employed, were generally confined to low-skill jobs in which work tends to be irregular and earnings are generally low.

The poorest, most disadvantaged people, including a rising proportion of Negroes are caught in slums without hope of escape. About one half of all urban Negroes were found to live in poverty neighborhoods, compared with only one-tenth of all urban whites. The characteristics of the unemployed are a partial indication of the whole complex of work problems which contribute to poverty in in the slums. In 1967, the average unemployment rate in the slums was about three times the national rate. To compound the problem, about 7 percent of the men in the 25 to 54 years age group residing in poverty neighborhoods were not even in the labor force -- that is, they were neither working nor looking for work. This was more than three times the proportion of men outside the labor force in other urban neighborhoods.[16]

The problems of high unemployment and poverty exist also on farms and in rural nonfarm areas. Although not as visible nor as dramatic in nature, about 11 million rural Americans (or one-fifth

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[15]See Paul M. Ryscavage and Hazel M. Willacy, "Employment of the Nation's Urban Poor," Monthly Labor Review, August 1968, pp. 15-21.

[16]Manpower, pp. 43-44.

of the rural population) lived in poverty in 1966. In fact, these rural poor outnumbered those in the cities. The farm worker has suffered due to the technological advancements of mechanization, which have greatly increased productivity and displaced millions of farmworkers over the past 50 years. The requirement for training and education is dramatically obvious as the transferability of rural skills to other occupations and industries is limited. The major problem facing the labor force of the rural areas is that the manpower requirements are changing faster than the skills of the unemployed rural worker can adjust and update. This technological progress in farming, coupled with the seasonality of employment and low wages in the rural economy, has induced massive rural-to-urban migration. In the years between 1950 and 1960, the population of the agricultural community dropped by about 400 thousand, while the rest of the population by areas grew more than 28 million. This marked decline was accounted for entirely by a decrease in the Negro rural population of 600 thousand, as the white rural population increased by about 118 thousand. During this period, an estimated 4.6 million persons departed the rural areas with the largest losses noted in the South and the North Central states.

Estimates of rural unemployment do not take into consideration the vast number of men and women who are not in the labor force because of lack of employment opportunities. Information derived from the 1960 census indicates that rural dwellers do not participate in the labor force at as high a rate as their counterparts in the cities. In 1960, there were 2.64 persons for every employed urban dweller; for the rural farm population, there were 2.88 persons to each employed

person, and for the rural nonfarm dweller, there were 3.23 persons for every employed person.

It should be evident that the impact of an increase in unemployment would depend upon many factors, such as which sectors of the economy would be affected the most. These variables would alter the kinds and numbers of workers affected. Past experience has shown it would be the goods-producing industries to bear the brunt of any economic slowdown. These industries accounted for much of the unemployment during past recessions and are a prime employer of men, especially blue-collar workers.

A recent study by Paul M. Ryscavage of the Bureau of Labor Statistics, calculated the impact of higher unemployment on the occupational groups by regression analysis. He utilized the monthly seasonally adjusted jobless rates for each occupational group against the total rate for the period 1959 - 1968. These relationships are presented in Table 15. The table indicates the unemployment rate for all blue-collar workers is more responsive to a change in the national unemployment rates than the rates for white-collar or service workers.

Estimates were also made to determine how an increase in the United States' unemployment rate would affect the occupational unemployment levels. The most significant increase was in the total rate of unemployment levels for blue-collar workers. Approximately 600,000 of the 900,000 increase in total unemployment resulting from a one percent increase in the unemployment rate would occur among blue-collar workers, with craftsmen and operators specifically accounting for most of the rise. White collar and service workers would each experience

a 100,000 rise in the number of unemployed as would workers with no previous work experience.[17]

TABLE 15

ESTIMATED IMPACT OF HIGHER UNEMPLOYMENT ON OCCUPATIONAL GROUPS

	Average change in unemployment rates (percentage points)
Total	1.0
White-collar workers	0.4
Professional and technical	0.3
Managers, officials, and proprietors	0.3
Clerical	0.5
Sales	0.6
Blue-collar workers	1.7
Craftsmen and foremen	1.3
Operatives	1.7
Nonfarm laborers	2.6
Service workers	0.9
Farm workers	0.2

SOURCE: Ryscavage, Paul M., "Impact of Higher Unemployment on Major Labor Force Groups," Monthly Labor Review, Volume 93, Number 3, March 1970.

It is now apparent that the present levels of unemployment themselves are not as distressing as the circumstances surrounding the unemployed. Consequently, the program of occupational training under the Manpower Development and Training Act (MDTA) of 1962 has relied heavily from the start on classroom instruction in the nation's

[17]Paul M. Ryscavage, "Impact of Higher Unemployment on Major Labor Force Groups," Monthly Labor Review, Volume 93, Number 3, March 1970, pp. 24-25.

vocational schools. Prior to the MDTA, the passage of the Area Redevelopment Act in 1961 provided for Federal Aid for training workers in areas of long-standing unemployment, but the scope of this Act was very narrow and did not provide the broad coverage that MDTA does. Since the start of MDTA, over one million unemployed individuals have been enrolled in MDTA projects. The basic guideline for this program is to train the unemployed for these occupations which have known vacancies. The program has proved that even the most disadvantaged, with proper training, can qualify for employment.

Authority to add work experience to the arsenal of major manpower programs was provided by the Economic Opportunity Act of 1964 (EOA). This Act authorizes assistance for work experience and training programs for young persons who have been handicapped by economic, cultural, and educational adversities, and for needy adults, particularly unemployed parents of dependent children. The Office of Economic Opportunity, established under the Act, is responsible for the coordination and the review of all programs delegated to other agencies. This agency has been the executive arm of the President for integrating the attack on poverty. Some of the programs administered by OEO are; community action programs (including Operation Upward Bound and Head Start). Volunteers in Service to America (VISTA), Neighborhood Health Centers, Legal Services, Migrant Workers Programs, and Rural Area Programs. These programs are aimed at reducing poverty in areas of chronic unemployment. There are other programs which are specifically oriented to prepare people for work through the provision of training and work experience for both youth and adults. These are particularly oriented toward those who are unemployed or from low-income families.

The Human Resources Development Program which was started in 1966, combines city, state, and Federal agencies with business and minority groups to conduct a two-phased attack on unemployment. The first phase is to work with potential employers to increase employment opportunities for the disadvantaged and the second phase is to help the disadvantaged prepare and qualify for the jobs.

The Model Cities Program is conducted by the Department of Housing and Urban Development. It offers financial help for communities desiring to start programs designed to provide training in order to reduce unemployment and dependence on welfare.

The Neighborhood Youth Corps program provides Federal funds and technical assistance to establish work-training programs for youth at the local level. The disadvantaged youth - aged fourteen through twenty-one years of age - receive counseling and other services which help them find a job and/or to encourage them to continue in school.

The Job Corps is also a training program for youth and differs from the preceeding program in that it is for individuals who have dropped out of high school and have been out for three or more months, have records of low educational achievement, and are in need of full-time employment. This residential program for both young men and women is administered by the Office of Economic Opportunity.

The Public Employment Service began in late 1967 to provide services to returning veterans and disadvantaged servicemen. Upon discharge, a representative of the local Federal-State Employment Service contacts the veteran to offer assistance tailored to his individual needs. This assistance may take the form of job counseling and guidance, referral to training or employment on a priority basis,

or information about the amended GI Bill of Rights and the financial assistance it offers to veterans in obtaining education and training.

To further improve services to veterans, the President, in late 1967, ordered the establishment of special Veterans Assistance Centers in major cities. The Veterans Administration operates these centers in 21 cities and places special emphasis on helping the 25 percent of the veterans who have less than a high school education.

The U.S. Civil Service Commission also has a three-part program of assistance to veterans of the Vietnam era. This consists of increased counseling on Federal job opportunities, expedited processing of applications from veterans, and a new type of transitional appointment that provides access to civil service jobs to veterans who have no more than a high school education and who agree to take one to two additional years of schooling.

Another program to prepare servicemen for civilian employment in advance of discharge is in the form of a program entitled "Project Transition." The transition program is opened to men in their last six months of service at about 250 military installations. Providing counseling, training, education, and placement services to those who face the most severe problems--the combat disabled, those with no civilian work experience, and these, including many combat veterans, who did not acquire civilian-related skills or had no opportunity to achieve high school graduation equivalency diplomas while in the service.

There are many programs supported by the Federal Government that are aimed at reducing poverty and preventing unemployment. The value of such Federal programs depends not only upon the attitude

of the participants, but also upon the willingness and ability of the administrator to communicate with those people whom he is trying to help.

Business has started to take a more active part in trying to solve some of the socioeconomic problems of the country. The businessmen of today are beginning to realize that the problems that cause unemployment and unemployment itself are not the sole responsibilities of the Government. Throughout the country, various businesses are starting to take a big interest in training programs conducted under the sponsorship of the Office of Economic Opportunity.

These businesses in turn are setting up projects of their own aimed at bringing the disadvantaged unemployed into the labor force. In the Watts area of Los Angeles, the Watts Manufacturing Company, a subsidiary of Aerojet-General has turned what was once thought of as a risky training program for unemployables into a paying proposition. An initial corporate investment of 1.3 million dollars was used to set up the plant. Then the management staff set out to hire the 440 people required to operate the plant that was to build prefabricated crates and to make tents. Most of those hired had no work experience and over half of them had police records. Sympathetic instruction helped the employees to gradually learn their jobs, and soon they were taking pride in their accomplishments. Later the company introduced an incentive system which enabled ambitious people to earn up to twenty-five dollars per day. The productivity of this unique plant has greatly improved from an output of one tent per employee per day to twenty-two per person each day.[18]

There are such programs taking place throughout the industrial community. Lockheed Aircraft Corporation has training projects at their Marietta, Georgia plant and also at their Sunnyvale, California plant. The Avco Corporation is starting a training project at their Roxbury plant near Boston with a $1.1 million dollar training grant from the Government, plus a direct investment of 2.3 million dollars.

The above examples reflect the willingness of business to start assuming some of the responsibility of training the disadvantaged and unemployables. Indicative of the type of support that these projects receive is the fact that the National Alliance of Businessmen has pledged to the Government to find 100 thousand jobs for the unemployed by July 1969 and 500 thousand jobs by July 1971.

Based on calculations made in 1966, the total labor force of the United States is increasing at a rate of about 1.4 million people per year. In order to maintain the present unemployment rate of 3.8 percent, the GNP will have to continue to increase at a rate of 4.5 percent per year, which is less than our present rate of growth.

The problem then is for the country to continue to fight poverty and to upgrade workers' skills while matching these skills to the available jobs. The focal point of the various training projects must continue to be that of reducing the unemployment rate among minority groups, youth, slum dwellers, and other disadvantaged workers, whose problems cannot be solved just by the economic growth of the country itself.

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[18] Gilbert Burck, "A New Business for Business," Fortune, January 1968, pp. 158-161, 198-202.

An Analysis of the Employment Level in the Defense Industry

The preceeding discussion of defense spending and employment is closely associated with the defense industry. Due to their homogenity, a discussion of the defense industry and its relationship with defense spending and defense generated employment in included in this study.

The defense industry is particularly hard to define due to its complexity and inter-relationships. The defense related companies range in size from the smallest of businesses employing only a few individuals to very large corporations employing thousands of people. Additionally, a complex weapon system under contract may have hundreds of sub-contractors and suppliers working for the prime contractor. The defense industry may provide products and services for the Department of Defense, the Atomic Energy Commission, the National Aeronautics and Space Administration, and the Military Assistance Program. This study will deal within the limits of the defense industry dealings with the Department of Defense.

The defense industry is a specialized industry and a great portion of the defense work is concentrated in a relatively small number of companies and institutions. In fiscal year 1969, over two thirds of the value of the military prime contracts awarded went to 100 companies and their subsidiaries. These 100 companies accounted for $25.2 billion, or 3.8 percent less than in fiscal year 1968, while total awards to all United States companies were down by 5 percent to $36.9 billion. The top 100 companies received 68.2 percent of the fiscal 1969 total compared with 67.4 percent in the previous year.

Contributing to the higher percentage of contract value awarded the top 100 companies was not only corporate restructuring, but also increases in the procurement of ammunition and of missile and space systems, highly concentrated industries, while concurrent decreases were being experienced in the procurement of clothing, textiles, and other commercial type items.

Table 16 shows that the first five companies received 18.9 percent of the contract awards received by all United States companies in fiscal 1969. This was lower by 1.7 percentage points than was recorded in fiscal 1968; however, the percentage for the next 20 companies totaled 25.9 percent, almost one percent more than in fiscal 1968. To be among the top 100 companies in fiscal 1969 required

TABLE 16

Prime Contract Awards as a Percent of U.S. Totals

Companies	FY 1966	FY 1967	FY 1968	FY 1969
1st	4.6%	5.4%	5.8%	5.5%
2nd	3.5	4.7	4.8	4.4
3rd	3.4	4.6	3.8	3.4
4th	3.4	3.3	3.4	2.9
5th	2.7	2.8	2.8	2.7
1 - 5	17.6%	20.8%	20.6%	18.9%
6 - 10	9.0	8.8	9.3	10.1
11 - 25	16.4	14.9	15.7	15.8
1 - 25	43.0%	44.5%	45.6%	44.8%
26 - 50	12.1	11.6	11.5	12.1
51 - 75	5.4	6.1	6.6	7.3
76 - 100	3.3	3.3	3.7	4.0
1 - 100	63.8%	65.5%	67.4%	68.2%

SOURCE: Office of the Secretary of Defense, Directorate of Information Services. October 27, 1969.

$48 million in awards, as compared to $50 million in fiscal 1968. Fifty-nine of the 100 companies were engaged directly in aircraft, ammunition, electronics, and fourteen were categorized as service companies. Table 17 offers a comparison of the Procurement Categories of the top 100 companies.

TABLE 17

PROCUREMENT CATEGORY OF TOP 100 COMPANIES
IN FISCAL 1968 AND 1969

Procurement Category	FY 1968	FY 1969	Change
Aircraft	22	21	-1
Missiles	12	11	-1
Ships	2	2	-
Tank-Automotive	7	5	-2
Weapons	2	1	-1
Ammunition	22	24	+2
Electronics	14	14	-
Services	12	14	+2
Construction	1	1	-
Petroleum	6	7	+1

SOURCE: Office of the Secretary of Defense, Directorate of Information Services. October 27, 1969.

Four of the five companies receiving awards of more than $1 billion in fiscal 1968 reached that level again in fiscal 1969; however, the total volume of awards to these four companies was $726 million below the fiscal 1968 volume. The four companies are; Lockheed Aircraft Corporation, General Electric Company, General Dynamics Corporation, and the McDonnell Douglas Corporation. The prime contract work of McDonnell Douglas, General Dynamics, and Lockheed Aircraft Corporation was for aircraft and aircraft parts, while General Electric concentrated their contracts for supplies of aircraft engines and

engine parts. The 100 largest defense industry-oriented companies and their contract awards are listed in Appendix B.

A large share of the defense production is performed in specialized facilities which were specifically designed for that purpose. These facilities were often built at the initiative of the military establishment and, in many cases, the ownership of the factories and equipment has been retained by the military. The C-5A jet transport, for example, that made its maiden flight on June 30, 1968, was fabricated in Air Force Plant Six operated by the Lockheed-Georgia Company at Dobbins Air Force Base, Georgia. Plant facilities are not the only items that make the defense industry specialized in nature. The defense industry must have a highly trained engineering staff, and effective quality control programs, and, at times, special financing by the government for high-cost items, and special management programs that are required by the military buyers.

Businesses in each of the fifty states won Defense Department prime contracts in fiscal 1969, but the geographical distribution was far from even. The top ten states, as shown in Table 18, accounted for 60.3 percent of the total dollar value.

In less populated states, such as Alaska, military procurement has a large economic impact even though the absolute value of contracts received is comparatively slight. At the other end of the scale, larger states, such as New York or Illinois, despite larger dollar awards, the economic impact is not as great when compared on a per capita basis.

The money spent by the Department of Defense has long been recognized as having a different employment effect in each of the

respective states. This employment effect upon the various states has been measured only since 1961. The Department of Defense, in conjunction with the National Aeronautics and Space Administration, developed the Economic Information System (EIS) which measures employment in 453 major defense contractor plants. The data gathered by DOD and NASA is collected for those prime contracts which exceed $10,000. The companies participating in this system were asked to report at six month intervals employment data on defense prime contracts and subcontracts. For smaller contractors throughout the United States, the defense generated employment is estimated on the prime contract award data by applying factors developed by the U.S. Bureau of Census. Statistics which reflect military and civilian employment at defense installations are derived from various Department of Defense publications.

TABLE 18

THE TOP TEN STATES WITH DEFENSE CONTRACTS
Fiscal Year 1969 (amounts in thousands)

STATE	CONTRACTS	PERCENT
California	$6,824,493	19.4%
Texas	3,525,155	10.0
Conneticut	1,715,115	4.9
Pennsylvania	1,700,396	4.8
Massachusetts	1,549,834	4.4
Ohio	1,533,016	4.4
New Jersey	1,270,460	3.6
Missouri	1,095,418	3.1
Indiana	1,058,557	3.0
Florida	964,541	2.7

SOURCE: Office of the Secretary of Defense, Deputy Comptroller for Information Services. October 27, 1969.

The results of the surveys by state, for the seven reporting periods, June 1965 through June 1968, have been summarized and are presented in Appendix C. Employment data obtained from the EIS surveys reflect total employment at defense contractor plants and employment of civilians at government installations.[19] The data clearly points out that there is a tendency for states with a large workforce, such as California, to have a large number of defense generated jobs.

The impact upon these states relative to the amount of defense employment is computed by dividing the defense generated employment of each state by the work force available for the chosen time period.[20] The resulting ratio referred to here as the defense dependency ratio, indicates that the defense impact is much greater in some states than it is in others. Table 19 presents the regional distribution of state defense ratios for June 1968. Utilizing the table, one can see that the New England, South Atlantic, and pacific regions of the United States are much more heavily affected by defense activity than are the central areas of the country.

The effect of government spending upon a particular area or state can be measured in numerous ways. Defense dependency ratios calculated from the Standard Metropolitan Statistical Areas (SMSAs) and other areas (counties) within each state revealed that some of the ratios were as high as 45 percent. The smaller, more highly

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[19] Employment at plants included EIS surveyed employment, imputed non-surveyed employment and construction employment. Defense Industry Bulletin, Economic Impact of Defense Programs. Buehler, Vernon M. March 1967, p. 2.

[20] Ibid, p. 3.

TABLE 19

DEFENSE DEPENDENCY RATIO
JUNE 1968

Area	Average Ratio
North East	
New England	4.7
Middle Atlantic	2.8
North Central	
East North	2.0
West North	2.1
South	
South Atlantic	4.5
East South Central	3.4
West South Central	3.6
West	
Mountain	2.7
Pacific	5.1
National Average	3.6

Regional Area Composition: New England: Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Conneticut. Middle Atlantic: New York, New Jersey, Pennsylvania. East North Central: Ohio, Indiana, Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, Kansas. South Atlantic: Delaware, Maryland, Washington, D.C., Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida. East South Central: Arkansas, Louisiana, Oklahoma, Texas. Mountain: Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada. Pacific: Washington, Oregon, Alaska, California, Hawaii.

SOURCE: Office of the Assistant Secretary of Defense, Defense-Generated Employment, June 1968. Unpublished paper of Economic & Resource Analysis, Systems Analysis.

dependent areas are typically ones with military installations or ammunition plants, although there are some exceptions. By contrast, the areas with the lowest dependency rates tend to be associated with the larger areas. Table 20 demonstrates that most of the areas with high dependency ratios are relatively small in terms of work force.

TABLE 20

AREA DISTRIBUTION BY DEPENDENCY CLASS AND
LABOR FORCE SIZE
June 1967

Defense Dependency Classes	No. of Areas With Indicated Dependency and Labor Force Size						
		Labor Force Size Group (in thousands)					
	No. of Area	Under 25	25 to 50	50 to 100	100 to 250	500 to 1000	Over 1000
15 % & over	54	33	13	5	3	0	0
12 to 14.9%	18	7	5	1	2	0	0
9 to 11.9%	30	12	6	2	4	0	0
6 to 8.9%	53	22	9	8	9	2	1
3 to 5.9%	72	19	14	14	10	4	4
Under 3%	135	11	29	39	31	8	3
Total	362	104	76	69	59	14	9

SOURCE: Buehler, Vernon M., "Economic Information System Reports," Approved by Bureau of the Budget. Defense Indistry Bulletin, June 1968.

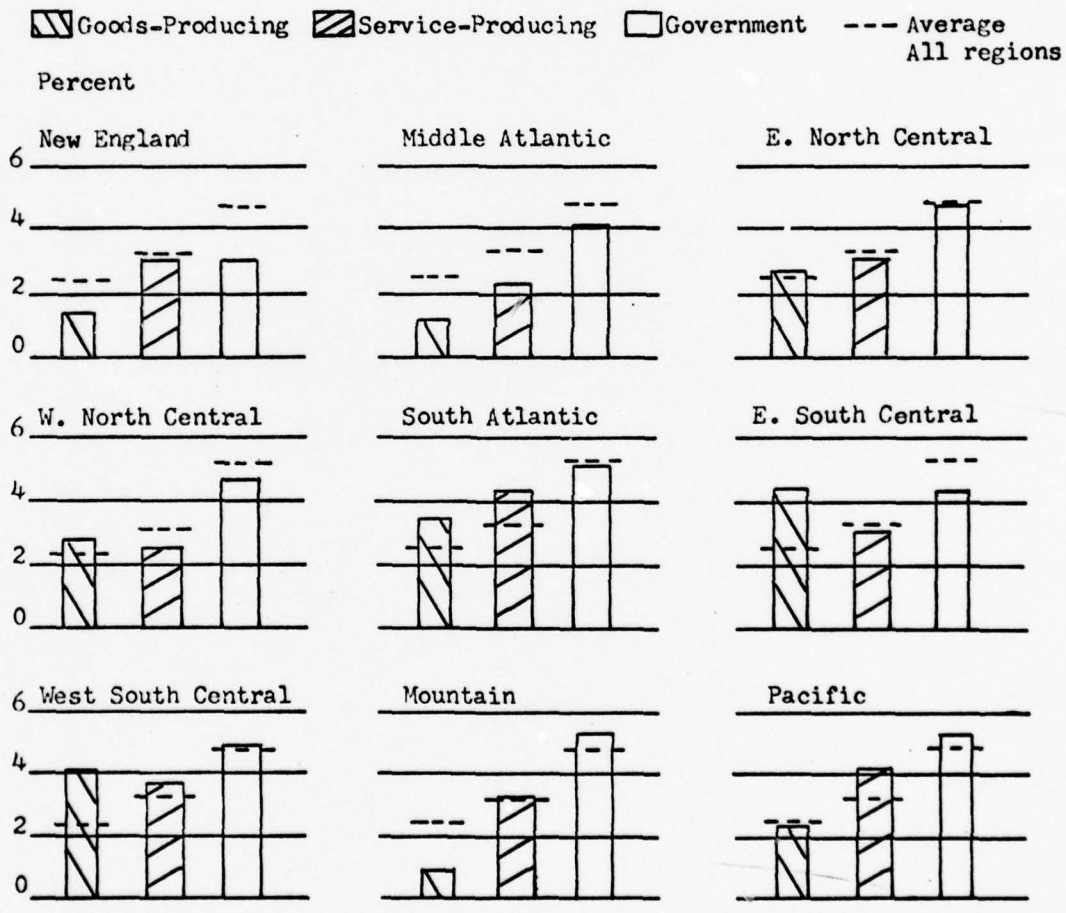
The level of dependency on defense spending can, in part, be associated with the states' industrial and high-income qualities. However, every region of the country has shared in the expansion of nonfarm employment since 1961, but the most substantial gains have been in the more highly industrialized areas. This is expected in view of the importance of manufacturing as a source of employment growth in the 1961 - 1968 period. (See Chart 3.)

The highest growth rates were in the South Atlantic, East and West South Central, and Pacific regions. During the 1961 - 1968 time period, employment in each of these regions expanded at an annual rate of about 4 percent. This was about double the pace in the New England and Middle Atlantic regions, and almost a third higher than

the growth rates in the East and West North Central states and in the Mountain regions. The ranking of regions, according to their average annual rates of employment growth from 1961 - 1958 are shown in Table 21.

CHART 3

Annual average rate of employment changes in goods- and service-producing industries and government, 1961-1968.



SOURCE: U.S. Department of Labor. Manpower Report of the President. Washington, D.C., January 1969.

TABLE 21

REGIONAL AVERAGE ANNUAL RATES OF EMPLOYMENT GROWTH
1961 - 1968

Region	Employment Growth Rate
South Atlantic	4.1
West South Central	4.1
Pacific	3.9
East South Central	3.8
Mountain	3.2
East North Central	3.1
West North Central	3.1
New England	2.3
Middle Atlantic	2.0
National Average	3.3

SOURCE: U.S. Department of Labor. Manpower Report of the President. Washington, D.C., January 1969.

Due to the fact that some regions have so many more workers than others, the relative rates of increase in employment are no adequate indication of the changes in numbers of jobs. Notably, three regions, East North Central, South Atlantic, and Pacific had some 47 percent of the nation's employment in 1961 and accounted for 51 percent of the employment gain over the seven-year period. Fractionally below the national rate was the East North Central region's rate of employment gain for the time period in question. Yet the number of jobs added there was higher than any other region. Following the trend of the rest of the nation, three-fifths of the major job gains were in trade, services, and government. However, manufacturing, especially the metal-producing and metal-using industries, which are concentrated to some extent in the East North Central states, was

also a significant source of new jobs. The employment gains in these states were most rapid in 1965 and 1966; they have slakened since that time.

All eight states in the South Atlantic region shared the second largest increase with an employment growth of 2.3 million. Employment gains in this region were stronger and steadier than in the East North Central states throughout the 1961 - 1968 period, owing partly to industry differences between the two regions.

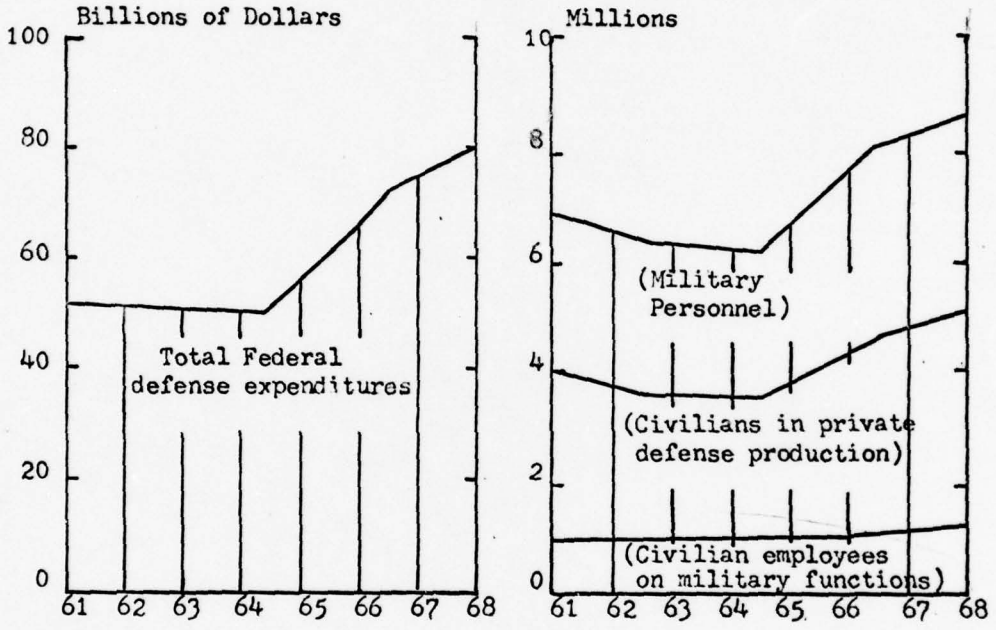
Like the South Atlantic region, the Pacific region registered a strong and steady employment rise. Three out of every four of the 2 million new jobs created in the region since 1961 have been in California, with trade, services, and government accounting for some 70 percent of the state's employment rise.

Higher defense expenditures have led to employment increase in all regions, but the impact has been heavier in some sections of the country than in others. This is shown in Chart 4. This difference is difficult to gage exactly since data is not available on overall defense expenditures within each state. However, the location of the prime contract awards implies to some degree the differential impact that defense outlays may have in different regions.

In fiscal 1968, defense prime contract awards totaled $37 billion. This amount is $12 billion higher than in 1962. The Pacific region received the largest amount, some 20 percent of the national total. California received the greatest single share within the region, amounting to about 90 percent of the total regional amount. A variety of defense-oriented industries, including ordnance, aircraft, and electronics are located in the state. The Middle Atlantic states

CHART 4

SHARP RISE IN DEFENSE EXPENDITURES HAS ACCOMPANIED RECENT BUILDUP IN MILITARY AND CIVILIAN DEFENSE PERSONNEL



SOURCE: U.S. Department of Labor. Data on Federal defense expenditures from the U.S. Department of Commerce, 1969.

received the second largest amount of contract awards, about 17 percent of the total. The East and West South Central States together were third, with slightly less than 17 percent of the overall awards in 1968. Six regions increased their share, while the remaining three showed smaller proportions of prime contract awards. (See Table 22.)

The region with the largest reduction in its share of prime contract awards was the Pacific region. Its proportionate share of defense contract awards dropped from 28 percent in 1962 to 20 percent in 1968. Underlying this shift were changes in the composition of

TABLE 22

MILITARY PRIME CONTRACT AWARDS, FISCAL YEARS 1962 AND 1968, AND TOTAL NONFARM PAYROLL EMPLOYMENT, BY REGION, MAY 1968
(percent distribution)

Region	Military Prime Contract Awards		Nonfarm Payroll Employment
	FY 1962	FY 1968	
New England	10.9	11.9	6.5
Middle Atlantic	18.7	17.0	20.3
East North Central	12.6	13.1	21.0
West North Central	6.7	7.4	7.7
South Atlantic	10.4	12.0	14.3
East South Central	1.9	3.8	5.3
West South Central	5.8	12.9	8.5
Mountain	4.7	2.3	3.6
Pacific	28.2	19.6	12.8
Total	100.0	100.0	100.0

SOURCE: U.S. Department of Labor. Manpower Report of the President. Washington, D.C., January 1969.

defense purchases brought about by the Vietnam war and increased procurement of items (notably ordnance) produced primarily in other regions.

The effect of defense expenditures on employment in the individual states is also significant. There are only nine states where 5 percent or more of the workers are employed in defense work. These states and their percentages are shown in Table 23.

A sharp cutback in defense expenditures could have serious employment consequences in these states and, above all, in the localities where defense employment is concentrated, unless countervailing measures are carefully planned and undertaken.

Federal spending not only accounts for a great number of jobs for those who work directly for the Government, but it also creates

TABLE 23

DEFENSE-GENERATED EMPLOYMENT[a] FOR ALL STATES WHERE SUCH EMPLOYMENT REPRESENTED 5 PERCENT OR MORE OF TOTAL WORK FORCE, JUNE 1965 AND JUNE 1967.

State	Number (thousands)		As Percent of Total Work Force	
	June 1965	June 1967	June 1965	June 1967
Alaska	8.8	9.4	9.8	9.8
California	354.4	499.1	4.1	6.5
Connecticut	68.0	96.3	5.7	7.5
Hawaii	20.8	25.3	7.9	8.8
Maryland	70.7	94.1	5.6	6.9
New Hampshire	11.9	18.1	4.5	6.4
Rhode Island	13.4	20.1	3.7	5.3
Utah	28.7	40.2	7.6	9.9
Virginia	112.6	143.1	7.1	8.4
U.S. Average			2.7	3.6

[a]Defense-generated employment includes that of the 453 plants measured by the Defense Department's Economic Information Survey, that imputed to all other defense prime contractors not individually surveyed, and civilians employed at military installations. Subcontract employment is included only for the 453 surveyed plants; employment on all other subcontract work, that generated by lower tier suppliers and other indirect or multiplier-effect employment are excluded. See "Regional Effect of Defense Effort on Employment," Monthly Labor Review, July 1968.

SOURCE: U.S. Department of Defense, Economic Information System, 1968.

many jobs throughout the entire civilian sector that would not otherwise exist. The following passage extracted from the Defense Industry Bulletin illustrates not only the geographical dispersion of those who contract with the government, but also the great diversity of the products produced in the defense industry by prime and subcontractors. Lockheed-Georgia was singled out as an excellent example of

the spreading prosperity in the United States. The effect of the C-141 Starlifter contract is as follows:

> After receiving the prime contract on the airframe of the C-141 from the Air Force Systems Command's Aeronautical Systems Division, Lockheed's plant in Georgia sublet the wing to Avco Corporation in Nashville, Tenn., in competitive bidding. The wing includes a fuel pump. The Tennessee subcontractor in Avco obtained the fuel pump from Pesco in Bedford, Ohio. To build the fuel pump, Pesco needed, among other things, a switch from the Micro Devices Company of Dayton, Ohio, and the Connon plug from a concern in Los Angeles, California . . . At this point, the defense dollar really begins to flow into communities over the United States. Micro of Ohio gathers components for the switch from the following areas: wire, from Cincinnati, Ohio; springs, Cincinnati; ceramics, Paramoit, Calif., and Sun Prairie, Wis.; epoxy, Canton, Mass.; and silver from New York City. The Los Angeles firm providing the cannon plug for Pesco's fuel pump follows a similar pattern in obtaining components from companies spread out over the nation . . . . . [21]

Major subcontractors and subsystems on the C-141 are shared by 33 companies throughout the United States. Whatever the total number of employees of a subcontractor and vendors who draw their paycheck as a result of the C-141 contract, it can be multiplied by at least five to give a better estimate of the number of people whose livelihood is affected by such a defense program. This phenomena shows the relationship between the grocers, clothiers, furniture dealers, appliance dealers, etc., who feed, clothe, house, and generally care for the needs of those who are working specifically on a defense contract. Obviously, defense work is performed by companies in almost every industry; some industries and firms, however, are much more heavily comitted than others.

The number of workers on nonfarm payrolls expanded, virtually without interruption, in all major industries between 1961 and 1968.

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[21] Editor, Defense Industries Bulletin, Feb. 7, 1966, p. 19.

By 1968, nonfarm payroll employment averaged almost 68 million, 14 million more than the average for 1961 and the highest level in the nation's history.

Employment in the goods-producing sector of the economy, manufacturing, mining, and construction, increased during the 1961 - 1968 period by almost 4 million, to more than 23½ million workers in 1968. A revival of employment growth in manufacturing, which accounts for over four-fifths of total employment in the goods-producing industries was primarily responsible for this dramatic recovery.

Manufacturing employment jumped by almost 3.5 million workers between 1961 and 1968, after a decade of negligible gorwth. By the close of 1968, employment in manufacturing was at an alltime high of nearly 20 million. This increase during the past 8 years represented the longest sustained rise in manufacturing employment during the postwar period. It continued despite the wide-spread introduction of technological innovations and substantial increases in productivity.

Most of the gain in manufacturing employment between 1961 and 1968 occurred in the durable goods industries, spurred by strong consumer demand for automobiles, television sets, and other hard goods, and from about 1965 forward, by the Vietnam war. Employment in these industries rose by 2.5 million during the period, to a record 11.6 million in 1968. By way of contrast, from the end of World War II to 1960, employment in the hard goods industries had increased in short and interrupted spurts, by only 1 million altogether. The impact of the Vietnam war on employment expansion in the durable-goods industries was greatest in 1965 and 1966.

The discussion of the rising demand for workers to fill jobs in defense related activities would not be complete without a brief look at the skills of the defense related worker. The labor force in defense associated industries is generally more skilled than the civilian labor force. Notably, 20.1 percent of the 4.7 million defense workers in fiscal 1968 were in skilled categories while 13.2 percent were in the same categories in the general labor force. Semiskilled workers made up 26.4 percent and professionals 14.4 percent of defense workers.

The defense associated workers made up 6.1 percent of the United States total employment in fiscal 1968. Three occupational groups had more than one-fourth of their number in defense associated work. These were aeronautical engineers, aircraft mechanics, and physicists (not including physicists professors).

Engineers made up 20 percent of the workers engaged in defense work. This reflects the growth of 26,000 from the previous year. Aeronautical engineers accounted for 59 percent of all engineers. Electrical engineers were second with 22 percent, closely followed by the mechanical and metallurgical engineers, each with 19 percent.

It is estimated that approximately 79,000 defense engineers, including almost 90 percent of the aeronautical engineers, were employed in the aircraft industry. The Department of Defense was the second largest employer with 53,000 engineers. The electronical machinery industry absorbed 40 percent of all electrical engineers engaged in defense production. The blue-collar workers, such as metalworking assemblers, were concentrated in the electrical machinery and aircraft industry.[22]

The impact of defense spending by the Government is most evident in five major defense manufacturing industries--aircraft and parts, communication equipment, electronic components, ordnance and shipbuilding and repairing. After growing slowly in the early sixties, aggregate employment in these industries increased rapidly from 1965 onward, accounting for almost 50 percent of the total job growth in these industries between 1965 and 1968, and two of them -- ordnance and aircraft, are about 80 percent defense oriented. Table 24 shows for fiscal 1965 and 1968 the proportion of each of the five major industries devoted to defense contracting as compared to the total employed in that industry.

Richard P. Oliver of the Division of Economic Growth, Bureau of Labor Statistics, estimated that in 1968, almost 3.6 million jobs in private industry could be attributed to military expenditures.[23] Military strength increased by 700 thousand during this same period. Department of Defense civilian employment in the United States for military functions increased by almost 200 thousand. The total employment generated by these expenditures was nearly 2.4 million.

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[22] Max A. Rutzick, "Skills and Location of Defense-Related Workers," Monthly Labor Review, Volume 93, Number 2, February 1970, pp. 11-12.

[23] Employment attributed to military expenditures includes both the direct employment necessary to produce the final goods and services purchased and the indirect employment required in all levels of supporting industries which provide materials, components, transportations, and distribution services ultimately embodied in the final purchase. The multiplier effects induce further consumption and investment purchases.

Richard P. Oliver, "Increase in Defense-Related Employment During Vietnam Buildup," Monthly Labor Review, Volume 93, Number 2, February 1970, pp. 3-10.

TABLE 24

ESTIMATED PRIVATE EMPLOYMENT ATTRIBUTABLE TO
DEPARTMENT OF DEFENSE EXPENDITURES

Industry	Fiscal Year 1965				Fiscal Year 1968			
	Total Employment (000)	DOD Generated Employment			Total Employment (000)	DOD Generated Employment		
		Number (000)	Percent of Total	Percent Distribution		Number (000)	Percent of Total	Percent Distribution
Aircraft Parts	602	331.3	55.0	15.8	851	615.9	72.4	17.2
Communication Equipment	533	195.4	36.7	9.3	666	256.9	38.6	7.2
Electronic Components	280	81.9	29.2	3.9	374	126.5	33.8	3.5
Ordnance	227	137.6	60.6	6.5	332	255.0	76.8	7.1
Other Transportation Equip. (shipbuilding)	261	66.2	25.4	3.1	300	79.1	26.4	2.2

SOURCE: Oliver, Richard P., "Increase in Defense-Related Employment During Vietnam Buildup," Monthly Labor Review, Volume 93, Number 2, February 1970.

Table 25 shows that approximately 8 million civilian jobs were in defense-related activities in 1968, including 1.4 million attributable to Vietnam. The 8 million included 3.6 million civilians in defense production and 1.2 million employees of installations and other military establishments. Each billion dollars of defense purchases (in current dollars) from the private sector is estimated to have created about 80,000 jobs in 1965 and 74,000 jobs in 1968.

TABLE 25

TOTAL EMPLOYMENT EFFECTS GENERATED BY MILITARY EXPENDITURES
(Includes military personnel and government employment)

	DOD-Generated Employment (in thousands)			
	1965	1967	1968	1969
Total	5,759	7,529	8,190	7,915
Public employment	3,657	4,447	4,616	4,515
Federal, military	2,716	3,343	3,483	3,370
Federal, civilian	928	1,085	1,113	1,125
State and local	13	19	20	20
Private employment	2,102	3,082	3,574	3,400

SOURCE: Oliver, Richard P., "Increases in Defense-Related Employment During Vietnam Buildup," Monthly Labor Review, Volume 93, Number 2, February 1970.

The greatest amount of defense spending closely follows the distribution of population among the states. It is not surprising that most procurement expenditures for defense goods are made in those states and regions which have the industrial structure for providing the goods.

The distribution of total defense employment in the private sector is widely spread. Only five industries had more than five

percent of the toal defense-generated employment during the buildup period. These were aircraft, ordnance, communications equipment, transportation, and wholesale trade. A substantial part of the total defense generated employment in 1968 was attributable to the Vietnam buildup. The major increase of 42 percent occurred in the ordnance industry. The transportation industry accounted for almost 12 percent increase of the Vietnam generated employment, due largely to increased purchases of air and ship transportation services.[24]

Once the size and dependency of the Vietnam generated employment is determined, it is important to examine its distribution. Again the major defense industries of ordnance, aircraft, electronics, transportation, and trade received most of the employment increases attributed to the buildup. The distribution of the 1968 Vietnam generated employment followed the pattern of total defense employment set in the 1965 - 1968 time frame. Table 26 indicates the shift in employment resulting from the Vietnam buildup was greater in ordnance and transportation, while lower in electronics and ship-building. The aircraft proportion remained relatively constant. Consequently, the industries most likely to be affected by a reduction in defense spending for Vietnam would be aircraft, ordnance, and transportation. These three account for almost 40 percent of the increase in defense employment assumed to be the result of Vietnam.

The effect of Government spending for the defense needs of the United States exerts a strong influence on the economic and social well-being of many Americans. The Department of Defense has recognized

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[24]Ibid, p. 6.

that information concerning defense obligations and expenditures is vitally necessary in order for the Department of Defense to be able to assess the actual and potential effect of defense spending. The Department of Defense has developed the capability to evaluate, in terms of employment, the direct impact of defense purchases.

TABLE 26

DISTRIBUTION OF VIETNAM GENERATED EMPLOYMENT SHIFTS IN EMPHASIS FOR MAJOR DEFENSE INDUSTRIES

Industry	Percent Distribution of DOD-Generated Employment		
	1965	Vietnam Buildup	% Change
Ordnance	6.5	9.6	+3.1
Communications equipment	9.3	5.2	-4.1
Electronic components	3.9	2.9	-1.0
Aircraft	15.8	16.4	+0.6
Other transportation equipment (Shipbuilding)	3.1	1.4	-1.7
Transportation	5.6	11.6	+6.0

SOURCE: Oliver, Richard P., "Increases in Defense-Related Employment During Vietnam Buildup," Monthly Labor Review, Volume 93, Number 2, February 1970.

Summary

The defense industry is a very specialized industry and is concentrated in only a few regions of the country. Table 27 summarizes where the military contracts go for the top 15 contractors in fiscal 1969. Although this concentration exists for prime contract awards, the subcontracting and suppliers for the prime contractors tend to

TABLE 27

DISPOSITION OF THE TOP 15 MILITARY CONTRACTORS IN FISCAL 1969

Firm	Headquarters	New Prime Contracts	Main Projects
1. Lockheed Aircraft	Burbank, Calif.	$2,040,236	C-141 & C-5A transports, Polaris Missile
2. General Electric	New York	1,620,775	Jet engines, electronics
3. General Dynamics	New York	1,243,055	F-111 fighter bomber, Polaris submarine
4. McDonnel Douglas	St. Louis	1,069,743	Phantom F-4, Douglas A-4 bomber
5. United Aircraft	East Hartford, Conn.	997,380	Jet engines, helicopters
6. American Telephone & Telegraph	New York	914,579	Safeguard Missile, Anti-sub projects
7. Ling Tempco Vought	Dallas	914,114	A-7 fighter, electronics, Lance Missile
8. North American Rockwell	El Segundo, Calif.	674,175	Avionics, submarine electronics
9. Boeing	Seattle	653,638	B-52, helicopters, Minuteman
10. General Motors	Detroit	584,439	M-16 rifles, tanks
11. Raytheon	Lexington, Mass.	564,772	Hawk, Sparrow III, SAM-D Missiles
12. Sperry Rand	New York	467,861	Computers, electronics
13. Avco Corp	New York	456,054	Aircraft engines & parts
14. Hughes Aircraft	Culver City, Calif.	439,016	Electronics
15. Westinghouse Electric	New Jersey	429,558	Electronics

SOURCE: Office of the Secretary of Defense, Directorate of Information Services.

spread the industry throughout the country. Defense work is performed by companies in almost every industry with some industries and firms more actively engaged than others. A significant amount of jobs in private industry are attributable to defense expenditures. The defense generated employment resulting from the Vietnam buildup may be traced, and thus indicate which industries were greatly affected by the buildup. Conversely, these are the same industries which are most likely to be affected by a reduction in defense spending for Southeast Asia. Current estimates indicate 40 percent of the new jobs created by the buildup were in the ordnance, aircraft, and transportation industries and thus are assumed to be the ones most likely to be affected by a reduction in Southeast Asia defense spending. The same analogy leads one to the fact that in fiscal 1968, 20 percent of the United States engineers and 10 percent of the skilled and semiskilled workers were in defense attributed jobs, thus they are assumed to be in a catagory of individuals most likely affected by a reduction in defense spending.

A reduction in defense expenditures would also have an effect on the number of those jobs available to the individual worker. A one percentage point rise in unemployment would have the greatest effect on jobless rates of men and blue-collar workers.

CHAPTER IV

THE IMPACT OF A REDUCTION AND DE-ESCALATION IN DEFENSE PROGRAMS

The continuation of negotiations in Paris for settlement of hostilities in Vietnam has raised considerable speculation as to what possible peace dividends will do to the economy of the United States and how the de-escalation will be accomplished. The nature, timing, and dimensions of de-escalation of the war in Vietnam and, hence a cutback in the United States defense spending, are easily speculated on, but are very hard to predict with any degree of certainty.

A de-escalation could follow any one of several different courses; ranging from sudden one-shot cessation to phased withdrawal, or a decline at the same rate as the buildup of forces occurred, etc. Before discussing the de-escalation, one should fully consider the two previous modern examples as models -- World War II and the Korean conflict. The two conflicts and their subsequent de-escalation policies provide the leaders of our economic community with valuable examples which may be of use in current times. The lessons learned from these two models will hopefully prevent a major waste of valuable resources as a result of de-escalation.

The demobilization of American armed forces after World War II was extremely rapid and caused widespread apprehension as to the economic dislocations that might be created by the conversion of

industry from a wartime to a peacetime footing. Between June 1945 and June 1946, over nine million men were released from the armed forces -- this number is about three times the present total of military personnel. Despite the major shift of resources, no sizable unemployment problem developed, due largely to the substantial "pent-up" demand of consumers for durable goods and housing and the policy of helping our Allies rebuild their shattered economies. During this same time periods, national defense purchases of goods and services were reduced by 75 percent. This reduction was equivalent to more than 25 percent of the 1945 Gross National Product of $211.9 billion.[25]

Despite the size and pace of the post-World War II demobilization, unemployment in the immediate postwar years remained below 4 percent of the civilian labor force. One major reason for this is that while defense spending fell, business investment more than doubled and consumer outlays and non-defense government programs rose to fill much of the gap left by the sudden and substantial decrease of this defense spending.

The process of economic adjustment was aided by effective governmental policy. Taxes were substantially reduced, veterans' cash benefits and payments for training and education programs were greatly increased. Quick settlements were made with defense contractors in order that they could devote their efforts to civilian work with a minimum of delay. The net result was that despite the

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[25]U.S. Congress, Joint Economic Committee, Hearings on Economic Effect of Vietnam Spending, Vol. I., 90th Cong., 1st Sess., (Washington, D.C.: Government Printing Office, 1967), pp. 218-219.

massive decline in defense spending, the overall income of individuals in the United States hardly fell at all.

The Korean mobilization posed problems of identifying timing of the economic impact and provides a direct parallel to the current Vietnam experience. Fiscal policy during 1951 seemed to restrain the economy during the period of initial military buildup. Expenditures rose by 11 percent and the overall budget showed a surplus of $3.5 billion. Discrepancies are evident upon examination of the data used to measure the earlier stages of government spending, so that one must not take the figures literally.

The amount of appropriations granted by the Congress in fiscal 1951 was 68 percent above the 1950 total. The aggregate amount of contracts let and other obligations entered into by the Federal agencies in 1951 rose 92 percent above the level of the previous year.[26] The interplay during that time period by the opposite ends of the Federal spending process was clearly brought out in the following comment of the period by the Joint Committee on the President's conomic report:

> The ineffectiveness of governmental cash surplus, normally a deflationary force, was in the large part, attributable to anticipatory forces on the inflationary side arising from the current or expected placement of orders for future deliveries.[27]

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[26]M.L. Weidenbaum, "The Economic Impact of the Government Spending Process," U.S. Senate Committees on Armed Services and Appropriations, "Supplemental Military Procurement and Construction Authorizations, Fiscal Year 1967," January 1967, pp. 35-36.

[27]U.S. Congress, Joint Committee on the Economic Report, "National Defense and the Economic Outlook for the Fiscal Year 1953," p. 49.

Fiscal 1952 was the period of the actual major increase in Federal defense expenditures and was a time of comparative stability in the American economy. Several generalizations may be inferred from an examination of the Korean mobilization program. First, the acceleration in economic activity occurred at approximately the same time as the announcement and authorizations of the program and while the most rapid increase in defense orders was taking place. Secondly, the rise and acceleration ceased when the rise in appropriations and obligations ended and began declining. Thirdly, the major rise in government expenditures occurred after the most rapid expansion in economic activity and continued until after the decline in appropriations and obligations ended and began declining. Furthermore, the major rise in government expenditures occurred after the most rapid expansion in economic activity and continued until after the decline in appropriations and contract awards. In the Korean case, the initial inflationary pressures were partly attributable to the overstocking in the civilian sector of the population in the fear of renewed wartime shortages. When defense spending rose, a substantial correction of civilian inventories occurred.

Certain important differences must be acknowledged when comparing the Vietnam buildup with the Korean experience in the hope of discerning parallels. The first such difference relates to the relatively smaller scale of the buildup in Vietnam. The recent expansion of the armed forces from 2,700,000 to 3,487,000 seems modest indeed when compared with the spurt from 1,500,000 in 1950 to over 3,500,000 in 1952. The defense budget also doubled during the initial year of the Korean war while the increase during

the initial buildup in Vietnam was about 16 percent. This reflects the fact that the United States entered Vietnam with a very large existing defense establishment.

The second difference relates to the fact that, unlike Korea or World War II, the present military buildup was superimposed on an economy that was rapidly approaching full employment. Utilizing June 1950 and July 1965 as respective beginning points, a comparison shows that unemployment was higher during the earlier period.

When viewed together, these two conflicting tendencies illustrate the fact that even though the current defense program utilizes a smaller fraction of the nation's resources, it represents to a considerable extent a displacement of civilian demand rather than a total addition of goods and services to actual production. Hence, in the absence of direct controls over materials, wages, and prices, it is not surprising that inflationary pressures should have accompanied the rapid shift of resources from civilian to military use.

The Korean experience showed that the strongest inflationary pressures occurred during the first year of the buildup while the economy was adjusting initially to the new level of military demand. The actual peak in defense spending a few years later occurred shortly before the onset of a recession. If there is any lesson to be gained from the Korean experience, it is that the nation particularly needs to understand the timing of the impact of the different stages of a defense buildup and subsequent cutback. If this is not done, the United States can quite possibly find itself fighting yesterday's inflation with a tax increase that will compound tomorrow's expected recessionary problems.

The experience gained by the Federal Government as a result of the 1953 - 1954 recession should hopefully prevent a similar situation from occurring. The recession following the Korean conflict was indicative of the economic impact of a rapid cutback in defense spending without timely monetary and fiscal offset policies. Current planners of de-escalation see a situation in which, even with reduced arms outlays following peace, the defense budget would still exceed $50 billion. This relatively large expenditure should insure against a drastic upheaval among defense producers and make a contribution to smoothing the transition from war to peace.

When peace comes, arms production will keep rolling for some time in order to rebuild depleted weapons inventories, ammunition war reserves, and to maintain an industrial base. A push for a complete antiballistic-missile system as compared with today's light antimissile network may be imminent. The expenditures for research and development, although large as compared to previous years, have been sacrificed for other programs by the Department of Defense during the Vietnam buildup. Consequently, when hostilities cease, the research and development programs previously held up due to a shortage of funds can be expected to proceed. This increase in spending, as well as spending in the space program, will be of help to offset the impact of defense cutback on skilled workers such as engineers, scientists, and technicians.

The relative size and speed of a likely post-Vietnam cutback would be about the same as the Korean cutback. This would be about 3 percent of the Gross National Product in a year and a half. Most estimates of the reduction in defense spending in the first year

of de-escalation are $13 to $16 billion, or about $3.5 billion per quarter. In a year and a half, the cutback would amount to $20 billion, or about 2.5 percent of the 1969 Gross National Product of $932 billion.

Although an estimated cutback in defense orders of $20 billion would have an immediate impact of only 2.5 percent of the GNP on the total economy, a small number of industries would be directly and significantly affected. The reductions in military procurement planned promise hard times for many companies in the fields of aerospace, munitions, tanks and other vehicles, electronics, communications, and shipbuilding. The reduction in military purchases of aircraft, ordnance, missiles, and weapons would make up 60 percent of the total reduction in orders for the defense industry. Table 20 shows the distribution of a $20 billion cutback in defense orders on industry. Eighty percent of the reductions in defense purchases from industry would be in one major sector of the private economy. This is the sector of the manufacture of durable goods and the industries supplying the inputs to it, such as the aluminum, copper, special metals, and steel industries.[28]

Generally, the states of the Far West and the South, as shown in Chapter III, are most dependent on defense for jobs. These areas and labor markets are much more dependent than others for their employment and income from defense procurement. Even with fiscal and monetary policies which promote stable growth in aggregate demand,

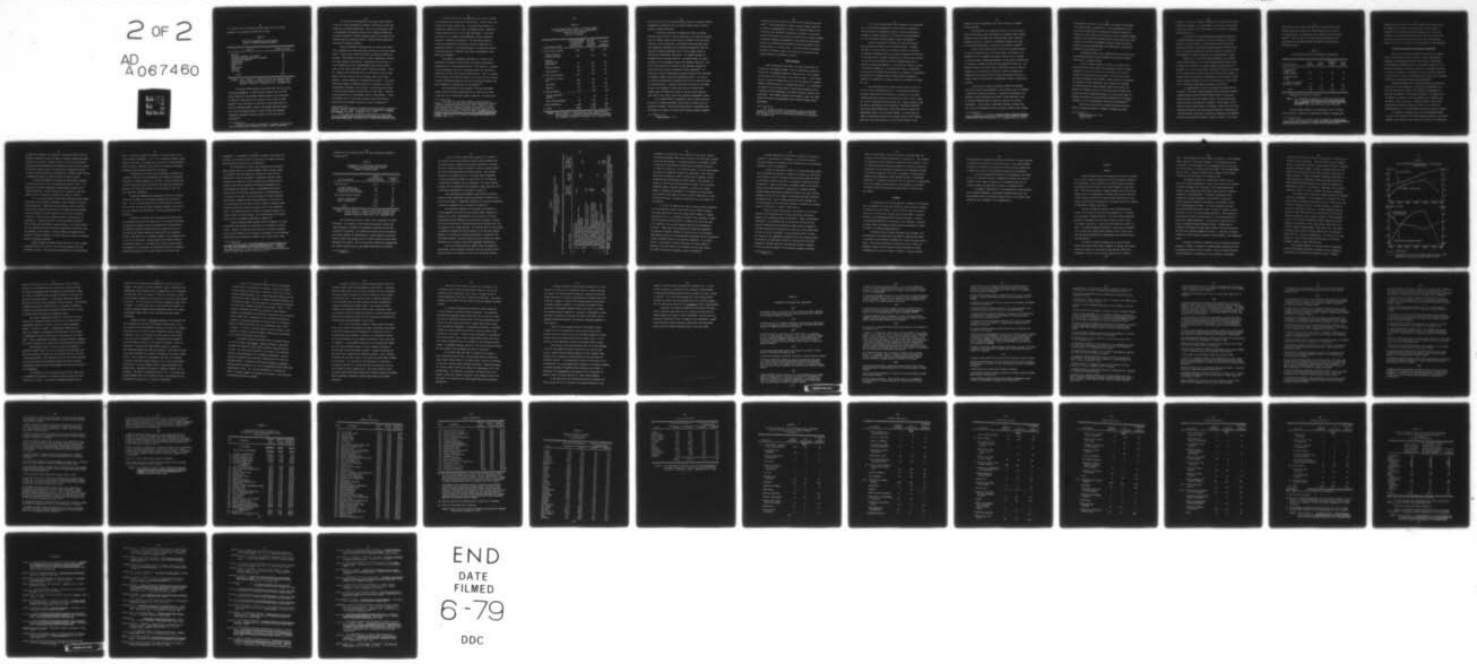
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[28]U.S. Chamber of Commerce, Report of the Ad Hoc Committee on the Economic Impact of Peace After Vietnam, After Vietnam. (Washington, D.C: 1968) p. 21.

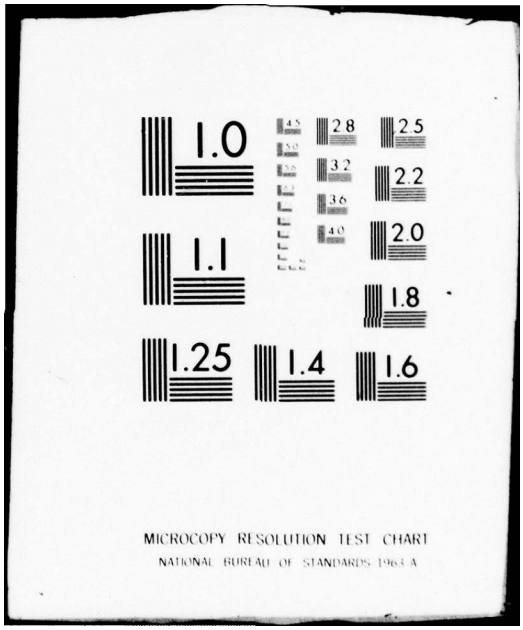
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A STUDY OF THE EFFECT OF REDUCTION IN THE MILITARY BUDGET FOR S--ETC(U)
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it is certain that some communities and areas will have to face problems in the industrial transition to peace.

TABLE 28

ESTIMATED DISTRIBUTION OF A $20 BILLION CUTBACK IN DEFENSE ORDERS BY INDUSTRY

Industry	Percent of Total
Aircraft	32
Missiles, ordnance, and weapons	28
Communications and electronic equipment	10
Petroleum and chemical	5
Shipbuilding	5
Construction	4
Food	3
Instruments	3
Vehicles	2
All other	8
Total	100

SOURCE: Lecht, Leonard A., "National Priorities, Manpower Needs, and the Impact of Defense Purchases for Vietnam," U.S. Chamber of Commerce. Washington, D.C.: September 1967.

The smaller labor markets in particular have the high ratios of defense employment. In the 362 areas reviewed in a June 1967 survey conducted by the Economic Impact Division of the Department of Defense, 93 had ratios over 9 percent; and of these 93 labor markets, all but nine were in areas with a total labor force of less than 100,000 workers. Most of the defense generated employment in the 362 areas occurred in labor markets where defense employment accounted for under 6 percent of the work force of that area.[29]

[29]Office of the Assistant Secretary of Defense, Systems Analysis, "Defense-Generated Employment, June 1, 1968," Unpublished

The high defense dependency in the smaller labor markets is due to civilian employment in defense installations rather than employment by defense contractors. Most of the metropolitan area in New England, for example, would be only slightly affected by a 20 percent reduction in defense spending; however, for most of the involved smaller metropolitan areas or isolated rural communities there might be serious problems.

Certain procurement categories may be cited to show where cuts in spending on military and space hardware can have the deepest impact. Eleven states handle 90 percent of contracts awarded for aircraft. Prime plants are located in Texas, Connecticut, California, Ohio, Georgia, and Missouri. Reductions are on the way: to cite an example--the F-111 fighter-bomber made near Fort Worth, Texas, and the C-5A cargo plane, made in Marietta, Georgia. There are, however, sharp increases for the F-14A fighter, made in Long Island, New York, and for the F-15 fighter, made in St. Louis, Missouri. Certain spending on missiles will be higher. This could offset some losses in aerospace activity in California, as well as Massachusetts, Washington, and Colorado. New York gets more money in prime-contract awards for ships than any other state. Virginia and Mississippi have a considerable amount of shipbuilding. A plan by President Nixon to build more merchant ships could assist in offsetting these probable reductions in naval construction.[30]

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update of the data contained in Roger F. Riefler and Paul B. Downing's article, "Regional Effect of Defense Effort on Employment," Monthly Labor Review, July 1968. (Washington, D.C.) 1969.

[30]U.S. Department of Defense, Directorate for Statistical Services, Military Prime Contract Awards by Region and State-Fiscal Years 1967, 1968, 1969. Washington, D.C., October 27, 1969, pp. 9-60.

Michigan stands to be the major loser as a result of plans for reduced buying of tanks and other vehicles. Vermont, Ohio, and Indiana could suffer losses also. The substantial reduction in spending for ammunition will have a widespread effect, especially in small towns and cities in the South and Midwest. The states most likely to be affected are Pennsylvania, Texas, California, Minnesota, Illinois, and Tennessee. The electronics industry anticipates substantial reductions in orders of electronic and communications gear. This material makes up a significant portion of defense business in Maryland, New Jersey, Massachusetts, New York, and California.

The changes in employment considered as a result of de-escalation are assumed to take place in an economic environment characterized by a high employment level. This includes a 4 percent or less unemployment rate and a reasonably rapid, but controlled, inflationary growth in the Gross National Product. This is a growth rate of slightly more than six percent a year made up of an increase in output averaging between four and four and one-half percent, and price increases at an annual rate of two percent.[31]

The distribution of the estimated 1.4 million employment cutback within the private sector made by Mr. Lecht in his study is shown by major occupational groups in Table 29. The basis used

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[31]The basis for this rate of growth is that the GNP is expected to rise in current dollars from approximately $780 billion in 1967 to approximately $880 billion in 1969. Consistant with these anticipations, output per employee is projected to increase by 2.5 percent a year and manufacturing plants are expected to be used at 90 percent capacity. Leonard A. Lecht, National Priorities, Manpower Needs, and the Impact of Diminished Defense Purchases for Vietnam. Report to the U.S. Chamber of Commerce, Washington, D.C., September 1967, p. 8.

TABLE 29

ESTIMATED OCCUPATIONAL IMPACT, IN PRIVATE INDUSTRY OF SHIFTS IN NATIONAL PRIORITIES ACCOMPANYING ENDING OF WAR IN VIETNAM
(in 000 of workers)

Occupational Group	Persons Released from Employment by Cutback in Defense Orders	New Jobs Created by Offset Programs	Net Change in Employment
A. White Collar Workers	587	699	112
Professional and technical workers	232	177	-55
Managers, officials and proprietors	97	184	87
Clerical workers	200	234	34
Sales workers	58	104	46
B. Blue Collar Workers	691	727	36
Craftsmen and foremen	252	324	72
Operatives	387	291	-96
Laborers	52	112	60
C. Service Workers	50	179	129
Private household workers	---	45	45
Other service workers	50	134	84
D. Farm Occupations	30	82	52
E. Total	1,359	1,685	326

SOURCE: Lecht, Leonard A. "National Priorities, Manpower Needs, and the Impact of Diminished Defense Purchases for Vietnam," U.S. Chamber of Commerce. Washington, D.C., September 1967.

by Mr. Lecht is that a one billion dollar cutback in spending reduces employment by 72,000 jobs and one billion dollars spent in offset programs creates 88,000 jobs.

The overall estimates of unemployment caused by defense cutbacks obscure the fact that the job skills of the person released from the defense industry would often be different from the skills required in new job openings. The defense industries employ many more engineers, technicians, and semi-skilled operatives than are required to produce equivalent value in the consumer goods and services and construction industries. The largest decrease in employment would be among operatives who would account for almost 30 percent of the employees released from defense industries. Non-white would account for 8 percent of the employees released and women would make up about 25 percent of those released.[32] In addition to civilian adjustments, returning veterans will contribute to manpower problems during this adjustment period. The size of the military establishment increased from 2.7 to 3.5 million during the Vietnam buildup. A gradual reduction in the size of the Armed Forces can be expected to occur after the end of hostilities. However, many servicemen may choose to continue their education under the GI bill, while others will exercise re-employment rights.

The combined effect of separations from the Armed Services and shifts in defense production could result in severe local unemployment problems. The serious dislocations in individual areas resulting from cutbacks in aircraft and aerospace defense programs

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[32] After Vietnam, p. 24.

in 1963 and 1964 are clues to the kind of local problems that may occur.[33] During that period, however, defense cutbacks were few in number and geographically isolated. The adverse effect of the communities and individuals involved was cushioned to some extent because they occurred in a period of unusually rapid economic growth. The workers involved were generally of high skill and educational levels, and alternative job opportunities were available in their own job markets or in other areas. A caution is noted concerning the impact of defense layoffs after Vietnam, as they may be more widely dispersed and different in nature.

Offset Programs

When de-escalation does occur, the major problem will be to maintain a prosperous economy. This is essentially a matter of seeing that the aggregate demand for current output in the economy is not reduced with the decline in the defense budget. Total demand would be reduced by significantly more than the reduction in defense spending, without some form of compensating factor. It is important to choose an initial policy which is sufficiently responsive so as to prevent serious unemployment and excess industrial capacity from developing. These offset programs on the Federal, state, and local levels will need to be considered, and an overall economic policy established.

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[33] A complete analysis of the Boeing, Martin, and Republic layoffs was conducted by the University of Colorado for the U.S. Arms Control and Disarmament Agency, Report ACDA/E-113, Washington, D.C., December 1968.

The following governmental offset programs to be considered are tax reductions, monetary and financial policy adjustments, rapid expansions in government programs, long-run expansions in government programs, federal aid to state and local governments, and aid to veterans, defense workers, areas, and companies.

There are many ways of reducing tax rates and thereby placing additional power into the national economy. Probably the most neutral way would be an across the board tax reduction. Its greatest advantage would be its relative simplicity and neutrality and would tend to shorten substantially the lead times involved in preparing detailed Executive Branch recommendations and in obtaining Congressional approval. In as much as a moderate surplus in the Federal budget, at a high employment level, is desirable, the initial tax reduction made possible by a cessation or diminuation of hostilities in Vietnam could be simply made by terminating promptly the temporary tax increases enacted or extended to finance the war.

Tax reductions in lower income brackets could have an important income redistribution effect. The reductions would also emphasize consumption at the expense of investment, as the lower income groups tend to spend an above-average amount of their income for current consumption items and save less. Major attention could be given to increasing the tax incentives to business investment. This action would be more than a short term policy to offset the deflationary impact of the military cutback. It would serve to reduce or slow down the growth of the public sector, favor investment and a more rapid long-term rate of economic growth at the

expense of current consumption and a quick increase in consumer living standards.

The institution of a negative income tax or other similar form of generalized income maintenance or guaranteed annual income scheme via the tax system would constitute more than a post-war adjustment device; it would be a fundamental change in the role of the Federal Government in relation to individual citizens.[34]

Prompt action must be taken to offset the economic impacts of large and abrupt shifts in military demand. One method is an appropriate mix of monetary and fiscal policies, such as changes in discount rates, reserve requirements, and open market transactions or increases in Federal lending and loan guarantee operations. Care should be taken so that each policy, separately, does not overcompensate, nor is the nation involved in a policy of lagging that marked the United States policy in 1966 when monetary policy was forced to bear the full brunt of governmental financial restraining actions.

There are many types of government expenditure programs which could undergo rapid expansion. Such programs could be expanded if required by economic conditions. Liberalized unemployment compensation, public assistance and similar income maintenance type of transfer payments might be among the actions to be quickly implemented. A wide array of government programs, already under way, for which expenditures could be rapidly increased would compete

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[34]Murray L. Weidenbaum, Peace in Vietnam: Possible Economic Impacts and the Business Response, Report to the Chamber of Commerce of the United States, Washington, D.C., September 1967, pp. 14-15.

for additional funding. As an example, the backlog of authorized civil public works is substantial. It was estimated that as of June 1968, planning would be complete on projects totaling $3.1 billion, for which construction contracts should be promptly awarded. Planning is not complete for another $5.9 billion which would cover projects of the Corps of Engineers, Tennessee Valley Authority, General Services Administrations, and Departments of Agriculture, Interior, and Transportation.[35]

Government programs, space exploration and anti-ICBM, which use resources similar to those released by the military cutback could also be increased rapidly.

Long-run projects would be of value in connection with offsetting deflationary effects of de-escalation only if defense cutbacks were to occur slowly and if an emphasis of short-run expenditure increases were not desired. The three major types of long-run programs are as follows: those primarily in the nature of investment in human resources, such as education, training, and health activities; those designed primarily to improve the physical environment, such as air and water polution control and housing and urban development projects; and those which apply the advanced technology and systems analysis capabilities of military contractors, such as oceanographic research and development.[36]

These three groups are not entirely mutually exclusive, because the systems approach, developed in defense and space

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[35] After Vietnam, pp. 44-45.

[36] Ibid, p. 45.

programs, may well have important applications in education or urban development programs. The improvements in the physical environment through the study of air and water pollution may help in increasing human productivity.

An alternative to expanding long-range Federal programs is to reallocate public resources to states and localities if the de-escalation proceeds slowly. Federal revenues could grow faster than existing federal expenditure programs because of Federal reliance on a generally progressive tax rate structure and because of the dominance of military programs in the present Federal budget.

Federal aid to state and local governments could include direct Federal programs in the fifty states; Federal grants-in-aid to states and localities for specific purposes; block grants for states to use at their discretion; a sharing of Federal tax revenues with the states; more liberal credits for state and local taxes on Federal income tax returns; and reductions in Federal taxes to make easier possible increases in state and local taxes are some of the ways to reallocate these public resources to the states.

The implications of each of the preceeding approaches can be traced. The direct Federal programs maintain Federal standards, preserve Federal control, and may by-pass states or localities. Federal grants-in-aid have similar effects, but may provide more state and local participation in programs. Block grants, without specific Federal restrictions as to purpose, allow states and localities more discretion and initiative and they may be equalizing or re-distributional, depending on allocation formulas set by Congress. Revenue sharing returns revenues to states of origin. Tax credits

spur states to pass income taxes but leave the initiative in the states' hands, while Federal tax cuts simply open up, as one of the possibilities, the opportunity of increases in state and local taxes.[37] Table 30 shows the choices among the alternative aid approaches does influence strongly the amount of funds going to particular states.

TABLE 30

STATE SHARES OF ALTERNATIVE FEDERAL AID APPROACHES

State Grouping	Tax Sharing	Tax Credits	Existing Program Grants	Block Grants
17 states with highest per capita incomes[a]	66	61	46	39
17 middle income states	20	23	25	20
17 states with lowest per capita incomes	14	16	29	41
Total	100	100	100	100

[a]Includes the District of Columbia

SOURCE: M.L. Weidenbaum, "Federal Aid to State and Local Governments: The Policy Alternatives," in Revenue Sharing and Its Alternatives, U.S. Congress Joint Economic Committee, Washington, D.C., April 1967, Vol II, pp. 651-655.

The last offset program to be considered is aid to veterans and to workers, companies, and communities involved in defense work.

[37]For a fuller discussion, see M.L. Weidenbaum, Prospects for Reallocating Public Resources: A Study in Federal-State Fiscal Relations, American Enterprise Institute for Public Policy Research, 1967.

Generous assistance would be given to disabled war veterans and to the dependents of those who lost their lives in the conflict. A Vietnam "G.I. Bill" already provides assistance for a rapid and successful transition to civilian life for many returning servicemen, but many veterans with limited skills and from low-income groups may not be in a position to take advantage of these benefits.

Facilitating Industrial and Regional Adjustments

Industrial and regional adjustments are mainly the responsibility of business and local initiate. Given an appropriated framework of governmental policies to avoid either inflationary or deflationary distortions, it is in the public interest for businesses and localities to take the initiative. The resulting shifts in the use of manpower and resources, if their disruptive influence is cushioned by a climate of stable growth nationally, can be quickly responsive to post-Vietnam demands and developments.

Business leadership can promote successful reconversion by improving their local capacity for getting the unemployed into a position requiring his skills or by training the unemployed for unfilled job vacancies. Multi-skill training in the community and the upgrading of skills in their own plants can be undertaken by businesses in their locations. Community leaders, through adult and vocational education programs, can take the initiative in establishing pools of trained workers to be used by local businesses.

An outstanding example of what can be accomplished along this line is the adult and vocational education program of the Denver, Colorado, public school system, which has a staff of 425 instructors

teaching 300 subjects. The program is "Opportunity School" and has attracted industry to Denver because the necessary workers have been trained at the school. Through the work of 88 advisory committees consisting of 800 businessmen and educators who work with the faculty and plan each year's course, the curriculum is constantly revised to insure trained workers for available jobs. Students attend classes at Opportunity School half-days and work the other half-day.

An excellent example of business and the Government helping in the training of men still in the services started in 1967. The Department of Defense inaugurated an experimental program called Project Transition. Project Transition is a program to teach marketable skills to enlisted men before they leave the service.

The first pilot program at Fort Knox, Kentucky enjoined Humble Oil Company to participate by helping to train "dealers" or service-station operators. Humble was easily convinced, since the company could possibly save about $1,000 per man by giving him instructions while he was still in uniform instead of waiting until he became a civilian. Of the 19 men initially enrolled in the program, 14 completed it. Each man spent half a day with Humble instructors and the other half attending to military duties. This initial effort was so successful that four more pilot programs were started to cover all branches of the services. Further success has prompted the expansion of Project Transition to include 238 posts, camps, or stations, with 30 cooperating companies.

Project Transition follows up with placement as well, through private firms who participate in the training programs, and state employment agencies. Municipal police departments are now recruiting

also. A specialized program for Negroes is also available, set up by the Commerce Department. Its aim is to establish Negroes in businesses of their own. If a Negro veteran can show he has the skills and inclination to become an entrepreneur, this agency can arrange necessary loans and provide technical assistance.

The Department of Defense also established at Dayton, Ohio, a computer facility for the registration and referral of displaced Department of Defense employees to new jobs. The data fed into the computer indicate the types of positions for which the workers are qualified, the locations at which they are willing to work, and other pertinent information.

The value of Federal-state employment services is directly related to the number of job referral requests made by business firms. So far, business firms have not relied heavily on the services and tend to rely on private employment agencies, help wanted ads, and company recruiting offices to provide satisfactory job candidates.

It should be realized that the timing factor differs from one government policy mix to another and is of strategic importance in designing an economic policy mix appropriate to de-escalation. The spending response by both business and consumers to tax and monetary policy changes rapidly and predictably in a prosperous economy. The response of a depressed economy to such economic stimuli is not as pronounced. Federal spending for personal service and transfer payments to individuals has a faster economic effect than spending for procurement and construction outlays or matching grant-in-aid programs which require approval by state and city

governments. The expansion of productive programs, both public and private, in the fields of health, education, and manpower training meet many barriers which slow their progress.

When de-escalation occurs, the tax reductions and greater public expenditures in the offset programs would primarily affect the industries providing goods for consumers and materials for construction. Most of the growth in disposable personal income resulting from lower tax rates and larger social welfare benefit payments would become translated into greater expenditures for consumer goods and services, while a considerably smaller part would be used for additions and alterations to existing homes or for purchasing new ones. The public outlays for urban facilities would largely represent grants from the Federal to the state and local governments for the construction of schools, hospitals, sewer systems, facilities to store and purify water, or for industrial parks. The remainder would be utilized to increase corporate dividends or added to capital surplus. The distribution of the expenditures by type of spending is described in Table 31.[38]

Private industry offset programs alone are expected to create 300,000 more job openings than jobs lost due to cutbacks in defense orders. However, the overall impact would be to increase unemployment by about 375,000 with the excess of job seekers over job openings being primarily attributable to growth in the civilian labor force

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[38]Leonard A. Lecht, National Priorities, Manpower Needs, and the Impact of Diminished Defense Purchases for Vietnam. Report to the United States Chamber of Commerce, Washington, D.C., September 1967 (Washington, D.C.: Office of the Ad Hoc Committee on the Economic Impact of Peace After Vietnam, 1967), pp. 11-12.

brought about by reduced military and other governmental manpower requirements.[39]

TABLE 31

DISTRIBUTION OF EXPENDITURES RESULTING FROM GOVERNMENT POLICIES TO OFFSET $20 BILLION DECLINE IN DEFENSE ORDERS

Type of Spending	Amount (in billion of 1968-1969 dollars)	Percent of Total
From Tax Cuts:	$ 9.0	48
Consumer expenditures	6.0	32
Residential construction	1.0	5
Private plant and equipment	2.0	11
From Greater Public Outlays:	9.9	52
Consumer expenditures	4.9	26
Public construction	5.0	26
Total	18.9	100

SOURCE: Lecht, Leonard A., "National Priorities, Manpower Needs, and the Impact of Defense Purchases for Vietnam," U.S. Chamber of Commerce, Washington, D.C., September 1967.

The civilian labor force in 1968 - 1969 is expected to exceed 80 million. An increase of about 375,000 job seekers without jobs would represent an increase in unemployment amounting to less than one-half of one percent. The reduction in defense orders and employment would, however, be concentrated in a small number of industries, such as aircraft and ordnance, and in certain states more than others, California for example. Much of the economic dislocation accompanying the cutback would grow out of the uneven diffusion of its effects.

[39] Ibid, p. 3.

A total of 600,000 persons are projected to be added to the civilian labor force because of veterans being released from the armed forces or because of many young persons who are either just out of school or still in school but trying to obtain employment rather than preparing for military service. Over 100,000 additional job seekers would be in the labor market attempting to find new positions because of jobs lost due to the reduction in Department of Defense civilian employment. The major elements entering into the estimate of the employment impact associated with the Vietnam de-escalation are presented in Table 32.

The distribution of employment impact within the private sector by major occupational groups was presented in Table 29 earlier in this chapter. Comparable information for detailed occupations is listed in Appendix D and by industry in Appendix E.

The industries affected by the cutback are estimated to reduce employment by 72,000 for each billion dollar reduction in production (in 1968 - 1969 dollars) as was pointed out earlier. Approximately 88,000 workers per billion dollar increase in production will be added by the industries which would increase their output because of the offset programs. The private sector of the economy is expected to account for some 95 percent of the new jobs created because of the shifts in priorities considered in connection with the offset programs. Private industry will also account for nearly 66 percent of the persons seeking new employment opportunities.

Since the defense industries employ many more engineers, technicians, and semi-skilled operatives than are required to produce an output of an equivalent value in the industries serving

TABLE 32

ESTIMATED EMPLOYMENT IMPACT OF ANTICIPATED SHIFTS IN NATIONAL PRIORITIES ACCOMPANYING END OF WAR IN VIETNAM
(in 000 of employees)

Source of Change	Additional Persons Seeking Jobs	New Jobs Created	Net Change in Job Seekers Without Jobs
A. In private industry due to:			
1. cutback in defense outlays	1,359		
2. tax cuts and increased spending for social welfacre and urban development		1,685	
3. net change in private industry			-326
B. In public sector due to:			
1. military personnel discharged from armed forces	500		
minus former military personnel in full-time education or training	100		
total, ex-military personnel seeking employment	400		
2. civilian employees released by Dept. of Defense	150		
3. public employees added because of larger social welfare and urban development programs		50	
4. net change in public sector			+500
C. Additonal persons in labor force because of lower draft calls and voluntary enlistments	200		+200
D. Net change in total employment	2,109	1,735	+374

SOURCE: Lecht, Leonard A., "National Priorities, Manpower Needs, and the Impact of Diminished Defense Purchases for Vietnam," U.S. Chamber of Commerce, Washington, D.C., September 1967.

customers or construction, the job skills of the persons released from defense industry would often be different from the skill required in the new job openings. The largest decrease in employment, almost 30 percent of the employees released from the defense industries, is listed as operatives. Less than 20 percent of the new jobs created are expected to represent openings for operatives. Other than engineers and technicians, modest increases can be expected in most occupations for professional technical workers. The greatest increase is listed for less skilled service workers, such as private household workers, hospital attendants, or waiters and counter workers. Expansion in employment in the managers and proprietors group would be most likely to occur in service industries, in retail and wholesale trade, in finance, insurance, and in real estate and construction.

In as much as nonwhites and women are more heavily represented in the occupations likely to grow because of the offset programs, they would experience a more than proportionate increase in employment opportunities. An estimated 8 percent of the employees released from the defense industries would be nonwhite, but they would make up 11 percent of the new job openings created by the government's policies. Unless large scale programs for retraining, upgrading, and placing of nonwhite workers are started, most of the projected employment gain would be in semi-skilled occupations such as construction, private household workers, or in service occupations. The workers growth in the nonwhite civilian labor force, as large numbers of veterans, white and nonwhite, are released from the armed forces, may offset the potential employment gains for nonwhites.

Although women make up less than 25 percent of the workers involved in the reduction in employment in the defense industry, they would comparise 30 percent of the employment in the job openings generated by the new programs.[40]

A number of openings for workers in the building trade crafts, such as brickmasons, carpenters, excavating, grading, and road machinery operators, painters, plumbers, and pipefitters would be created by the offset programs which lead to increases in public and private construction. Based on the growth in manpower needs in the skilled crafts, they might also offer an opportunity to examine existing apprenticeship, high school vocational education, and other training programs, in light of the changes in technology affecting individual occupations with a view to taking advantage of these changes, and of the development of new teaching techniques, to shorten the average period of training in a number of these fields.

A method for many veterans and other persons to avoid unemployment while increasing their future productivity and earning capacity is by further training and education. Based on post-Korean experience, it is estimated that an average of 20 percent of the veterans released from active military service would be engaged in full-time education and training in the year and a half period after the end of the war in Vietnam. If this proportion were to double to 40 percent, the unemployment associated with the transition could be reduced by an anticipated 100,000, or from 375,000 to 275,000. Measures to encourage education and training include an expanded GI bill, and greater support for the manpower programs introduced

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[40] Ibid, p. 18.

since the early 1960's, such as the training conducted under the direction of the Manpower Development and Training Act. This includes the on-the-job training offered in cooperation with industry. Part-time refresher courses, perhaps sponsored by university centers for continuation of the education of engineers and technicians released from defense employment, could make it possible for many of these highly skilled employees to enter expanding fields of non-defense employment. This type of development will be partially in construction and in the consumer goods industries, and partially in new fields of endeavor such as the growing national effort to farm and mine the oceans.

Summary

The present rate of defense spending in support of the Vietnam war is estimated to be about $25 billion per year or about 3 percent of the Gross National Product. When hostilities cease in Vietnam, there is no reason why the United States should suffer a recession similar to that experienced after the Korean conflict. To avoid any depressing effects upon the economy, prior planning is required to shape fiscal and monetary policies which are necessary to offset any effects of reduced defense spending.

Presently, plans are being formulated which encompass such alternatives as tax reductions, adjustments in monetary and financial policies, and programs to enlarge aid to state and local governments. These short-run plans are intended for use to offset any immediate adverse economic effects which can materialize should de-escalation cause slow to moderate cutbacks in defense spending.

These programs are intended primarily as investments in human resources via education, training, and health activities. Long range programs are aimed at improving the physical environment by urban renewal and by additional outlays for oceanographic research and development.

The prime consideration should be the precluding of the waste of the vast resources involved. Regardless of whether the resource involved is men, money, or material, the necessary steps must be taken to prevent its waste when a decrease in spending occurs.

The biggest countermeasures to unemployment are those prepared by the Federal Government. When reduced spending does occur, the most important part of any offset program will not be the plans themselves, but the timeliness of the implementation.

CHAPTER V

SUMMARY

Defense spending furnishes employment for millions of people and is a major source of prosperity for whole industries, regions, and occupations. Direct Department of Defense spending accounted for approximately 43 percent of the Federal Budget in fiscal year 1969. The direct Department of Defense spending, plus the indirect support given to the Department of Defense activities by other government agencies accounted for approximately 80-85 percent of the budget, leaving only 15-20 percent of the budget that was not related to Department of Defense activities.

The major buildup of American troops in Southeast Asia started in the middle of 1965 and was accompanied by a resulting rapid increase in defense spending. The total military personnel deployed to Southeast Asia was about 100,000 by June 30, 1965. This number increased to a peak of 543,000 personnel by April 30, 1969. The defense spending attributed to operations in Southeast Asia in fiscal year 1965 was $103 million, while in fiscal year 1969 the special Southeast Asia expenditures were estimated to be over $29 billion.

The number of persons employed and the Gross National Product have demonstrated steady increases in the past seven years. During this period, the unadjusted Gross National Product has increased 41 percent, for an average increase of 5.2 percent a

year. The unemployment rate was reduced 44 percent - or from slightly under 7 percent to less than 4 percent. The unemployment rate of 3.5 percent in 1969 compared with an unemployment rate of 4.5 percent in 1965 and is the lowest rate since 1953. The low unemployment rate in 1969 is largely the result of an increase in armed forces strength and defense spending for Southeast Asia.

The defense industry is a specialized industry with its majority of effort concentrated in only a few regions of the country. Six states received over 51 percent of all military procurement actions. These states were California, Texas, New York, Missouri, Connecticut, and Pennsylvania. The impact of spending by the Government for defense purposes is most evident in five major defense industries--aircraft, electronics, and ordnance, as well as in transportation and trade. The total employment for these five major defense industries account for about 11 percent of those jobs held in all of the manufacturing industries. These industries are estimated to have at least one half of its workers engaged in defense and related production. Two industries, ordnance and aircraft, are about 80 percent defense oriented. Defense work is performed by companies in almost every industry with some industries and firms more actively engaged than others. A reduction in defense expenditures would reduce the number of jobs available to the industrial worker.

Planning is required to shape the fiscal and monetary policies necessary to offset the effects of reduced defense spending and avoid any depressing effects upon the economy. Plans are being formulated which encompass such alternatives as tax reductions, adjustments

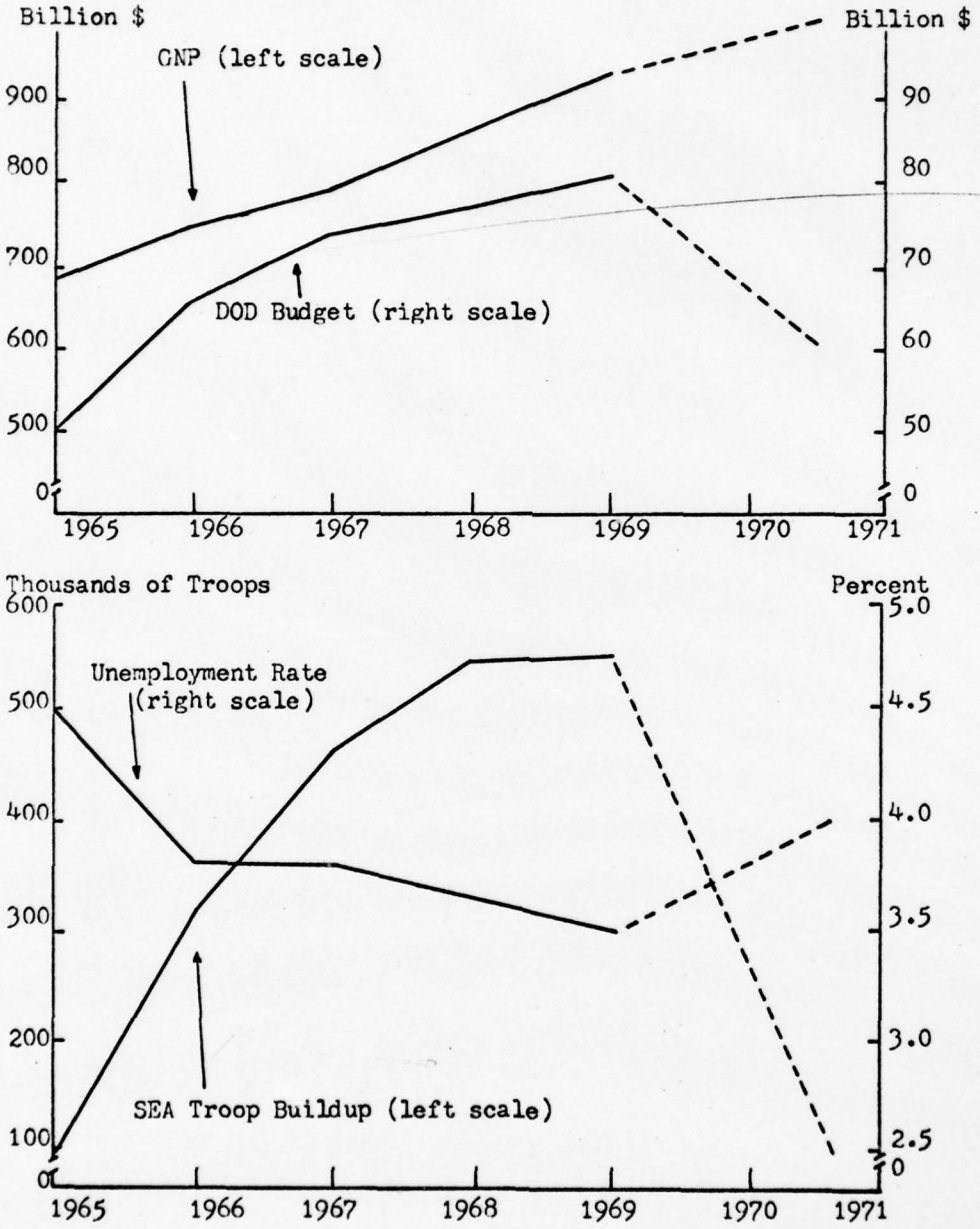
in monetary and financial policies, and programs to enlarge aid to state and local governments. These short-run plans are intended for use to offset any immediate adverse economic effects. Long-run projects are being designed to offset any effects which can come about should de-escalation cause slow to moderate reductions in defense spending. These are programs intended as investments in human resources via education, training, and health activities. Other long-run programs include urban renewal and research and development projects. The information presented in the previous chapters is used as the basis to answer the research questions.

What effect will a decrease in defense spending for Southeast Asia have on employment? The de-escalation in Southeast Asia may occur suddenly or gradually and either may occur under varying conditions of economic activity. The data presented in Chapter IV indicated a $20 billion reduction in defense spending extending over an 18 month period would cause approximately 1.359 million people to lose their jobs in private industry. Offset programs, such as tax reductions, increases in public spending for social welfare, and development of the urban areas, would offset this impact by creating approximately 1.685 million jobs. This would be 326,000 jobs in excess of those released from the industrial labor force as a result of de-escalation. The rationale for this estimate is that for each billion dollars spent in the offset programs, there is a gain of 88,000 jobs.

The personnel affected in the public sector (discharged military and released Department of Defense civilian employees) would amount to 650,000 when de-escalation occurs. Manpower

CHART 5

GNP, DOD BUDGET, UNEMPLOYMENT RATE, AND SEA TROOP BUILDUP SUMMARY



reductions totaling 300,000 men in uniform and 76,700 civilians working for the Defense Department were ordered through mid-1970. The number of unemployed would be reduced by approximately 100,000 as a result of former military personnel enrolled in full-time education and training programs. An additional 50,000 jobs would be created by social and urban development offset programs. The resulting unemployment estimate of 500,000 would be increased to 700,000 as a result of additional persons entering the labor force as a result of reduced draft calls and lower enlistment rates.

The overall unemployment effect of a $20 billion reduction would be the difference between the 326,000 job vacancies and the unemployment estimate of 700,000 - which is 374,000 unemployed persons. If such an increase in unemployment (374,000) was to occur, an increase in job seekers would represent a total increase in unemployment of less than one half of one percent of the labor force. Chart 5 summarizes the changes in defense spending, unemployment rates, Southeast Asia troop buildup, and Gross National Product.

What measures should be taken to offset any decrease in employment brought about by an end to hostilities in Southeast Asia? When de-escalation does occur, the main problem will be to maintain a prosperous economy. Most important of all is the initial selection of an overall policy which contains programs that can be promptly implemented to prevent serious unemployment and excess plant capacity from developing.

The economic situation facing the United States today makes it impossible to consider the transition along the lines of either World War II or Korea. The balance of payments problem makes it

grant-in-aid programs which require approval by State and [illegible]

imperative that effective demand pressures on prices be kept to a minimum. The crisis in the cities makes it just as imperative that unemployment not be allowed to get any higher than it is at present, and preferably that it be reduced. These two restraints, imposed by the balance of payments and the crisis in the cities, work against each other. The first means that the macro, aggregate demand route is closed. The second means that we must achieve the results of increased aggregate demand (lower unemployment rates), but through non-aggregate demand means -- which can only mean micro market adjustments.

However desirable a very low unemployment rate would be for the de-escalation, the balance of payments problem rules it out. The economy will not be permitted to become so active that a further deterioration of the United States' competitive position results. Furthermore, there is not likely to be much slack in the economy at the time of the de-escalation. Simultaneously the problem of the cities tends to push us in the opposite direction. Rapid re-employment of veterans and former defense workers is essential. Their personal economic loss must be minimized. They should be given the maximum opportunity to rebuild a satisfying and realistic career. Lacking a good transition in employment, the other city problems of housing, transport, health, education, etc., will be aggravated. Unfortunately, the most reliable method of insuring adequate job opportunities -- substantial increases in effective demand -- is not available. The balance of payments rules it out. At the same time, aggregate demand must not be allowed to fall. The economy must not be underheated any more than it should be overheated.

Impact of Peace After Vietnam, 1967), pp. 11-12.

An end to the Vietnam conflict can provide considerable immediate ease in the balance of payments. There will, however, be many important claimants demanding their share of the "extra" foreign purchasing power. These include additional foreign aid and some slack for import expansion to support a moderate heating up of the domestic economy. One can estimate the tax reductions required to bring about a moderate heating of the economy. First, a tax reduction sufficient to offset any reduction in war spending. Secondly, an additional tax reduction of between five and ten billion dollars, which with a multiplier of two, will provide sufficient expansion to reduce unemployment by about one half of one percent. These two reductions should lower the unemployment rate to about 3 percent. With such a moderate heating up of the economy, a most successful transition would be possible, especially if accompanied by the proper micro labor market reforms.

A successful transition requires that the moderate heating up of the economy be well timed. Bouyancy in demand is required, otherwise the transition could become extremely costly and get out of hand. The fiscal tools presently in the hands of the President provide a good beginning, but are probably insufficient. The temporary tax increase can be reversed, releasing some $10 billion of aggregate demand. In addition, many federal programs in highways, housing, health, education, etc., can be accelerated without additional Congressional action. If these are insufficient to provide the boost in aggregate demand that appears to be required, then additional tax legislation should be readied.

[39]Ibid, p. 3.

It would be necessary to derive rough estimates of what the aggregate demand would be by geographical distribution. A matching with the labor supply, by area, would highlight any gross imbalances. Two sources would be required to provide information of the supply of unemployed labor. These sources refer to those who are going to be discharged from the armed services and from a geographical overlay of reductions in defense plants. When compared, likely trouble spots identified, plans could be made to accelerate model city programs, health and education programs, or highway construction. These short-run programs should also help longer-run adjustments and not create new special problems in the future.

It is in the information channels linking supply and demand where major advances are possible and where considerable improvement in the labor market could be accomplished at relatively low cost. The mechanical task involved in creating a new information network for the labor market are not complex and should not take a long time to implement. A pilot program could use a small occupational breakout, with several salary levels, to take a complete inventory of all the jobs in the labor market surveyed. Computer technology can now handle such a matching and information problem. Once a solution is derived for one labor market, it can easily be generalized throughout the nation. If instituted in the Vietnam era of transition, it probably could do more to make the transition smoother than any other reform or offset program could. Most other reforms to make the labor markets work better depend upon improved information channels, hence an improved information network would permit far reaching advantages.

duce an output of an equivalent value in the industries serving

Those veterans interested in going to a university or to a technical school should have available to them the kind of job information that would permit them to make a rational choice of career perspective, given their interests and aptitudes. Once again, accurate and reliable information about future job prospects becomes crucial.

The employees released will probably be quite comparable to those released in previous defense reductions. The importance of maintaining aggregate demand would hold true, as would the importance of an information reform program. The major difference would be that the high quality labor force involved would require major career perspective adjustments in non-defense industries. Excellent information channels would be essential to utilize properly these specialized work forces. Without a great improvement in information of the labor market, most of these highly trained people will drift into numerous positions that are unrelated to their skills and background. Considerable economic sacrifice, both for the people involved and the economy, would accompany this kind of transition.

It is evident that old terms of reference with regard to labor transitions must be shed. New variables must be studied and these suggest restructuring of the labor market to permit the economy to take great strides toward increased efficiency. Improved operation of the labor market could easily reduce the unemployment rate to the desired level. The increase in efficiency and productivity would become a strong force against inflation. Such changes strike at the very core of the working of the labor market and have far-reaching implications.

A summary of Federal offset programs considered to be most effective at reducing the unemployment impact of reduced spending are listed: an across-the-board income tax reduction which would become translated into greater expenditures for consumer goods and services, a change in monetary and financial policies which would be quickly adopted to shifts in the economic environment, rapid expansions in government programs which can be used as an avenue for increased Federal spending, an increase in investments in human resources via education, training, and health activities, and an expanded information programs, and finally, long-range programs of urban renewal.

There are other programs similar to the Federal offset programs that can be implemented at the state and local level. Business has also recognized the need for offset programs to reduce impacts within the private sectors of the economy, and it is proceeding to train personnel for other than defense related trades.

The success of any program depends upon the initial planning as well as the support the plans receive when the need for them arises. Without initial adequate support, or with untimely implementation due to lagging, the effectiveness of any plan would be seriously impaired. A recommendation to assist in this area is the establishment of an inter-departmental committee to coordinate economic adjustment planning for demobilization, identify areas likely to experience high unemployment, and arrange for the cooperation of Federal, state, and local agencies in a joint action program.

It has been noted that officials from both the private and public sector, as well as scholars, are vitally interested in the

may offset the potential employment gains for nonwhites.

impacts of reduced defense spending for Southeast Asia. In light of this interest, the transition from a defense oriented economy to a peacetime oriented economy should be smoother than any of those in the past. It is also very apparent that when reduced defense spending does occur, the most important part of any offset programs will not only be the plans, but the timeliness of their implementation.

This topic was examined primarily at the Federal Government level, therefore a need still exists to examine and set forth the offset programs that might be state implemented. Fertile areas for additional study may be found in changes to the unemployment compensation structure, capital spending, educational and recreational action, and air and water pollution laws at the state level.

APPENDIX A

CHRONOLOGY OF SOUTHEAST ASIA ESCALATION

1950

23 December--United States signs Mutual Defense Assistance Agreement with France, Vietnam, Cambodia, and Laos for indirect U.S. military aid to Vietnam, Cambodia, and Laos.

1955

12 February--The U.S. Military Assistance Advisory Group (MAAG) takes over the training of the South Vietnamese Army, following the relinquishing of command authority by the French.

1957

5-19 May--President Diem visits the United States. He addresses on May 9 a joint session of Congress. In a joint communique (issued May 11), President Eisenhower and President Diem declare that both countries will work toward a "peaceful unification" of Vietnam. The United States will continue helping South Vietnam to stand firm against Communism.

1960

May--President Eisenhower doubled the number of advisers in South Vietnam, increasing the number to 685.

June-October--Communist guerrilla activities in South Vietnam increase.

26 October--President Eisenhower assures President Ngo Dinh Diem, in a letter of good wishes on South Vietnam's fifth anniversary, that "for so long as our strength can be useful, the United States will continue to assist Vietnam in the difficult yet hopeful struggle ahead."

1961

5 May--President Kennedy declares at a press conference that consideration is being given to the use of U.S. forces, if necessary, to help South Vietnam resist Communist pressures. He declares that this will be one of the subjects discussed during the forthcoming visit of Vice President Johnson in South Vietnam.

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11 October--President Kennedy announces (at his news conference) that he is sending General Maxwell D. Taylor, his military adviser, to South Vietnam to investigate the military situation and to report on it to him personally.

16 November--Following closely the recommendations in General Taylor's report, President Kennedy (with the approval of the National Security Council) decides to bolster South Vietnam's military strength, but not to commit U.S. combat forces at this time.

1962

7 February--Two U.S. Army air support companies totaling 300 men arrive in Saigon, increasing (according to the New York Times) the total of U.S. military personnel in South Bietnam to 4,000.

8 February--United States reorganizes its South Vietnam military command, establishes new "U.S. Military Assistance Command, Vietnam" (MACV) under four star General Paul D. Harkins.

1963

26 August--U.S. Ambassador Henry Cabot Lodge presents his credentials to President Diem.

1 November--Military coup (organized by the key generals of the armed forces) against the Diem regime. Rebels lay siege to the presidential palace in Saigon which is captured by the following morning. President Diem and his brother, Ngo Dihn Nhu escape from the palace, but a few hours later are taken by the rebels, and while being transported in an armored carrier to rebel headquarters they are assassinated. A proclamation broadcast by the leaders of the coup (a council of generals, headed by Major General Duong Van Minh) declares that they have "no political ambitions" and that the fight against the Communists must be carried on to a successful conclusions.

22 November--President John F. Kennedy is assassinated in Dallas, Texas. His successor, Lyndon B. Johnson, affirms on November 24 the U.S. intention to continue its military and economic support of South Bietnam's struggle against the Communist Vietcong.

1964

30 January--Military coup, organized by Major General Nguyen Khanh, ousts government of Major General Duoing Van Minh from power in South Vietnam.

12-13 May--Secretary McNamara in Saigon on fifth fact-finding mission (with General Taylor).

20 June--General William C. Westmoreland takes over as COMUSMACV, Vice General Paul D. Harkins ends two and one-half years of duty in Vietnam.

1 July--Region 10 established by GSA (General Supply Agency) in Seattle, Washington, to support increased requirements in SEA. Region 10 took support for Korea on 1 July, Japan on 1 September, and 5th Air Force in October.

26 July--The President ordered intensification of the war in South Vietnam. Between 5,000 and 6,000 more military personnel sent to Vietnam.

2 August--North Vietnamese PT boats attacked the destroyer USS MADDOX in the Gulf of Tonkin.

4 August--Persident Johnson orders U.S. "air action" against "gunboats and certain supporting facilities in North Vietnam."

5 August--President Johnson's message to Congress: Joint resolution is introduced to "promote the maintenance of internation peace and security in Southeast Asia."

7 August--U.S. Congress approves Southeast Asia resolution (Senate vote, 88-2; House vote, 416-0). General Khanh declares state of emergency in Vietnam.

11 August--President Johnson signs Southeast Asia resolution into law (Public Law 88-408).

1 November--In an unprecedented attack on U.S. forces in South Vietnam, VC (Viet Cong) mortars bombard U.S. aircraft and the barracks area at Bien Hoa Air Base, killing 4 Americans and wounding 72 others. Five USAF B-57 Camberra jet bombers were destroyed in the attack and 15 others were damaged. Four A-1H Skyraiders of the VNAF were also destroyed or damaged.

3 November--President Johnson ordered a new bomber squadron to Vietnam, replacing the 20 destroyed or damaged B-57s in the Bien Hoa mortar attack of 1 November.

1965

8 January--South Korea sends 2,000 military advisers to South Vietnam.

28 February--Continous air strikes were initiated by the U.S. against North Vietnam in an effort to stop infiltration and force a negotiated settlement.

9 March--First U.S. ground units landed in Vietnam.

2 April--United States announces intention of sending several thousand more troops to South Vietnam.

4 May--President Johnson requests $700 million supplemental appropriation for Department of Defense for Vietnam effort.

5 May--House of Representatives approves President's request for additional $700 million in defense funds by vote of 408 to 7.

6 May--Senate passes $700 million supplemental appropriation bill by vote of 88 to 3.

6 May--Two U.S. Marine battalions sent to Vietnam; first combat units to be deployed to South Vietnam.

13 May--U.S. halted bombing raids against North Vietnam in bid for peace.

19 May--United States resumes air attacks on North Vietnamese targets.

2 June--An advance echelon of 111 Australian officers and soldiers of the 1st Infantry Battalion of the Royal Australian Regiment arrives at Ton Son Nhut. The Australian troop-carrier HMAS SYDNEY arrives with 400 troops and equipment of the 1st Battalion on 8 June.

7 June--U.S. military authorities disclose that the number of American military personnel in South Vietnam has passed the 50,000 mark. (Army, 21,500; Marine Corps, 16,500; Air Force, 9,500; and Navy, 3,500).

16 June--Secretary McNamara announces new troop movements to Vietnam which will bring the total there to over 70,000.

28 June--American troops participate in their first major attack of the Vietnamese war.

8 July--General Maxwell D. Taylor resigns as U.S. Ambassador to RVN; Mr. Henry Cabot Lodge named as successor and arrives in Saigon to assume duties as U.S. Ambassador on 20 August.

18 August--The Senate approves a $1.7 billion supplementary appropriation for military operations in Vietnam.

19 August--The Defense Department reports that 561 Americans had been killed, 3,024 wounded, and 44 missing in Vietnam between January 1, 1961 and August 16, 1965.

8 October--Arrival of elements of the U.S. 1st Infantry Division brings U.S. military strength in RVN to 140,000.

9 October--President signed $6.8 billion DOD appropriations, including $1.7 billion for Vietnam buildup.

23 October--U.S. military authorities in Saigon reported that U.S. forces in South Vietnam have reached a total of 148,300 men; 89,000 Army, 8,000 Navy, 37,000 Marine Corps, 14,000 Air Force, and 300 Coast Guard.

11 November--Defense Secretary McNamara announces that the administration "believes it will be necessary to add further to the strength of U.S. combat forces in Vietnam."

1 December--President Johnson said U.S. would send 400,000 men to Vietnam.

1966

8 January--Senate majority leader, Mike Mansfield and four other Senators file a report with the Senate Foreign Relations Committee based on their trip to South Vietnam and other countries. The report expresses the view that "a rapid solution to the conflict in Vietnam is not in immediate prospect." The report states that despit the U.S. expanded military effort, the Vietcong offensive had only been "blunted," not "driven back."

15 January--South Vietnam Premier Ky pledges a popular referendum in October on a new constitution for South Vietnam to pave the way for "real democratic elections in 1967" for a civilian government to replace the current military regime. One of the government's principal tasks in 1966, he declares, will be a rural construction program.

19 January--The President sends Congress a request for an additional $12.76 billion in supplemental funds primarily for Vietnam expenses. New authorization will be needed for $4.8 billion of this amount.

20 January--Defense Secretary McNamara reports that the United States lost 351 planes and helicopters in Vietnam in 1965.

5 February--Aircraft losses in Vietnam during 1964 and 1965 totaled 313 fixed wing planes and 100 helicopters.

2 May--Secretary McNamara predicts an increase in U.S. troop strength in order to offset rising North Vietnamese infiltration.

12 June--Bulk of 1st Australian Task Force arrives in SVN.

7 August--U.S. Congress approved a SEA resolution (H.R. Res. 1145), giving the President power to "take all necessary measures to repel any armed attack against the forces of the U.S. and to prevent further aggression."

17 September--Size of U.S. commitment approaching 400,000. (Includes 25,000 in Thailand and 50,000 in 7th Fleet.)

5 November--Secretary McNamara states that the number of U.S. troops in Vietnam will continue to grow in 1967 but at a lower rate than the increase in 1966.

14-15 December--U.S. officials admit that American aircraft have bombed military targets in Hanoi but deny Soviet charges.

31 December--U.S. troop strength in South Vietnam reaches 389,000. U.S. battle deaths in Vietnam reached 6,644, while total wounded reached 37,738.

1967

5 January--North Vietnam's chief diplomatic representative in Western Europe states that if the United States will "definitively and unconditionally" stop the bombing of his country, Hanoi will "examine and study" proposals for negotiations.

23 January--In his annual posture statement before the Senate Armed Services Committee and Defense Appropriations Subcommittee, Secretary McNamara lists enemy strength in South Vietnam at 275,000 men including 45,000 North Vietnamese regulars.

25 January--The President presents his budget for fiscal year 1968 to Congress. For Vietnam, it estimates expenditures at $21.9 billion. Total defense spending for fiscal 1968 is estimated at $73.1 billion.

23-24 February--25,000 Allied troops begin Operation Junction City in a wide area near the South Vietnam-Cambodia border. U.S. artillery in South Vietnam shells North Vietnam for the first time.

1 March--The Senate, by a vote of 75 to 19, passes a resolution tied to a $4.5 billion military spending bill (for fiscal 1967) pledging support to President Johnson.

15 March-President Johnson announces that Ellsworth Bunker will replace Henry Cabot Lodge as U.S. ambassador to South Vietnam.

16-20 March--The House and Senate pass a $12.2 billion supplemental (fiscal 1967) defense money bill for Vietnam. Senate vote, 77-3; House vote, 385-11.

27 March--South Vietnam's Government approves the new constitution voted by the Constituent Assembly on March 18. The constitution was promulgated on April 1.

14 May--South Vietnam's Chief of State Thieu states his belief that 50,000 American or allied troops will be needed 10 to 20 years after the end of the Vietnam war to guard against future aggression. He also states that he expects heavy fighting to continue for 2 to 3 years followed by 3 or 4 years of cleanup operations.

22 June--According to Department of Defense figures, total U.S. troop strength in South Vietnam is 463,000 as of June 17. U.S. combat deaths stand at 11,099 and number of wounded totals 67,083.

12 July--Secretary McNamara tells reporters at the White House that more American troops will be needed in Vietnam beyond the present approved ceiling of 480,000.

13 July--Following a meeting with his chief military advisers including General Westmoreland, President Johnson tells newsmen that: "We have reached a meeting of the minds. The troops that General Westmoreland needs and requests-as we feel it necessary-will be supplied.

19 July--Speaking at a press conference, Secretary Rusk states on the bombing of North Vietnam that "we are not prepared to stop half the war while the other half goes on unrestricted, unimpeded, and with maximum violence."

3 August--President Johnson announces that he has authorized the raising of the maximum limit of U.S. personnel in South Vietnam to 525,000.

31 August--Army Chief of Staff Johnson reportedly tells a group of Army chaplains that the United States could begin a phased withdrawal of its troops from Vietnam within 18 months if the present rate of military progress continued.

21 September--About 1,200 Thai troops land in Vietnam as the first of 2,500 troops expected to participate in the Vietnam war.

17 October--Australia announces that it will increase the size of its Vietnam force from 6,300 to 8,000. New Zealand announces that it will send an additional 170 infantrymen to join the 370 already there.

29 October--Thailand's Interior Minister tells newsmen that his country will send 12,000 additional troops to Vietnam as soon as the United States provides arms and equipment.

14 November--Thailand's Cabinet gives final approval to the dispatch of a full division-10,000 to 12,000 men-to Vietnam.

16 November--General Westmoreland reportedly tells the House Armed Services Committee that the United States should be able to begin phasing out its operations in Vietnam in 1969.

17 November--President Johnson tells a news conference that the United States has no plans to increase its Vietnam troop strength beyond the authorized limit of 525,000.

1968

1 February--Secretary McNamara presents his final posture statement to Congress. He declares that the ultimate success in South Vietnam depends on the ability of the Saigon government to reestablish its authority over its territory so that peaceful reconstruction can be undertaken.

13 February--The Pentagon announces that the United States will airlift 10,500 additional troops to Vietnam in compliance with General Westmoreland's request.

4 March--According to Defense Department figures total U.S. troop strength in South Vietnam as of February 24, 1968, was 495,000. U.S. combat deaths stood at 18,799 (Jan. 1, 1961 - Feb. 24, 1968) and wounded totaled 115,114.

22 March--President Johnson announces that he will nominate General William Westmoreland to replace retiring Army Chief of Staff, General Harold K. Johnson, in July 1968.

31 March--President Johnson announces that he has ordered U.S. aircraft and naval vessels "to make no attacks on North Vietnam except in the area north of the demilitarized zone where the continuing enemy buildup directly threatens allied forward positions and where the movements of their troops and supplies are clearly related to that threat."

10 April--President Johnson announces the appointment of General Creighton Abrams to replace General Westmoreland as U.S. commander in Vietnam.

25 April--United States and North Vietnamese diplomats meet in Vietiane, Laos, over the problem of a site for preliminary peace talks.

3 May--President Johnson announces that the United States has accepted a North Vietnamese offer to meet in Paris for preliminary peace talks on May 10 or soon afterwards.

13 May--The first formal negotiating session meets at Paris.

19 June--President Thieu signs South Vietnam's first general mobilization law. He states that the South Vietnamese Government "intends to take over more responsibility" for the war and that it will draft 200,000 men by the end of 1968 under the law.

21 September--Congressman Melvin Laird states that current plans of the Johnson administration call for reducing American troops in Vietnam by about 90,000 men by June 30, 1969. White House Press Secretary George Christian says that "I have no idea what he's talking about," and Assistant Secretary of Defense Phil Goulding states that he knows of "no plans" to lower the troop ceiling of 549,000 men and of "no preliminary planning toward this end."

25 October--Secretary of Defense Clifford states that President Johnson has ordered no slackening of the U.S. military effort in Vietnam.

31 October--President Johnson announces that the United States will cease "all air, naval, and artillery bombardment of North Vietnam" as of 8 a.m. (Washington time), November 1.

8 November--President Thieu proposes that the new phase of the Paris talks consists of two delegations: an Allied delegation headed by South Vietnam and including the United States, and a Communist delegation headed by North Vietnam including members of the NLF. North Vietnam's Xuan Thuy rejects the idea, saying that Hanoi could not accept the idea of a single Communist delegation.

1969

5 February--President Nixon states at a news conference that the subject of U.S. troop withdrawals from South Vietnam was "high on the list of priorities, and that just as soon as either the training program for South Vietnamese forces and their capabilities, the progress of the Paris peace talks, or other developments make it feasible to do so, troops will be brought back."

6 March--According to Department of Defense figures, U.S. troop strength in South Vietnam totaled 541,500 as of March 1, 1969. U.S. combat deaths stood at 32,376 (January 1, 1961 to March 1, 1969). U.S. wounded totaled 104,686 (hospital care required) and 99,802 (hospital care not required).

April--U.S. troops reached peak strength of 543,400.

8 June--President Nixon announced 25,000 Americans would be pulled out of Vietnam before the end of August.

SOURCE: U.S. Congress. Senate. Foreign Relations Committee, Background Information Relating to Southeast Asia and Vietnam, 91st Cong., 1st Sess., Washington, D.C.: Government Printing Office, 1969.

APPENDIX B

TOP 100 COMPANIES LISTED ACCORDING TO
NET VALUE OF MILITARY PRIME CONTRACT AWARDS
Fiscal Year 1969

Rank	Companies	Millions of Dollars	Percent Of U.S. Total	Cumulative Percent of U.S. Total
	U.S. TOTAL a/	$36,888.6	100.00	100.00
	TOTAL, TOP 100 COMPANIES	25,175.2	68.25	68.25
1.	Lockheed Aircraft Corp.	2,040.2	5.53	5.53
2.	General Electric Co.	1,620.8	4.39	9.92
3.	General Dynamics Corp.	1,243.1	3.37	13.29
4.	McDonnel Douglas Corp.	1,069.7	2.90	16.19
5.	United Aircraft Corp.	997.4	2.70	18.89
6.	American Telephone & Telegraph Co.	914.6	2.48	21.37
7.	Ling Temco Vought Inc.	914.1	2.48	23.85
8.	North American Rockwell Corp.	674.2	1.83	25.68
9.	Boeing Co.	653.6	1.77	27.45
10.	General Motors Corp.	584.4	1.58	29.03
11.	Raytheon Co.	546.8	1.48	30.51
12.	Sperry Rand Corp.	467.9	1.27	31.78
13.	Avco Corp.	456.1	1.24	33.02
14.	Hughes Aircraft Co.	439.0	1.19	34.21
15.	Westinghouse Electric Co.	429.6	1.16	35.37
16.	Textron Inc.	428.3	1.16	36.53
17.	Grumman Aircraft Engineering Corp.	417.1	1.13	37.66
18.	Honeywell Inc.	405.6	1.10	38.76
19.	Ford Motor Co.	396.3	1.07	39.83
20.	Olin Mathieson Chemical Corp.	354.4	0.96	40.79
21.	Litton Industries, Inc.	317.1	0.86	41.65
22.	Teledyne Inc.	308.5	0.84	42.49
23.	R C A Corp.	299.0	0.81	43.30
24.	Standard Oil Co. (New Jersey)	291.1	0.79	44.09
25.	Martin Marietta Corp.	264.3	0.72	44.81
26.	General Tire & Rubber Co.	263.5	0.71	45.52
27.	Intl Business Machines Corp.	256.6	0.70	46.22
28.	Raymond Morrison Knudsen (JV)	254.0	0.69	46.91
29.	International Telephone & Telegraph Co.	238.3	0.65	47.56
30.	Tenneco Inc.	236.7	0.64	48.20
31.	Dupont (E.I.) DeNemours & Co.	212.0	0.57	48.77

APPENDIX B-CONTINUED

Rank	Companies	Millions of Dollars	Percent Of U.S. Total	Cumulative Percent of U.S. Total
32.	F M C Corp.	$ 195.6	0.53	49.30
33.	Norris Industries	187.6	0.51	49.81
34.	Bendix Corp.	184.4	0.50	50.31
35.	Hercules Inc.	179.6	0.49	50.80
36.	Northrop Corp.	178.9	0.48	51.28
37.	Uniroyal Inc.	174.1	0.47	51.75
38.	T R W Inc.	170.4	0.46	52.21
39.	Pan American World Wirways Inc.	167.4	0.45	52.66
40.	Asiatic Petroleum Corp.	155.6	0.42	53.08
41.	Mobil Oil Corp.	151.5	0.41	53.49
42.	Standard Oil Co. of California	148.8	0.40	53.89
43.	Fairchild Hiller Corp.	148.6	0.40	54.29
44.	Collins Radio Co.	145.8	0.40	54.69
45.	Kaiser Industries Corp.	142.4	0.39	55.08
46.	General Telephone and Electn Corp.	140.5	0.38	55.46
47.	Day & Zimmerman Inc.	137.8	0.37	55.83
48.	Texas Instruments Inc.	132.5	0.36	56.19
49.	Federal Cartridge Corp.	131.9	0.36	56.55
50.	Magnavox Co.	130.3	0.35	56.90
51.	Thiokol Chemical Corp.	128.1	0.35	57.25
52.	Texaco Inc.	124.0	0.34	57.59
53.	Chrysler Corp.	121.9	0.33	57.92
54.	Pacific Architects & Engineers Inc.	121.0	0.33	58.25
55.	Sanders Associates Inc.	118.5	0.32	58.57
56.	United States Steel Corp.	117.8	0.32	58.89
57.	Goodyear Tire & Rubber Co.	116.5	0.32	59.21
58.	Singer Co.	116.2	0.32	59.53
59.	Chamberlain Mfg Corp.	115.9	0.31	59.84
60.	Lear Siegler	115.8	0.31	60.15
61.	American Machine & Foundry Co.	115.3	0.31	60.46
62.	Colt Industries, Inc.	114.4	0.31	60.77
63.	Eastman Kodak Co.	109.8	0.30	61.07
64.	City Investing Co.	109.2	0.30	61.37
65.	Whittaker Corp.	107.7	0.29	61.66
66.	American Mfg Co. of Texas	106.7	0.29	61.95
67.	Massachusetts Institutechnology	100.5	0.27	62.22
68.	Gulf Oil Corp.	95.9	0.26	62.48
69.	National Presto Industries Inc.	94.9	0.26	62.74
70.	Kidde Walter & Co. Inc.	91.9	0.25	62.99
71.	Signal Companies Inc. (The)	91.3	0.25	63.24
72.	Curtiss Wright Corp.	91.2	0.25	63.49
73.	Harvey Aluminum Inc.	90.5	0.25	63.74
74.	States Marine Lines Inc.	87.1	0.24	63.98
75.	Reynolds (RJ) Industries Inc.	85.0	0.23	64.21
76.	Aerospace Corp.	76.2	0.21	64.42
77.	Motorola Inc.	73.2	0.20	64.62
78.	Automation Industries, Inc.	73.1	0.20	64.82

APPENDIX B-CONTINUED

Rank	Companies	Millions of Dollars	Percent Of U.S. Total	Cumulative Percent of U.S. Total
79.	Talley Industries, Inc.	$ 72.5	0.20	65.02
80.	Harris-Intertype Corp.	71.6	0.19	65.21
81.	Firestone Tire & Rubber Co.	66.7	0.18	65.39
82.	Seatrain Lines Inc.	64.6	0.18	65.57
83.	Aluminum Company of America	64.4	0.17	65.74
84.	Hughes Tool Co.	63.7	0.17	65.91
85.	National Gypsum Co.	63.2	0.17	66.08
86.	Hazeltine Corportation	60.5	0.16	66.24
87.	Western Union Telegraph Co.	57.7	0.16	66.40
88.	Control Data Corp.	56.9	0.15	66.55
89.	White Motor Corp.	56.3	0.15	66.70
90.	Continental Air Lines Inc.	55.2	0.15	66.85
91.	World Airways Inc.	54.9	0.15	67.00
92.	Atlantic Richfield Co.	54.3	0.15	67.15
93.	Tumpane Co. Inc.	54.0	0.15	67.30
94.	Cessna Aircraft Co.	53.4	0.14	67.44
95.	Smith Investment Co.	51.7	0.14	67.58
96.	Sverdrup & Parcel & Assocs Inc.	50.2	0.14	67.72
97.	Dynalectron Corp.	50.0	0.14	67.86
98.	Letourneau R G Inc.	49.9	0.14	68.00
99.	Flying Tiger Line Inc.	48.3	0.13	68.13
100.	Southern Airways Inc.	48.3 c/	0.13	68.26 b/

a/ Net value of new procurement actions minus cancellations, terminations and other credit transactions. The data include debit and credit procurement actions of $10,000 or more, under military supply, service and construction contracts for work in the U.S. plus awards to listed companies and other U.S. companies for work overseas.

Procurement actions include definitive contracts, the obligated portions of letter contracts, purchase orders, job orders, task orders, delivery orders, and any other orders against existing contracts. The data do not include that part of indefinite quantity contracts that have not been translated into specific orders on business firms, nor do they include purchase commitments or pending cancellations that have not yet become mutually binding agreements between the government and the company.

b/ Does not agree with percentage shown in table due to rounding.

c/ Totals may not agree due to rounding.

SOURCE: Office of the Secretary of Defense, Directorate for Information Services, October 27, 1969.

APPENDIX C

DEFENSE GENERATED EMPLOYMENT
JUNE 1965-JUNE 1968
(In Thousands)

State	DOD Measured Employment		Employment as Percent of Work Force	
	June-65	June-68	June-65	June-68
Alabama	47.5	59.1	3.7	4.5
Alaska	8.8	10.2	9.8	10.3
Arizona	14.9	26.1	2.8	4.4
Arkansas	5.6	11.5	0.8	1.6
California	354.4	491.5	4.9	6.2
Colorado	24.1	30.8	3.2	3.7
Connecticut	68.0	116.3	5.7	8.8
Delaware	2.0	2.8	0.9	1.2
D.C.	33.2	43.1	8.6	10.2
Florida	68.5	94.9	3.1	3.9
Georgia	58.4	77.2	3.6	4.3
Hawaii	20.8	27.7	7.9	9.4
Idaho	0.6	1.2	0.2	0.4
Illinois	48.7	83.3	1.0	1.7
Indiana	35.3	72.3	1.8	3.5
Iowa	7.9	13.8	0.7	1.1
Kansas	19.4	22.8	2.3	2.6
Kentucky	13.3	19.6	1.2	1.7
Louisiana	10.6	17.9	0.8	1.3
Maine	5.6	8.4	1.5	2.1
Maryland	70.7	87.5	5.6	6.2
Massachusetts	75.9	115.8	3.1	4.6
Michigan	30.3	39.3	1.0	1.1
Minnesota	17.3	34.6	1.1	2.1
Mississippi	23.3	38.1	3.0	4.7
Missouri	53.6	80.3	2.8	4.0
Montana	1.5	5.0	0.6	1.9
Nebraska	5.1	9.9	0.8	1.5
Nevada	3.0	3.3	1.6	1.6
New Hampshire	11.9	18.0	4.5	6.2
New Jersey	66.9	88.8	2.4	3.1
New Mexico	15.3	16.4	4.3	4.5
New York	132.2	168.4	1.7	2.1
North Carolina	26.0	44.3	1.3	2.1
North Dakota	2.7	5.6	1.0	2.2
Ohio	81.7	108.7	2.0	2.5
Oklahoma	31.0	43.6	3.3	4.3

APPENDIX C-CONTINUED

State	DOD Measured Employment		Employment as Percent of Work Force	
	June-65	June-68	June-65	June-68
Oregon	5.5	8.7	0.7	1.0
Pennsylvania	108.4	157.0	2.3	3.2
Rhode Island	13.4	17.1	3.7	4.4
South Carolina	19.2	28.0	1.9	2.8
South Dakota	2.1	2.7	0.8	1.0
Tennessee	25.0	45.8	1.6	2.8
Texas	118.1	200.8	3.0	4.6
Utah	28.7	36.2	7.6	8.9
Vermont	2.0	3.9	1.2	2.2
Virginia	112.6	149.7	7.1	8.7
Washington	45.7	54.5	4.0	4.0
West Virginia	4.9	8.6	0.8	1.4
Wisconsin	11.4	26.4	0.7	1.4
Wyoming	0.7	0.7	0.5	0.5
	2055.6	2932.7	2.7	3.6

SOURCE: U.S. Department of Defense, Office of Assistant Secretary of Defense (Economics). "Defense Generated Employment, June 1968." Unpublished report. Washington, D.C. 1968.

APPENDIX D

ESTIMATED EMPLOYMENT IMPACT OF REDUCED DEFENSE PURCHASES FROM INDUSTRY FOR VIETNAM AND OFFSET PROGRAMS
(In Thousands)

Occupation	Persons Released[a]	New Employment[b]	Net Change in Employment
		Total	
I. Professional, technical and kindred workers	232	177	-55
Accountants and auditors	14	11	- 3
Airplane pilots and navigators	2	*	- 1
Architects	*	3	3
College Presidents, Professors and Instructors	1	2	1
Dentists	*	2	2
Designers and Draftsmen	17	10	- 7
Engineers	112	34	-78
Lawyers and judges	2	4	2
Librarians	*	1	*
Natural scientists	14	4	-10
Nurses, professional	2	12	10
Personnel and labor relations workers	5	4	- 1
Pharmacists	---	2	2
Physicians and surgeons	1	5	4

APPENDIX D-CONTINUED

	Occupation	Persons Released a/	New Employment b/	Net Change in Employment
			Total	
	Social, welfare and recreation workers	*	7	7
	Teachers, elementary	1	1	---
	Teachers, secondary	*	2	2
	Technicians, electrical and electronic	21	4	-17
	Technicians, medical and dental	1	3	2
	Technicians, other	20	10	-10
	Other professional and technical workers	19	56	37
II.	Managers, officials and proprietors, except farm	97	184	87
	Salaried managers	83	108	25
	Self-employed	14	76	62
III.	Clerical and kindred workers	200	234	34
	Bookkeepers	14	26	12
	Cashiers	1	12	11
	Office machine operators	11	10	- 1
	Secretaries, stenographers and typists	54	61	7
	Shipping and receiving clerks	18	8	-10
	Stock clerks and storekeepers	14	9	- 5
	Telephone operators	2	7	5

APPENDIX D-CONTINUED

	Occupation	Persons Released a/	New Employment b/	Net Change in Employment
			Total	
	Other clerical workers	86	101	15
IV.	Sales workers	58	104	46
	Insurance and real estate agents and brokers	4	14	10
	Salesmen and sales clerks, retail trade	1	61	60
	Salesmen and sales clerks, other	53	29	-24
V.	Craftsmen, foremen, and kindred workers	252	324	72
	Brickmasons, stonemasons and tilesetters	3	14	11
	Cabinetmakers and pattern makers	4	2	- 2
	Carpenters	7	47	40
	Cranemen, derrickmen and hoistmen	8	6	- 2
	Electricians	11	16	5
	Excavating, grading, and road machinery operators	2	14	12
	Foremen	49	35	-14
	Linemen and servicemen, telegraph, telephone and power	4	10	6
	Locomotive engineers	1	1	---
	Machinists and job setters	42	10	-32

APPENDIX D-CONTINUED

	Occupation	Persons Released a/	New Employment b/	Net Change in Employment
			Total	
	Mechanics and repairmen, automobile	8	18	10
	Mechanics and repairmen, other	41	39	- 2
	Painters, construction and maintenance	5	27	22
	Plumbers and pipefitters	6	20	14
	Printing craftsmen	5	6	1
	Stationary engineers	9	5	- 4
	Tinsmiths, coppersmiths, and sheet metal workers	10	4	- 6
	Toolmakers, diemakers and setters	18	4	-14
	Other	19	46	27
VI.	Operatives and kindred workers	387	291	-96
	Assemblers	51	12	-39
	Attendants, auto service and parking	1	9	8
	Brakemen and switchmen, railroad	3	2	- 1
	Bus drivers	1	3	2
	Deliverymen and routemen	8	14	6
	Checkers and inspectors, manufacturing	36	10	-26

APPENDIX D-CONTINUED

	Occupation	Persons Released a/	New Employment b/	Net Change in Employment
			Total	
	Filers, grinders and polishers, metal	17	3	-14
	Laundry and dry cleaning operatives	3	9	6
	Mine operatives and laborers	5	7	2
	Painters, except construction and maintenance	7	3	- 4
	Sewers and stitchers, manufacturing	12	15	3
	Taxicab drivers and chauffeurs	1	2	1
	Truck and tractor drivers	44	50	6
	Welders and flame cutters	17	11	- 6
	Other operatives and kindred workers	181	141	-40
VII.	Private household workers	---	45	45
VIII.	Service workers, except private household	50	134	84
	Attendants, hospital and other institutions	1	10	9
	Barbers, hairdressers, and cosmetologists	1	13	12
	Charwomen, janitors and porters	19	24	5
	Cooks	2	12	10

APPENDIX D-CONTINUED

	Occupation	Persons Released a/	New Employment b/	Net Change in Employment
			Total	
	Firemen, fire protection	---	*	*
	Guards, watchmen and doorkeepers	18	5	-13
	Policemen, sheriffs and marshalls	1	*	*
	Practical nurses	1	6	5
	Waiters, bartenders, and counter workers	4	27	23
	Other service workers, except private household	3	35	32
IX.	Farm workers	30	82	52
	Farmers and farm managers	15	40	25
	Farm laborers and foremen	15	42	27
X.	Laborers, except farm and mine	52	112	60
XI.	Total	1,359	1,685	326

Note: detail may not add to totals due to rounding.

* Less than 500 employees.

a/ Persons released from employment by a $20 billion cutback in defense purchases. Refers to purchases of goods and services from private sector of the economy. It does not include compensation of public employees.

b/ New employment created by $10 billion in tax cuts and $10 billion greater public spending for urban development and social welfare.

SOURCE: Lecht, Leonard A. National Priorities, Manpower Needs, and the Impact of Diminished Defense Purchases for Vietnam, U.S. Chamber of Commerce, Washington, D.C. September 1967.

APPENDIX E

ESTIMATED EMPLOYMENT IMPACT OF REDUCED DEFENSE PURCHASES FROM INDUSTRY FOR VIETNAM AND OFFSET PROGRAMS, BY INDUSTRY[a]
(thousands of employees)

	Persons released from employment by a $20 billion cutback in defense purchases[c]	New employment created by $10 billion in tax cuts and $10 billion greater public spending for urban development and social welfare	Net change in employment
Agriculture[b]	33	89	56
Mining	14	16	2
Construction	59	382	323
Manufacturing	878	372	-506
Durables	773	215	-558
Nondurables	105	158	53
Transportation	67	57	- 10
Public Utilities	6	15	9
Communications	7	16	9
Trade	205	307	102
Finance, Insurance and real estate	20	77	57
Services	70	352	282
Private households	---	47	47
Other services	70	305	235
TOTALS	1,359	1,685	326

Note: Detail may not add to totals due to rounding.

[a] To be consistent with occupational data, these estimates are based on household rather than establishment data.

[b] Includes forestry and fishery industries.

[c] Refers to purchases of goods and services from private sector of the economy. It does not include compensation of public employees.

SOURCE: Lecht, Leonard A. National Priorities, Manpower Needs, and the Impact of Diminished Defense Purchases for Vietnam, U.S. Chamber of Commerce, Washington, D.C. September 1967.

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