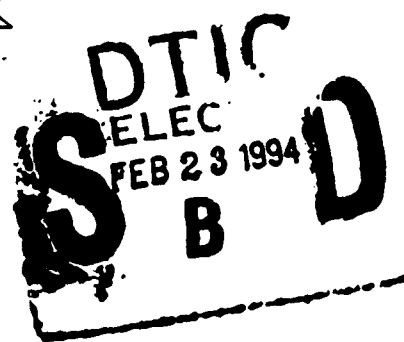


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A STUDY OF THE DEVELOPMENT  
OF PLANNING, PROGRAMMING  
AND BUDGETING SYSTEM (PPBS)  
IN THE UNITED STATES  
DEPARTMENT OF DEFENSE

THESIS

Sakir Serhat Kantik, 2nd Lt., TUAF

AFIT/GSM/LAR/93S-10

DEPARTMENT OF THE AIR FORCE  
AIR UNIVERSITY

**AIR FORCE INSTITUTE OF TECHNOLOGY**

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A STUDY OF THE DEVELOPMENT OF  
PLANNING, PROGRAMMING AND BUDGETING SYSTEM (PPBS)  
IN THE UNITED STATES DEPARTMENT OF DEFENSE

THESIS

Presented to the Faculty  
of the School of Logistics and Acquisition  
of the Air Force Institute of Technology  
Air University  
In Partial Fulfillment of the  
Requirements for the Degree of  
Master of Science in Systems Management

Sakir Serhat Kantik  
Second Lieutenant, TAAF

September 1993

Approved for public release; distribution unlimited

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Sakir Serhat Kantik

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Abstract

Having served as the United States Defense Department (DoD)'s primary resource allocation and decision-making process for more than 30 years, Planning-Programming-Budgeting System (PPBS) has kept going its evolution since it was first introduced in 1961. Accordingly, this study examined the development of PPBS in the U.S. DoD from its beginning to the recent past, that is to 1986, focusing on its basic purposes, how it has been modified and to assess the various expert observations made about the system.

As originally conceived, the budget process was divided into three phases: Planning, Programming and Budgeting. The Planning phase was concerned with multi-year long range requirements to lead the development of the Service programs. The Programming phase would have a multi-year prospective based on specific programs needed to support the long range planning requirements. The Budgeting phase would focus on pricing the first year of the programs chosen in the Programming phase.

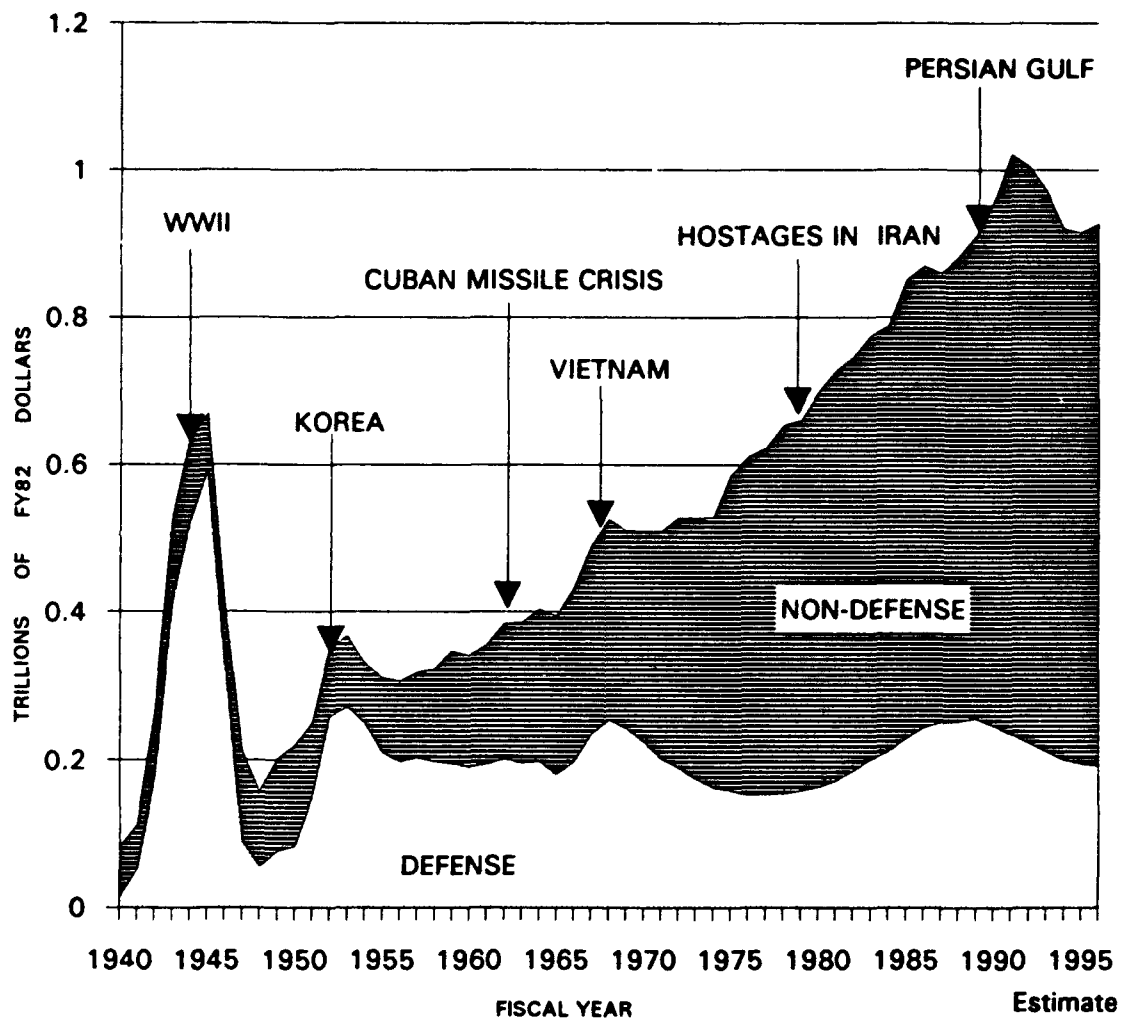
Although PPBS brought some improvements to the ability to tie missions, strategies, forces, and budgets together, planning continued to be the weak link in the PPBS resource allocation process.

A STUDY OF THE DEVELOPMENT OF  
PLANNING, PROGRAMMING AND BUDGETING SYSTEM (PPBS)  
IN THE UNITED STATES DEPARTMENT OF DEFENSE

I. Introduction

This study examines the development of Biennial Planning, Programming and Budgeting System (BPPBS) in U.S. Department of Defense. As a prelude, it is appropriate to discuss the responsibilities of national governments, the expenditures required to accomplish those responsibilities, the portion of military spending on government's total expenditures, and the need to control military spending.

Military capability is indeed a fundamental responsibility of government. Among those who have written extensively on the subject are Thomas Jefferson, Adam Smith and Alexander Hamilton. Some of the essential principles of government declared by Thomas Jefferson during the First Inaugural Address in 1801 (Abbott, 1973) are "Equal and exact justice to all men... a well-disciplined militia - our best reliance in peace and for the first moments of war..." Adam Smith (1937) observed that "The first duty of the sovereign, that of protecting the society from the violence and invasion of other independent societies, can be performed only by means of a military force." Alexander Hamilton



**FIGURE 1**  
 Total defense and non-defense outlays, 1940-1996.  
 SOURCE: "Budget of the U.S. Government: FY92," OMB, 1991.

(Abbott, 1973) admitted that "there can be no limitation of that authority which is to provide for the defence and protection of the community, in any matter essential to its efficacy - that is, in any matter essential to the formation, direction, or support of the National Forces."

In many countries, a major portion of central government's spending is for military purposes because of its inevitability and necessity. Figure 1 shows that annual U.S. defense expenditures (in FY82 dollars) have been around \$200 billion since the early 1950s. The United States DoD budget for FY90 was \$299.3 billion. This represented 5.5% of GDP and was almost 24% of total federal spending. For the ten year period, 1980-1990, average DoD outlays (in current dollars) were \$219.5 billion.

Clearly, with such immense outlays involved, there is a need to use great care in military spending. And this is the main reason for the creation of BPPBS during the early 1960s. As Senator William Proxmire said "If we view the budget as a system in itself, we note the importance of information inputs in the decision-making process. Bad inputs lead to bad outputs, and bad outputs cause serious resource misallocations within the budgetary system. The application of PPB methods should prove a valuable advance for the better direction, coordination, and control of government budgetary concepts" (Hovey, 1970).

Accordingly, my purpose is to trace the development of BPPBS in the U.S. Department of Defense from its beginning to the

recent past, that is to 1986, focusing on its basic purposes, how it has been modified and to assess the various expert observations made about the system.

## II. Public and Private Goods

Soon after World War II, public interest in government expenditures grew as those expenditures continued to exceed pre-war levels. John G. Head (1974) indicated in his introduction, "The vast extent and growth of the public sector have been perhaps the most important fiscal phenomena of the postwar period." This change in the way of the central government's doing business led to the output of the economy being thought of as comprised of two general categories: public goods and privately produced priceable goods.

In this general distinction, it needs to be clarified that some public goods (for instance, postal service) are also priceable like all private goods. In some literature, priceable goods are also called "impure" public goods while the remaining public goods (e.g. national defense) are referred to as "pure" public goods (Clarke, 1980).

### Definitions.

To be able to make the distinction between collective and priceable goods, let us look at the following quotation from Samuelson's original mathematical exposition in 1954:

I explicitly assume two categories of goods: ordinary private consumption goods [priceable goods]  $(X_1, \dots, X_n)$  which can be parcelled out among different individuals  $(1, 2, \dots, i, \dots, s)$  according to the relations and collective consumption goods [collective goods]  $(X_{n+1}, \dots, X_{n+m})$  which all enjoy in common in the sense

$$\Sigma_j = \Sigma X_j^i,$$

that each individual's consumption of such a good leads to no subtraction from any other individual's consumption of that good, so that

$$X_{n+j} = X_{n+j}^i$$

simultaneously for each and every  $i^{\text{th}}$  individual and each collective consumption good.  
(Samuelson, 1955)

It is preferable to name those definitions as priceable and collective goods, respectively. The reason for this adjustment is, as mentioned earlier, that government can also supply some goods which are priceable like energy, transportation, postal service, sewerage, water supply, etc.

Some examples of "pure" public goods are the maintenance of national defense and of internal law and order, the building of highways, and public health. On the other hand, most of the gross national product (GNP) like TV, bread, VCR, shoe, etc. are priceable goods produced by private enterprise.

Call and Holahan (1983) differentiate goods in such a way that priceable goods exhibit rivalry and exclusion, but public goods which are collective in nature exhibit nonrivalry and nonexclusion. "Nonrivalry means that a good can be consumed collectively... Jogging through a park or driving over a bridge does not require the replacement of the bridge after each use. Nonexclusion is the inability of sellers to restrict use to people who pay for the services."

### Satisfaction of Public Needs.

Besides understanding the distinction between public and priceable goods, it is important to examine the reasons for government providing all public and some priceable goods. One reason is to realize welfare objectives. A second one is to circumvent market failure that otherwise would occur. And a third reason is that "Private provision of these public goods will not occur because the benefits of the goods are dispersed so widely across the population that no single firm or consumer has an incentive to provide them" (Samuelson and Nordhaus, 1985). Therefore, government should and does still provide collective goods since private provision of public goods will not be sufficient.

Although there is no question about the need for government's providing "pure" public goods such as national defense, it is really questionable why government provides priceable goods out of which government can neither make a profit nor give a superior service better than that of the counterpart private sector. Historically, this can be perceived as a tradition within the government's duties. Another reason for that can be the job-creation potential of government's involvement in this business. As shown in the OMB's Special Studies: Budget of the U.S. Government FY1990, average Government civilian employment as a percent of total civilian employment was approximately 15% between 1958-1988.

At this point, it is worth noting that the former (Bush) Administration expounded the Privatization Initiatives as one of its priorities in the 1990 Budget. Under the "Meeting Infrastructure Needs" subheading, it is pointed out that, as "The private sector represents an untapped source of capital resources and management expertise of the magnitude needed to meet infrastructure needs," the Administration proffers "a series of initiatives that further the role of the private sector in these areas." Moreover, the United States Postal Service is mentioned as "a major part of the national communications infrastructure," and it is proudly written that "Comprehensive competitive reform of the Postal Service is a top priority of the privatization agenda" (Budget of the U.S. Government, Fiscal Year 1990).

As Abraham Lincoln emphasized, the legitimate object of government is "to do for the people what needs to be done, but which they cannot, by individual effort, do at all, or do so well, for themselves." To accomplish this ultimate object, government is responsible for three peculiarly economic functions: "efficiency, equity, and stability. Government actions concerning efficiency are attempts to correct for market failures like monopoly. Government programs to promote equity use techniques such as income redistribution to reflect society's concerns for the poor or hapless. Stabilization policy attempts to shave the peaks and troughs of the business cycle, reducing unemployment and inflation, and promoting economic

growth" (Samuelson and Nordhaus, 1985).

### National Security as a Public Good.

In the previous section, the maintenance of national defense is mentioned as an example of public goods. The reason for that is because national security holds an important place within the central government's responsibilities. Since the value of any nation's sovereignty and of lives of that nation's people cannot be priced, national security becomes especially important whenever a nation encounters any threat. As shown in Figure 1, the U.S. defense outlays increased relatively during the period of wars (especially WWII) and conflicts.

Before examining some sources of threat, let us look at the major U.S. national security objectives:

- Safeguarding the United States and its forces, allies, and interests by deterring aggression and coercion.
- Encouraging and assisting allies and friends in defending themselves against aggression, coercion, subversion, insurgencies, and terrorism.
- Ensuring U.S. access to critical resources, markets, the oceans, and space.
- Pursuing equitable and verifiable arms reduction agreements.

Some sources of threat related to national security can be viewed as listed below:

- availability and limitation of resources,

- international trade,
- transnational investment,
- differing rates of industrial development,
- acquisition of territory.

As Kapstein (1992) mentioned, "Reliance on farflung supplies of raw materials and energy has been a traditional concern of policymakers in the industrial world, and countries have frequently turned to foreign suppliers for defense related technology." For example, in October 1973, the Organization of Arab Petroleum Exporting Countries (OAPEC) embargoed the sale of oil to the United States. Consequently, oil prices quadrupled, and gasoline shortages occurred. This example shows that the United States, like other advanced industrial countries, is dependent on foreign energy supplies for its economic well-being.

Continuing the discussion, Kapstein concludes that

The problem of national security in a global economy is bound to become more complex in the coming decades. States remain responsible for the provision of defense and social welfare, but they cannot provide these goods without entering the world economy. Throughout the postwar era, the industrial states have accepted the risks associated with the division of labor, so long as some defense-related production remained safely grounded on national soil and critical raw materials were stockpiled for emergency needs. Today, these traditional efforts to reduce vulnerability are less likely to prove effective during a crisis.  
(Kapstein, 1992)

Another threat as perceived by some for national security is transnational investment (Foreign Direct Investment, FDI).

In this view, "There are two quite different situations in which the national security implications of FDI can become an issue. One is that of potential or actual military conflict between the host country and the home country of a multinational enterprise. The other situation is where the foreign affiliate's home country is a friendly nation but foreign ownership is deemed nonetheless to impair the host nation's defense capability" (Graham and Krugman, 1989).

Being classified in different ways by others, factors upon which national security depends are mentioned in The Economics of Defense in the Nuclear Age by Charles Hitch and Roland McKean. Besides some of the important ones, as they perceive, like "the morale of a country's soldiers, the number and ingenuity of its scientists, the character and skill of its political and military leaders, its geographic position relative to other countries, and even - in this nuclear age - the prevailing winds that blow across its expanses;" economic factors gather the most attention from the authors.

Following this subject, Hitch and McKean (1960) come up with some economic problems, from an economist's point of view, at upper decisionmaking levels:

- the quantity of national resources available, now and in the future;
- the proportion of these resources allocated to national security purposes; and

- the efficiency with which the resources so allocated are used (Hitch and McKean, 1960).

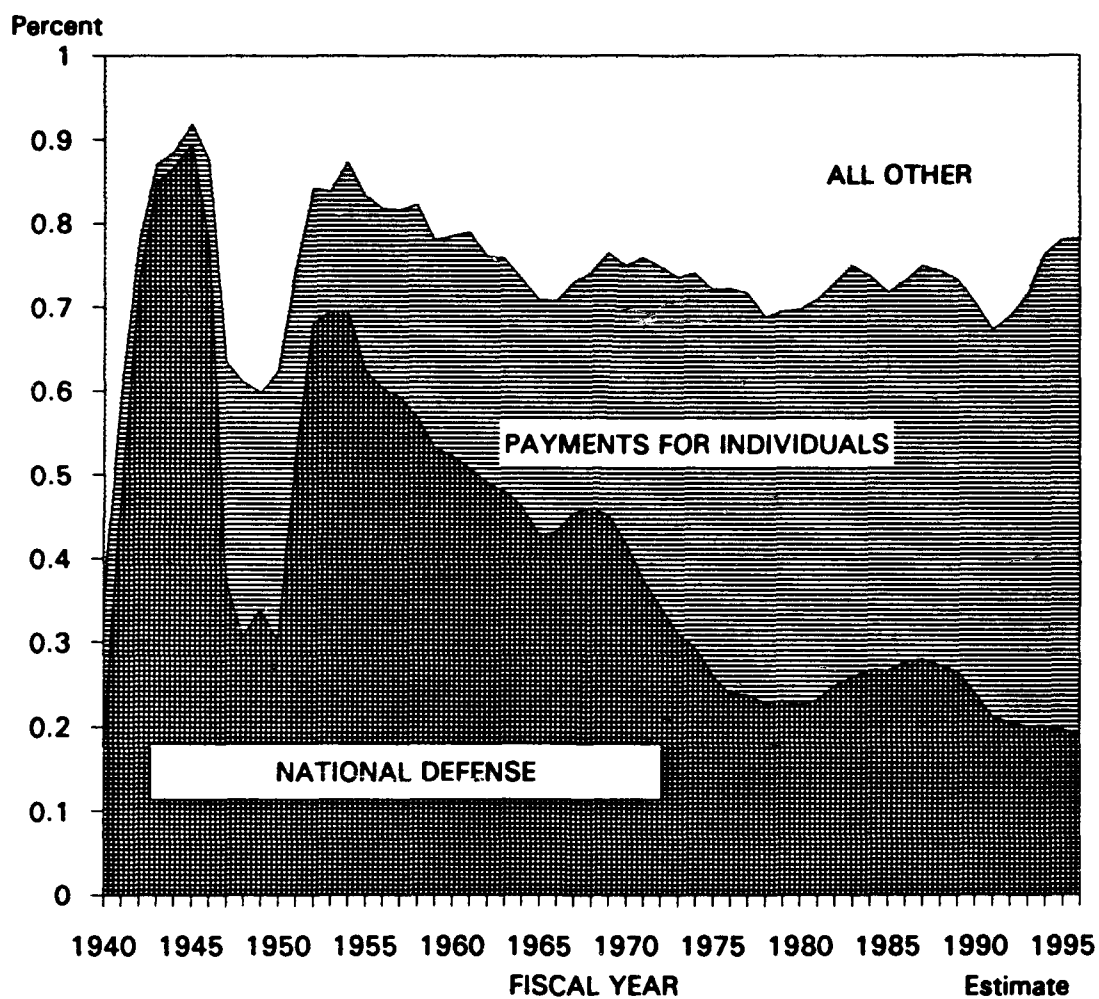
In the following sections, Defense Department's effort, which is going to end up in President's Budget, to deal with these problems will be gone over.

### III. Review of Federal Expenditures

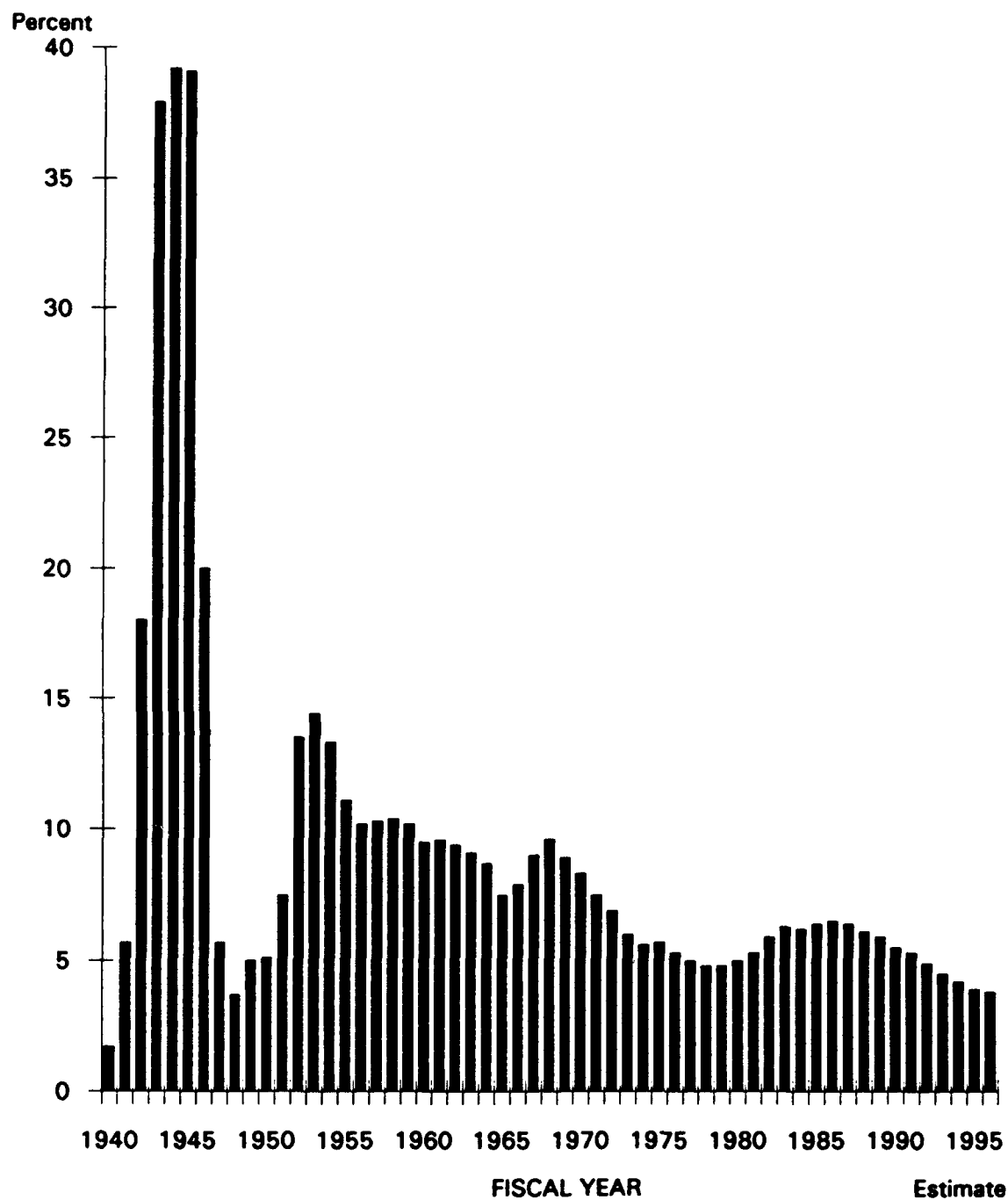
In the way of tracing the development of Planning, Programming and Budgeting System in the United States Department of Defense, the proportion of military (national defense) spending on federal government's total expenditures undoubtedly clarifies its significance and dimension. Not surprisingly, military outlays have occupied a sizeable proportion heavily influenced by the fluctuations related to the national security concerns since the very early times. Needless to say, this amount jumped to a higher level during the presence of any war or conflict as shown in Figure 2 (See also Figure 1).

The United States could accommodate these defense budgets by virtue of the healthy and growing U.S. economy. If the WWII period which was an extreme case is excluded for the sake of the applicability of information, the share of the Gross National Product devoted to national security (as shown in Figure 3) decreased from more than 14 percent in 1953 to less than 5 percent at the end of the 1970s. During the buildup of Reagan Administration, it was around 6 percent. Nowadays, it is estimated to be under 5 percent.

While military spending comprises some 20 percent of total federal outlays today, payments to individuals - entitlements including Social Security, Medicare, Medicaid, and retirement benefits for federal employees - represent around 40 percent.



**FIGURE 2**  
**Percentage composition of U.S. Government outlays (in Current Dollars).**  
**SOURCE: U.S. Statistical Abstracts, 1940 through 1991.**

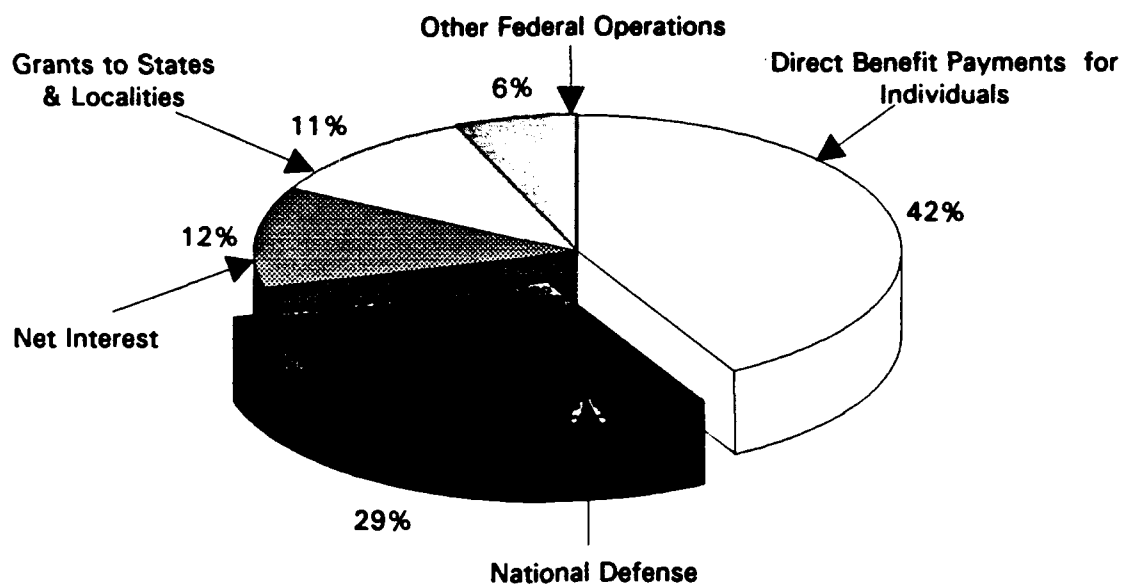


**FIGURE 3**  
**National Defense as Percentage of GNP.**  
**SOURCE: U.S. Statistical Abstracts, 1940 through 1991.**

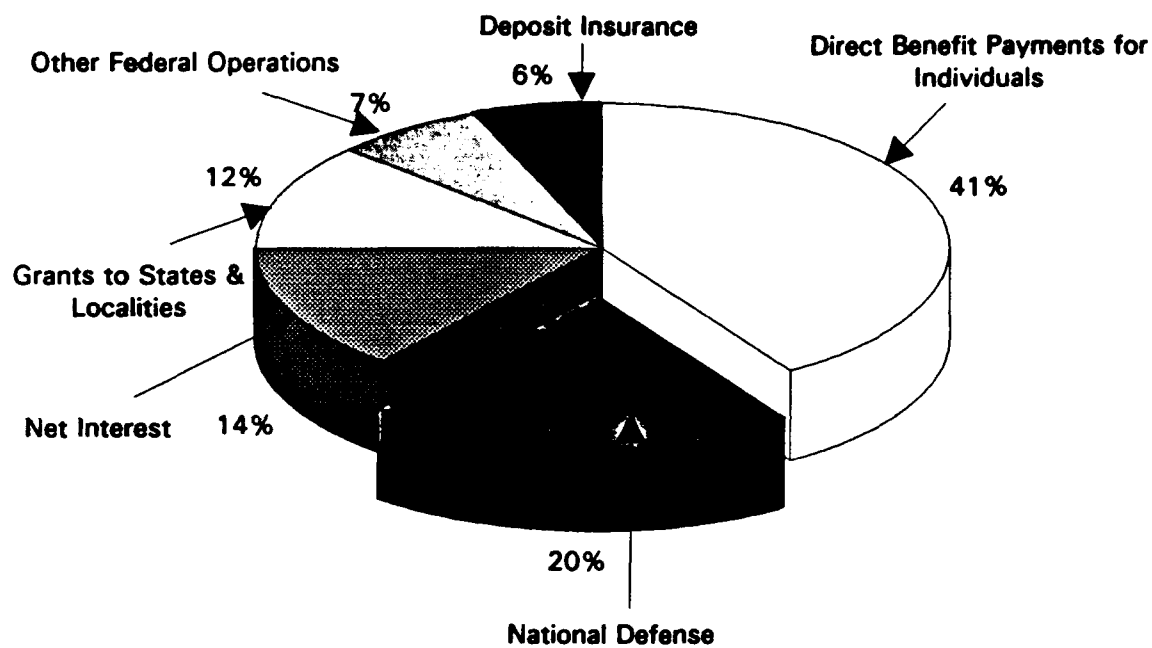
The next largest category of the federal budget, after entitlements and defense outlays, is the net interest payment on the federal debt. By the end of the 1970s (excluding the period right after WWII) this was not a significant portion of the federal budget - representing some 7 percent of GNP. However, beginning to increase in 1979, net interest payment totaled approximately \$200 billion - representing some 14 percent of GNP (The Budget for FY92, part seven, 30-36).

As seen from both Figure 4 and Figure 5, the comparison of the distribution of the federal government's spending shows that "In spite of the significant decreases in the defense budget as a part of the total budget, it remains highly vulnerable to congressional attack - partly because of the still-high levels of expenditure, but mainly because domestic entitlement programs (such as Social Security and Medicare) are politically sacrosanct" (Gansler, 1991).

Next section will examine the evolution of the U.S. military framework before the creation of PPBS in an effort to give the readers the idea how the circumstances were in the eve of the Kennedy Administration.



**FIGURE 4**  
**Where the Federal Government dollar goes... (FY84 Estimate).**  
**SOURCE: "Budget of the U.S. Government: FY84," OMB, January 1983.**



**FIGURE 5**

**Where the Federal Government dollar goes... (FY92 Estimate).**

**SOURCE: "Budget of the U.S. Government: FY92," OMB, February 1991.**

#### IV. Evolving Military Framework in US

The discussion in this section is based primarily on the reports of the two Hoover Commissions (Hoover, 1949, 1955), semiannual reports of the Secretary of Defense (Defense 1954, 1955, 1956, 1958), annual reports of the Secretary of Defense (Defense, 1960, 1962, and conversations with Professor R. T. Taliaferro).

Financial management in U.S. armed forces prior to World War II was different in a number of ways from financial management after the war and later in the Defense Department under PPBS. In the 1930s, the War Department and the Navy Department were far more independent from one another than they now are as sister services along with the Department of the Air Force, playing subordinated roles in planning, programming, budgeting and operational control subject to the direction of the Joint Chiefs of Staff and the Secretary of Defense.

Prior to World War II, each of the two services, the War Department and the Navy Department, to a significant extent went its separate way, determining for itself what its annual budget request should be on the basis of its unique plans for war making capability. In contrast to the way in which the budget proposals of the three services are subject to prior guidance and later scrutiny of the Defense Department today in keeping with clearly defined missions, War Department and Navy Department budget

proposals were quite distinct from one another. They were not parts of a coordinated whole, but followed their own paths to the Congress through the then Bureau of the Budget.

Each department's budget proposal was based on its independent assessment of the external threats it was its responsibility to meet. In those times, the National Security Council had not yet been created, so there was an absence of the direct link that now exists between threat assessments determined by the President's own staff and the response of the Defense Department in terms of planning, programming and budgeting for national security purposes.

For most of the decade leading up to the United States entry into World War II, the Roosevelt administration was running a continuous budgetary deficit in an attempt to pull the economy out of the agonizing depression it had fallen into. For that purpose, the Roosevelt administration separated its budget into two elements, one being referred to as the regular budget and the other being referred to as the recovery budget. Thus, the regular budget could be shown to be in balance, while the recovery budget was related to the overall budgetary deficit. But national security was not yet consciously figured into compensatory fiscal policy changes as it has since the long and bitter confrontation between the United States and the Soviet Union.

To what extent compensatory measures would have affected

national security budgets had those budgets been included in overall policy changes directed at employment and nation income is a matter of conjecture. Isolated as they were from compensatory policy prior the buildup to World War II, War Department and Navy Department budgets seemingly were almost an afterthought of the administration. But whatever their nature, they apparently were subject to little systematic planning and scrutiny for economic efficacy. The costs of planes, tanks, ships and personnel made up the budget, but the numbers of weapons and personnel seemed to be a matter of ad hoc reasoning. A system was not in place for conceiving and weighing alternatives against one another for satisfying clearly defined national security goals.

The status of the United States as a military superpower lay in the future, and in that decade changes in military spending had not yet become an integrated element of compensatory fiscal policy as it became sometime after World War II. A reading of history makes it clear that it was only after the United States emerged as one of the two military superpowers pitted against one another that peacetime strategic planning and programming were based increasingly on clear-cut missions and role for U.S. armed forces and which served to determine military budget requests. It is equally clear that domestic economic conditions also have affected what appropriated budgets have been. After World War II, more attention was paid by the administration and Congress

to the impact that changes in national security outlays would have on employment and national income.

In the decade preceding World War II, however, those factors associated with and governing national security outlays were absent. There was not an explicit definition of strategic missions for the services, and budget requests and appropriations were not based on major mission assignments. In the selection and contracting for military hardware, there apparently was an absence of life-cycle cost considerations, and in the operation and maintenance of hardware, management techniques for relating performance to cost were absent. In those days, generally speaking, defense contractors had more or less settled on particular shares of the overall market, and the competition that the Defense Department of today seeks in awarding contracts did not exist at that time. As examples, Boeing Aircraft Company tended to be the sole source of strategic bombers, and Douglas Aircraft Company tended to be the sole source for Navy dive bombers.

Of course, in the decade preceding Pearl Harbor, planes, tanks, ships and personnel were few, and there were probably not the choices of alternatives potentially available to satisfy predetermined national security goals. What Army and Navy personnel, population and overall expenditures were and how they were related to one another for the two decades preceding World War II are exhibited in the tables below.

The 1930s were a time of desperate economic conditions for the United States and other industrialized countries. In the early part of the decade, unemployment approached 25 percent of the labor force and national output had fallen from about \$90 billion in 1930 to some \$65 billion in 1932. During those years as can be seen from the tables below, the War and Navy departments were constrained by very restrictive budgets and were facing substantial antiwar sentiment and an isolationist outlook among a sizeable segment of the American public.

TABLE 1  
The Distribution of Population, 1920-1940

| <u>Year</u> | <u>Personnel</u> |             | <u>U.S. Population</u> |
|-------------|------------------|-------------|------------------------|
|             | <u>Army</u>      | <u>Navy</u> |                        |
| 1920        | 204,292          | 121,845     | 106,466,000            |
| 1930        | 139,378          | 96,890      | 123,188,000            |
| 1935        | 139,486          | 95,053      | 127,362,000            |
| 1940        | 269,023          | 160,997     | 132,122,000            |

SOURCE: Historical Statistics of the United States, Colonial Times to 1957, U.S. Department of Commerce, 1960, pp.8, 139,723,735 & 736.

TABLE 2

The Distribution of Expenditures, 1920-1940  
(In Millions of Dollars)

---

| <u>Year</u> | <u>Military Expenditures</u> | <u>Federal Expenditures</u> | <u>Gross National Product (GNP)</u> |
|-------------|------------------------------|-----------------------------|-------------------------------------|
| 1920        | \$1,000                      | \$3,800                     | \$89,000                            |
| 1930        | 650                          | 3,500                       | 91,000                              |
| 1935        | 740                          | 7,500                       | 72,000                              |
| 1940        | 1,567                        | 10,000                      | 100,000                             |

---

SOURCE: Historical Statistics of the United States, Colonial Times to 1957, U.S. Department of Commerce, 1960, pp.8, 139,723,735 & 736.

Military expenditures were about 1% of gross national product. In that time, too, among industrialized countries there were efforts to reduce tendencies towards war. At the London Disarmament Conference of 1930, the great powers of that day had sought to dampen their war-making capabilities; other international conferences as well worked towards that objective. Nevertheless events in Asia and Europe were creating international tensions that later in the decade would lead to general war.

President Roosevelt anticipated the conflict that was to come between the United States, and Germany and Japan. Yet because of the economic depression and antiwar sentiment, his outlook could not be translated into expanded military budgets until well into the decade. Even then, the Army and Navy were skimping along in many instances with equipment and paraphernalia while future enemies of the United States had already put their economies on a wartime footing.

World War II profoundly changed the role of the United States in international affairs. Although immediately after the end of the war, there was a desire by the public at large for a rapid demobilization of armed forces and a return to a peacetime economy, it was soon apparent that the vital interests of the United States and the Soviet Union were in extreme conflict, and that the United States would not revert to the relationships that characterized its prewar foreign policy. Thus the armed forces of this country soon stabilized at levels far above those prior to the buildup for the war.

The experience of World War II showed that if indeed the United States was effectively to play the role in world affairs it was now assuming, its armed forces could not revert to their prewar methods in planning for the future, carrying out current operations and getting appropriations for resources needed to do so. As pointed out above, in prewar days, the two departments, War and Navy, maintained an aloofness from one another that

tended to inhibit coordinated large-scale operations. Fortunately, in the days immediately prior to Pearl Harbor, and in the months following, the hierarchy of the War and Navy departments was afforded the time to establish itself on a coordinated basis with the creation of joint planning staffs and departmental reorganization into operational and support commands. Out of that reorganization, of course, was born the Army Air Forces, which in time was to become the Department of the Air Force.

The success of the coordinated approach in achieving the grand wartime aims of the United States led to the enactment of the National Security Act of 1947, which created the National Military Establishment in which there was to be a separate Department of the Air Force, a Joint Chiefs of Staff comprised of the chiefs of staff of the separate services, a chairman of that staff chosen from among the services, and a civilian Secretary of Defense.

While those profound organizational changes took place in the structure of the military establishment, the process by which annual budgets were determined and annual outlays were actually made was not appreciably changed from earlier time. It became increasingly clear that the old methods of deciding what was needed, getting the money to support those decisions, acquiring the resources to outfit the armed forces, and carrying out operations had to change. There was an inability for determining

just what categorical achievements there were to be for implemented budgets.

In addition to creating the National Military Establishment, the 1947 act created the National Security Council, headed by the President, whose responsibility was to identify the external threats to national security. The identified threats formed the basis for decisions by the NME what the deployment and capabilities of armed forces should be. However, each service although now an element of a unified whole nevertheless continued to prepare its budgets somewhat independently of the others. Furthermore, in this process, the Secretary of Defense did not quite have the authority to bring the separate budgets together systematically as a coordinated response to the threat assessment by the NSC, and decisions by the President on how much of the federal budget should be devoted to national security purposes. There were continuing conflicts among the three services over what share of the military budget each was entitled to. In those days, the Bureau of the Budget, still very much as it was since its creation in 1921, as the President's agent and along with Congress acted as the arbiter in the conflicts among the services.

The disputes over budgets, the absence of any means for relating budgets and outlays to the satisfaction of mission responsibilities, and increasing frustration over the inability of the Secretary of Defense to exercise authority over the Joint

Chiefs of Staff and the services they represented led to amendments of the 1947 law aimed at correcting those shortcomings. Those amendments were more or less in keeping with the recommendations of the first and second Hoover Commissions (in 1949, and 1955) set up to examine and look for way to improve financial management throughout the federal government.

The National Military Establishment became the Department of Defense, and the Secretary of Defense became the principal military advisor to the President with undivided authority over the Joint Chiefs of Staff, which became essentially a planning and advisory group without command. An assistant secretary for financial management was created in each of the services, and the Comptroller of the Department of Defense was given functional authority in financial management within the three services.

Concurrently with those changes, in keeping with the Hoover recommendations, budgetary processes were revamped to provide broader appropriations categories and a budget restructure in terms of the objectives major military missions or programs were designed to accomplish. Thus began the trend in defense financial management that led eventually to the planning, programming and budgeting system implemented by Robert McNamara in 1961.

In the years 1954 to 1961, there were continuing efforts aimed at improving depot utilization, surplus property disposal,

management of real property, budgeting and accounting, and medical services. The single manager concept was implemented by which a service secretary was designated Single Manager for one or more of the various categories of common-use items of supply.

Implementation was tentative at first but then was widened as cost reductions became more and more apparent. In 1958, operational command of the world-wide U.S. armed forces was vested in what came to be known as specified and unified force commanders, eliminating the vestiges of problems associated with split commands involving the three services in the field.

In 1960, the budgetary process was reorganized so that major purposes of appropriations were stressed instead of being centered on requests for organizational units of the services. Military personnel, operations and maintenance, procurement, research and development, test and evaluation, and military construction as major programs became the focus of the new approach to defense budgeting. But the entire effort, the planning, the programming and the budgeting for defense needs had not yet been pulled together in an integrated system.

Before digging into the development of PPBS, the next section will provide necessary information taking into consideration the relationship between the compensatory fiscal policy and a major touchstone of this study - defense expenditures.

## V. Defense Expenditures and Compensatory Fiscal Policy

The primary purpose of this thesis has been to explore the development of the system for determining and carrying out military expenditures to meet predetermined objectives. However, there is another aspect of national security spending which should not be ignored. As referred to in Section III, national security spending is affected by political decisions. According to Professor Taliaferro, and Wallace Peterson (Peterson, 1992) superimposed on the decision-making process for expenditures in reference to military performance objectives, are considerations of the impact those expenditures will have on the level of output and employment in the national economy. That is to say, it is not only military needs as such and how those needs are to be satisfied, but what the needs of the economy are in terms of output, income and employment. Those ideas are expanded upon in the paragraphs below.

Peterson's text among others relates that some sixty years ago prevailing economic theory which emphasized the self-correcting nature of the industrial economy was overturned by the ideas of John M. Keynes to the effect that the economy was vulnerable to forces throwing it into prolonged periods of high unemployment and low output. Keynes' theory came along at a time when the Roosevelt administration was waging a desperate battle against just such conditions, and whether in response to Keynes

or whether from its own perceptions of what was need, it invoked the Keynesian remedy for economic depression - deficit spending by the central government to create additional demand for output leading eventually to a multiple increase in output, income and employment.

Although the results of compensatory fiscal policy were rather disappointing in that era, the belief that changes in government spending and taxing could improve economic condition gained increasingly wide acceptance. Since that time it has become a mainstay in domestic policy of the two major political parties in the United States that compensatory fiscal policy is a fundamental instrument in economic affairs; throughout the industrial world compensatory fiscal policy holds sway.

Prior to the first Roosevelt administration, spending by the federal government was a relatively small part of gross domestic output. But in the decade leading up to World War II, Keynesian oriented fiscal policy effected increasing deficit spending; the federal government was borrowing money to inject more into the economy than it was taking out in tax revenue. Military preparedness in conjunction with World War II added to successive annual deficits, and U.S. entry into the war increased deficits even more.

At war's end much of the spending for military spending was eliminated, and the stimulus that deficits provided to output, employment and income fell markedly. However, the recessionary

effect of reduced government spending was soon counterbalanced by pent-up demand by families and individuals for housing, clothing, autos and other consumer goods and services.

Nevertheless, the business cycle had not disappeared and continued to pose a recurring problem for successive Democratic and Republican administrations alike. The Presidency and Congress found that from time to time the country was facing rising unemployment and depressed output or excessive demand for output and escalating prices. Typically, changes in federal spending and taxing were made to counteract unwanted trends.

In the waning years of the Truman administration, the growing tension between the United States and the Soviet Union led the former to implement a policy of military and economic containment of the latter. That policy called for a substantial rehabilitation of U.S. military forces which was to remain in place to the present day. During successive administrations and the military engagements of the United States in Korea, Viet Nam and elsewhere, military expenditures in constant dollars while moving up and down were at significantly elevated levels in comparison with pre-World War II spending.

The incumbent presidents and congresses found that Containment spending provided a convenient vehicle for making changes in federal government spending aimed at compensating for too little or too much demand for output. The two Eisenhower administrations were noted for fiscal conservatism, and critics

of the administration blamed budget stringency for the two recessions of that time. However, the more expansionary policies of successor administrations did not do away with the recurrence of the business cycle by more concerted use of compensatory spending and taxing.

Through all those administrations, decisions on military spending based on performance evaluation criteria were modified by decisions dwelling on economic conditions. Accordingly, at a time when the Soviet threat may have subsided but the economy was faced with rising unemployment, defense spending might be pumped up somewhat to work against that trend. At some other times the reverse might be true.

Thus, the defense budget typically has taken shape influenced by administration decisions on fiscal policy and on its expectations of congressional response to its annual budget proposals. The Office of Management and Budget has become the center of the process in constructing that budget. The budgets of each of the departments in the executive branch, already affected by White House decisions on what the federal budget ought to be, are subject to yet further modification as the date for submission of the proposed budget to Congress nears.

Of course, once the budget proposal is sent to Congress, it goes through a lengthy process of analysis, hearings and debate in which it is yet further modified according to the preponderance of sentiment in the two legislative houses on what

the needs of the country are and how they can best be satisfied. In this respect as brought out earlier, much of the federal budget for various reasons is relatively inflexible and not subject to significant change. Social welfare programs entitling individuals to payments of various sorts because of their political sensitivity are not easily changed. Some social welfare programs, of course, such as unemployment compensation, act as automatic economic stabilizers in paying out more in recessionary times and less when employment is high. They thus bolster administration efforts to resolve business cycle problems. But the legal entrenchment of most of the federal budget programs means that those parts of the budget which are readily changed play a relatively larger role in compensatory fiscal policy. Thus, however carefully a defense budget proposal may be put together and however closely it may be related to national security needs, what the Defense Department actually gets as a budget may significantly reflect compensatory policy decisions.

In the next section, the development of PPBS is examined chronologically. Right after the "Creation of PPBS," some more information is inserted to give the reader a general view on "What PPBS is."

## VI. Development of PPBS

The Planning, Programming, Budgeting System (PPBS) is the Department of Defense's formal process for arriving at resource allocation decisions. To understand the evolutionary development in PPBS, its historical perspective should be reviewed. Having served as DoD's primary resource allocation and decision-making process for more than 30 years, PPBS has kept going its evolution since it was first introduced in 1961 (Frazier, 1990).

### Pre-PPBS Period.

Prior to 1961, as discussed above there was a lesser connection between military planning and financial management which were and still are two related activities. This gap between planning and budgeting in the past was causing the military plans to be prepared with little regard to resource constraints and the costs of the plans to be much more than the annual budget requests to Congress. John E. Keller of the Center for Policy Studies points out that "a major deficiency in any planning process is to allow the plan to be created in isolation from an understanding of its resource consequences" (Rostker, et al., 1982).

Moreover, when Robert S. McNamara, the former President of Ford Corporation, became the Secretary of Defense under the

Kennedy administration, these were the headlines of the previous system's shortcomings as identified by the Joint DoD/GAO Working Group on PPBS (1983):

- Budget decisions were largely independent of plans.
- There was duplication of effort among the Services in various areas.
- Service budgets were prepared largely independent of one another with little balancing across services.
- Services felt they were entitled to their fixed share of the budget regardless of the effectiveness of their programs or overall defense needs.
- The budget process focused almost exclusively on the next year, though current decisions had considerable consequences for future years.
- There was little analytical basis on which the Secretary could either make choices among the competing Service proposals or assess the need for duplication in service programs.

Additionally, explaining the same environment, K. Wayne Smith of Coopers and Lybrand makes the points that PPBS was designed to deal with:

- There was no (or just a little) central leadership.
- The Defense budget was a bookkeeping device, rather than a policy instrument. It was a mechanism for keeping spending down, rather than an investment for integrating strategy or forces or costs.
- Arbitrary budget ceilings and inflexible service allocations took place. "From 1954 to 1961, there were only minor changes. The Air Force got 47 percent of the budget, the Navy got 29 percent, and the Army got 24 percent. It really didn't vary very much."

- The Budgeting process had been criticized since "requirements planning was being done without explicit regard to cost, and budget planning was being done without regard to need" (Rostker, et al., 1982).

Being in such an environment, Robert S. McNamara defined his choice of management type with his own words:

In many aspects the role of the public manager is similar to that of a private manager. In each case he may follow one of two alternative choices. He can act either as a judge or a leader. As the former he waits until subordinates bring him a problem for solution, or alternatives for choice. In the latter case, he immerses himself in his operations, leads and stimulates an examination of objectives, the problems and alternatives. In my case, and specifically with regard to the DoD, the responsible choice seems clear. (Frazier, 1990)

The circumstances under which DoD had been operating were very challenging, and the current methods of operations within the DoD were unacceptable and inapplicable in the mind of the new Secretary of Defense. Along with his centralized management style, McNamara used the budget process as a tool for effective control over the Department of Defense.

After explaining the issues that PPBS was supposed to deal with, Smith elucidates some of the ideas which were involved in PPBS:

- The first idea was decision-making based on the national interest, that is, decision-making based on some kind of explicit national criteria, rather than decision-making based on service programs. What that really meant was more centralization. [He also adds that inevitably there was a loss of individual service authority which led to somewhat an over centralization.]
- Another idea was the consideration of needs and costs simultaneously.

- The third idea was the explicit consideration of alternatives.
- A fourth idea involved the active use of an analytical staff. That was the Systems Analysis office.
- A fifth idea was the multi-year force and financial plan. That was the FYDP (Future Year Defense Plan).
- The sixth idea was the use of open and explicit analysis. (Rostker, et al. 1982).

#### Creation of PPBS.

McNamara recruited Charles Hitch and Alain Enthoven from the RAND Corporation as the architects of the PPBS, which sought to bring the defense budget process under centralized control and to provide unity of effort in achieving established national defense policies and goals. The general design of the PPBS was laid out very carefully in Charles Hitch and Roland McKean's book, The Economics of Defense in the Nuclear Age, which was published by the RAND corporation in March 1960, just ten months before Hitch was called upon as Assistant Secretary of Defense (Comptroller).

Hitch (1965) emphasizes that although unification (as mentioned in Section IV) had been achieved in form with the passage of the National Security Act in 1947, it was not until 1961 that the full powers of Secretary of Defense to run the Department on a unified basis were actually used. He suggests that this situation existed principally because earlier Secretaries of Defense lacked the necessary tools to do so.

Moreover, Hitch (1965) declares that PPBS has provided for the Secretary of Defense and his principal military and civilian

advisors a system which brings together at one place and at one time all of the relevant information that they need to make sound decisions on the forward program and to control the execution of that program. It has also provided the necessary flexibility in the form of a program change control system. Budgets are in balance with programs, programs with force requirements, force requirements with military missions, and military missions with national security objectives. And the total budget dollars required by the plan for future years do not exceed the Secretary's responsible opinion of what is necessary and feasible.

With this management tool at his command, the Secretary of Defense was now in a position to carry out the responsibilities assigned to him by the original National Security Act, and its amendments namely, to exercise "direction, authority, and control over the DoD" - and without another major reorganization of the defense establishment (Hitch, 1965).

Howard Haynes (1992), in his thesis submitted to the Naval Postgraduate School, writes of two significant ways in which PPBS contrasts with the traditional budgeting process that preceded it. First, PPBS tends to focus more on objectives and purposes, and the long-term alternative means for achieving them. Secondly, the system links planning and budgeting through programming.

Philip Odean, who worked with Charles Hitch in the effort

to establish the new budgeting system in the DoD, observes that PPBS is designed to accomplish five things:

- Lay out the multi-year impact of decisions made this year
- Look at the defense program in mission or output terms, not in service or budget terms. It was to focus on what we were trying to do, not on who would do it.
- Provide a way to tie missions, and budgets together. The hopes was for integrated plans, programs, and funding.
- Facilitate Cross-service or comparative analysis where missions overlap and output oriented analysis (cost-benefit) for service-unique missions.
- Make resource decisions according to a rational sequence, looking at broad plans, and finally at the one year budget details. (Frazier, 1990)

A corollary intent was to introduce "cost-benefit analysis" and other qualitative techniques. Hitch (1965) explains the need for military-economic studies which compare alternative ways of accomplishing national security objectives and which try to determine the way that contributes the most for a given cost or achieves a given objective for the least cost. These "cost-effectiveness" studies or systems analyses were introduced into the decision-making process of the Defense Department. Hitch also argues that cost-effectiveness analysis is more difficult in defense than in a private firm operating in a market economy, and even more important.

The budget process was divided into three phases: Planning, Programming and Budgeting. The Planning phase was concerned with multi-year long range requirements to lead the development of the Service programs. The Programming phase would have a multi-year prospective based on specific programs needed to support the long range planning requirements. The Budgeting

phase would focus on pricing the first year of the programs chosen in the Programming phase. The Office of Systems Analysis was established to provide the independent analytical support necessary to assess and review Service programs and budget requests (Frazier, 1990).

The Five Years Defense Program (FYDP), now known as the Future Years Defense Program, was created to provide a programmatic and multi-year focus. Being the central data base underlying PPBS, FYDP divides, in its present form, the Department of Defense's budget into 11 major force programs:

- Strategic Forces
  - General Purposes
  - Intelligence/Communications
  - Airlift/Sealift
  - Guard and Reserve Forces
  - Research and Development
  - Central Supply and Maintenance
  - Training, Medical, Other General Personnel Activities
  - Administration and Associated Activities
  - Support of Other Nations
  - Special Operations Forces [added recently]
- (D'Angelo, 1992)

The original programs were intended to be the bridge between the military planners who cared about requirements and the budget people who were concerned with cost.

No other Secretary of Defense since McNamara had sought to apply the level of detail over the defense program and the budget that he did. Although PPBS brought some improvements to the ability to tie missions, strategies, forces, and budgets together, planning still remained the weak link in the PPBS resource allocation process.

### What is PPBS?

In the simplest of terms, PPBS is a system designed to assist the Secretary of Defense in making choices about the allocation of resources among a number of competing or possible programs and alternatives to accomplish objectives of national defense. The PPBS is principally concerned with the management of resources to meet strategic requirements. National interests are primarily determined by the President after receiving input from a number of sources, including the State Department, the National Security Council (NSC), the Congress, and other executive agencies. These national interests are incorporated into the National Security Strategy of the United States. The PPBS translates force requirements developed by the military in the National Military Strategy Document (NMSD), formerly called the Joint Strategy Planning Document, into budgeting requirements which are then presented to Congress as part of the President's budget (look at the Appendices A-C just to see the highlights).

In essence, the PPBS is simply a decision-making process for allocating defense resources. The process moves from broad planning considerations to more definitive program objectives to specific budget estimates which price out programs (Haynes, 1992).

The PPBS process might be summarized in this way: "Based on the anticipated threat to national security objectives, a

strategy is developed. Requirements of the strategy are then estimated and programs are developed to package and execute the strategy. Finally the costs of approved programs are budgeted" (Haynes, 1992).

Accordingly the goal of PPBS is to find the most effective allocation of resources to accomplish national defense objectives. In other words, the ultimate objective of PPBS is to provide commanders with the best mix of forces, equipment, and support attainable within fiscal constraints.

PPBS Phases. According to DoD Directive 7045.14, "the PPBS is a cyclic process containing three distinct but interrelated phases: planning, programming, and budgeting." In the planning phase, the military role and posture of the United States and the Department of Defense in the world environment shall be examined, considering enduring national security objectives and the need for efficient management of resources. In the programming phase, the DoD components shall develop proposed programs consistent with the Defense Guidance. These programs shall reflect systematic analysis of missions and objectives to be achieved, alternative methods of accomplishing them, and the effective allocation of the resources. In the budgeting phase, the DoD components shall develop detailed budget estimates for the budget years of the programs approved during the programming phase.

Planning. The first step in the DoD resource allocation process is the planning phase. The DoD PPBS begins with a review of the state of the U.S. national security and its objectives, consideration of broad strategies for dealing with the threats to national security, and development of force structures and levels that will support those strategies. Those steps are followed by development of defense-wide policies with respect to manpower, logistics, acquisition, and other functional areas.

These planning elements are brought together under the general direction of the Under Secretary of Defense for Policy and represent the views of all the senior defense staff offices, including the various elements of the Office of the Secretary of Defense (OSD), the Joint Chiefs of Staff (JCS), the unified and specified commanders (CINCs), and affected staff elements of the military services and the defense agencies.

The broad elements of national security policy guidance are also derived in coordination with the National Security Council (NSC) and the Office of Management and Budget (OMB). The planning guidance that arises from this process is reviewed by the Defense Planning and Resources Board (DPRB) to ensure that the guidance represents realistic and executable direction.

Upon completion of that review, the Defense Planning Guidance (DPG) is signed out by the Secretary of Defense to the military departments and defense agencies, with instructions to

prepare and submit their Program Objectives Memoranda (POM) consistent with that guidance (Haynes, 1992).

Programming. In the programming phase, the services and defense agencies propose programs (POMs) that are designed to meet the mid-range objectives of the defense guidance and to fit within the fiscal constraints of the projected DoD budgets. The program review examines these programs for compliance with the defense guidance and the fiscal guidelines. The program review is conducted by the OSD, JCS, and service staffs, and led by the comptroller and the program analysis and evaluation directorate (PAE). The key issues addressed in the program review are evaluated and debated in DPRB which is the primary resource decision-making body in DoD at the top of the resource allocation process. The deputy secretary, who chairs the DPRB, confirms the decisions and changes through the program decision memoranda (PDM) (Art, et al., 1985).

Budgeting. In the budgeting phase, the POMs as amended by the PDMs become the basis for the budget estimate submissions from all DoD elements to the DoD comptroller. The comptroller checks accuracy of pricing, producibility, feasibility, scheduling, and consistency with established policies and previous decisions. The budget review concentrates primarily on the budget year to be presented to Congress. After the president has approved the final DoD budget, and the OMB has incorporated it into the national budget, the process begins

to move into the congressional review process (Art, et al., 1985).

The budgeting phase, therefore, consists of three major segments:

- Formulation and review of the appropriation-based budgets within the military services and agencies.
- Review and approval of the individual budgets, as well as the overall DoD budget, by the Secretary of Defense, the Director of the OMB, and the President.
- Justification of the budget, and then execution and management of the DoD budget, once approved by Congress. (Haynes, 1992)

#### Post-1968 Period.

The first major change to the PPBS occurred under President Nixon's Secretary of Defense Melvin Laird. Having observed McNamara's revolution from his seat on the House Subcommittee on Military Appropriations, Melvin Laird felt that McNamara's methods had led to overcentralization. Laird believed in using a more participatory management style and Management by Objective. He concluded that McNamara had concentrated too much power in his office at the expense of the Military Departments. The tenth Secretary of Defense, Laird returned to the Services the responsibility for identifying needs and defining, developing and producing the systems to satisfy those needs (Frazier, 1990).

The essence of these changes was contained in an agreement signed by the Deputy Secretary of Defense, the service Secretaries, and the JCS. This agreement would look to the

services and the JCS in the design of forces. Additionally, the Systems Analysis Office would limit itself to evaluate and review and not put forward independent proposals of its own. Therefore, the Office of Systems Analysis no longer prepared independent program proposals but reviewed the program proposals or POM prepared by the Service using specific budgetary ceilings. This imposition of budget ceilings for the Programming phase of PPBS has become a permanent part of the system (Korb, 1977).

The degree of control over the Programming process exercised by the Office of the Secretary of Defense has varied many times depending upon the management style and personality of the Secretary of Defense.

The second major, actually oblique, change to the PPBS was the Congressional Budget and Impoundment Act of 1974. The purpose of this act (Public Law 93-344) is stated that:

The Congress declares that it is essential:

- (1) to assure effective Congressional control over the budgetary process;
  - (2) to provide for the Congressional determination each year of the appropriate spending level of federal revenues and expenditures;
  - (3) to provide a system of impoundment control;
  - (4) to establish national budget priorities; and
  - (5) to provide for the furnishing of information by the Executive branch in a manner that'll assist the Congress in discharging its duties.
- (Lantz, 1984)

To accomplish these purposes the Act created three new entities: the House Budget Committee, the Senate Budget Committee and the Congressional Budget Office (CBO). In

addition, the Act provided for a new set of budgeting procedures, a timetable for budgetary actions, and a change to the fiscal year. Moreover, the Act provided for procedures to control Presidential impoundment.

Prior to the Congressional Budget and Impoundment Act of 1974, the evolution of the budget process can be viewed as follows:

- (1) 1789-1801: The Executive had control of the process through a strong Secretary of the Treasury.
- (2) 1802-1920: A period of general confusion and conflict between Congress and the Executive with few inescapable rules governing the process.
- (3) 1921-1973: An era following the Budget and Accounting Act of 1921 where Congress recognized the need for a formal budget process, but also that it may have given away too much authority to the Executive Branch.
- (4) 1974-Present: The era following the Congressional Budget and Impoundment Control Act of 1974 when Congress regained much of the power over the spending function.  
(Lantz, 1984)

Under the process established by the Act the Congress must face annually the consequences of its fiscal decisions. The Act was also changed the start of the fiscal year from 1 July to 1 October. Unfortunately, the Congress has neither lived up to the expectations of the Act nor the timetable established by the Act (Frazier, 1990).

The budgetary process in DoD was not affected only by changes made by the Secretary of Defense and Congress, but also by changes made in the National Security Council (NSC) system. Under the administration of President Nixon, headed by Henry Kissinger, the NSC issued 127 formal National Security Decision

Memoranda (NSDM) between 1969 and 1972. The Defense Program Review Committee (DPRC) was also created under the same administration. "The task of the DPRC was to assess the political, economic, and social consequences which would result from changes in the levels of defense spending, budgetary, and force levels" (Korb, 1977).

Another significant event occurring at that time was the first recorded mention of biennial budgeting by a congressman in front of the Congress. Representative Richard Bolling (D-Mo.) is credited with originally suggesting DoD adopt a biennial budget:

I am convinced that the most sensible - and in the long run, necessary - solution would be the enactment of authorizing legislation in the year before the appropriations are made. If this were done, Congress would be able to proceed to early consideration of appropriations bills and the dismal practice of continuing resolutions would be ended. The conference will move in the direction of advance authorizations by requiring the president to submit requests for new authorizations in the calendar year prior to the one in which they are to take effect. The bill also calls for a study of the desirability and feasibility of advance appropriations.  
(Lawrence, 1988)

In 1975 another major event in the evolution of biennial budgeting occurred: the Department of Defense was granted authority to request two year budget authorizations. DoD has exercised this authority every year since 1975. However, DoD has never provided the requisite level of detailed information to support the second year of the request. Therefore, Congress has adhered to annual defense authorizations (Lawrence, 1988).

### Major Changes during the Carter Administration.

In 1977, then Secretary of Defense Harold Brown under the President Carter asked Richard Steadman to review the "National Military Command Structure." Being highly critical of the PPBS, Steadman's report claimed that the managers of the PPBS had lost sight of the objective of the process. He also concluded that "National Command Authorities" were not communicating clear and definitive guidance to military leaders. USAF Major Frank Lawrence, in his report submitted to Air Command and Staff College in 1988, observes that "Mr. Steadman had hit upon the same problem General David C. Jones had identified during his tenure as chairman, JCS":

There is not enough emphasis in the government on the output side of Defense program (e.g., readiness). In particular, there is too little emphasis on Joint activities, which are primarily output-oriented. DoD traditionally organizes around inputs, not outputs; its priorities are driven by such issues as procurement decisions, manpower levels and policies, budget deadlines, Congressional hearings, and other program-oriented activities. Thus, the DoD has tended to deal effectively with output issues such as readiness, integrated force capabilities, and crisis management preparations. The latter are all primary JCS issues - difficult under the best circumstances, and certainly not given equal time in the defense management process.  
(Lawrence, 1988)

Although the Steadman report caused Secretary Brown some concern, the Secretary was not willing to make substantial changes in the PPBS without some confirmation of its findings. Secretary Brown therefore appointed Donald B. Rice of RAND Corporation to completely examine the Defense Department's method

of resource allocation. Rice's report underscored the problems highlighted by the earlier study of Steadman. Rice characterized the planning "P" in PPBS as silent since it failed to provide any meaningful or useful output. Supposedly, Planning should bring strategy into harmony with the current national environment and update defense policy by aligning it with national goals. Secondly, Rice found that decisions made in the programming phase were revisited in the budget phase. A third deficiency in PPBS was its failure to provide feedback on the progress of programs already approved. The lack of a realistic role for JCS and the unified and specified commanders was another problem. To correct all these problems, Rice proposed three groups of solutions: process changes, organizational and role changes, and new capabilities (Rice, 1979).

During the Carter administration, Zero Based Budgeting (ZBB) was introduced throughout the Federal Government. This process required the military services to develop decision packages which would give OSD the opportunity to adjust service proposals (Record, 1989). ZBB's major purpose was to examine all programs simultaneously starting from the ground (zero-base) up, with a clear goal of identifying marginal programs. The introduction of ZBB into the PPBS process significantly increased the overall work load, level of detail, and paperwork requirements (Frazier, 1990). In his analysis of ZBB, Rice never

directly mentions a problem with integrating ZBB into PPBS. However, a problem apparently existed (Lawrence, 1988).

In 1979, the Heritage Foundation undertook a study of the congressional budget process. As a result of the study, the Foundation recommended Congress adopt the techniques of advance budgeting. In the opinion of the Heritage Foundation, advance budgeting offered the Congress the advantage of a longer-term perspective for their decision making. This situation would "... force Congress to examine the budgetary consequences beyond the initial fiscal year and discourage the casualness with which Congress binds its future budget."

Also in 1979, as a result of the recommendations from the Defense Resource Management Study (DRMS) by the Rand Corporation, the so-called "Rice Study", Secretary of Defense Harold Brown created the Defense Resource Board (DRB) (Frazier, 1990).

The purpose of the DRMS was to conduct an organizational review of the DoD resource management process. The DRMS recommended the establishment of a Defense Resource Board, chaired by the Deputy Secretary of Defense (DEPSECDEF), to manage the combined program/budget review (Rice, 1979).

There were several shortcomings to the DRMS. First, the DRMS failed to include planning in the role of the DRB. Second, the membership of the DRB was limited. Initially, the DRB was comprised of the DEPSECDEF, as Chairman, and six members. Five

of the six members were civilians. The sixth member was the Chairman, Joint Chiefs of Staff (CJCS) (Draper, 1985).

#### Major Changes during the Reagan Administration.

On 13 February 1981 (three weeks after taking his position under the administration of Reagan and Defense Secretary Caspar Weinberger), Deputy Secretary of Defense Frank Carlucci ordered Vince Puritano to investigate PPBS. Here is a summary of Mr. Puritano's findings:

##### Planning and Policy:

1. Planning doesn't influence system, is irrelevant.
  2. Lack of policy context, no bridge from DPG programming.
  3. Not enough dialogue.
  4. Gap between capabilities and policy.
  5. Inadequate current assessment and CINC input.
- Underlying cause: Planning has not been a priority concern of SECDEF.

##### Programming and Budgeting:

6. Too much program guidance.
7. Inadequate participatory management.
8. Focus on first year of FYDP, little in last years.
9. Conflict of program guidance vs fiscal guidance.
10. Inadequate risk assessment.
11. Program instability.
12. Too many issues.
13. Too much paper.
14. Tail-end perturbations.
15. "Gold watch" behavior: gaming.
16. Duplication of content: unique formats.

Underlying problems: Confusion of line/staff relationship ZBB failure. Focus on "margin." Paperwork not in proportion to value. Decisionmakers more creative than system allows. No uniform communication device.

##### System-wide:

17. Revisitation of decisions.
18. Neglect of Execution.
19. PPBS--Acquisition DSARC [Defense Systems Acquisition Review Council] conflict.
20. DRB role and membership issue.
21. DoD-OMB joint review issue.

Underlying problems: No overall management of total PPBS process below SECDEF level... No uniform communication  
Too many data bases and categories due to competing confusing demands and needs from OMB, Congress, OSD offices and services.

(Puritano and Korb, 1981)

As a result of these findings, DEPSECDEF prepared a Memorandum dated 27 March 1981 to put them into effect. In this Memorandum, the primary role of the DRB was stated as follows: "To help the SECDEF manage the entire planning, programming and budgeting system." Additionally, he directed the DRB to become involved in the planning process and also increased membership of the DRB from 7 to 16 (Carlucci, 1981). The DoD Instruction 7045.7 assigns responsibilities to members of the board.

The DRB was also given a broader role in developing, reviewing and approving defense policy and strategy which is contained in the Defense Guidance (DG), a descendant of the old Draft Presidential Memorandum and now known as the Defense Planning Guidance (DPG). The operational experience of the Unified and Specified Commanders-in-Chief (CINC's) was also brought into the process (Frazier, 1990).

In the same Memorandum, DEPSECDEF underlined two major management principles: decentralization and accountability, and participative management. He claimed that they would achieve better Defense management by working toward "a system of centralized control of execution policy direction and more decentralized policy execution." He also pointed out that "all those that have a legitimate interest in the outcome of a

management decision should participate in the decision" (Carlucci, 1981).

Consequently, Secretary Weinberger announced the following changes to the PPBS:

- Modifying the existing PPBS to reflect a shift to greater emphasis on long-term strategic planning;
  - Greater decentralization of authority to the services;
  - Closer attention to cost savings and efficiencies;
  - Elimination of most of the paperwork required by the Zero Based Budget (ZBB) system;
  - A restructuring of DoD's top management board, the Defense Resources Board (DRB);
  - An increase in the responsibilities and roles of the Service Secretaries;
  - A change of roles and relationships between the various OSD staff agencies and the services;
  - A new process for management review by the Secretary of progress toward objectives in major programs;
  - A general streamlining of the entire PPBS.
- (Lawrence, 1988)

As 1981 closed, the need for budget reform was recognized by both the Congress and the President. Nonetheless, disagreement on the type, timing and details of this reform was still existing. Therefore, in 1982 the General Accounting Office (GAO) was asked to review and report on the feasibility of using biennial budgeting at the federal level. In spite of the lack of unanimous support for the two year budget process, the study highlighted some benefits of biennial budgeting:

- During a 2-year budget cycle, agency personnel can spend time in the off-budget year on managing their agency activities (e.g., operating State programs, monitoring cash flow, etc.)
- Biennial budgeting does not require the State government's (legislative and executive level) full-time attention for budget review every year. Therefore, more time is available to do non-budget activities.
- Biennial budgeting allows a "planned approach" to 2-year

budgeting (i.e., through budget preparation, analysis of policy issues, and major budget proposals).  
(Lawrence, 1988)

Two problems were also uncovered by the study:

- the difficulty in estimating revenues and expenditures and in budgeting for "uncontrollable" items is increased,
  - the legislature has less control over the executive and State agencies.
- (Lawrence, 1988)

In spite of the previous initiatives, Deputy Secretary of Defense Taft, Carlucci's replacement, noticed that planning continued to be the weak link in the PPBS process. Therefore, in November 1984, he issued a memorandum titled "Enhancement of the CINC's role in the PPBS" to increase the role of the Unified Commanders-in-Chief in the development of the Service POMs and the DRB Program Review. Specifically, the CINCs were to submit their prioritized requirements known as Integrated Priority Lists (IPL) to the Services to be included in the Service POMs (Frazier, 1990; Graham, 1986).

#### Major Changes after 1985.

In addition to the initiatives of Carlucci and Taft, two concurrent actions which would affect the evolutionary development of PPBS were taking place. First, the Congress began conducting a review of the organization of the DoD in January 1985. Secondly, the Reagan administration established "a Blue Ribbon Commission on Defense Management in July 1985 with the goal of making recommendations on how to improve the effectiveness and stability of the resource allocation for

defense, including the legislative process." These studies were followed by the Department of Defense Authorization Act of 1986 and the Goldwater-Nichols Defense Reorganization Act of 1986, implementing many of the recommendations of the congressional study. The President, at the same time, issued National Security Decision Directive 219 (NSDD 219) which implemented almost all of the recommendations of the Blue Ribbon Commission (Frazier, 1990).

During the Senate Hearings on the Congressional study, titled Defense Organization: A Need for Change, James R. Locher, the Director of the Study, noted that:

In some activities, the Defense Department has achieved a level of efficiency unmatched elsewhere in the Federal Government. Notable in this regard is the Department's resource allocation process; the Planning, Programming, Budgeting System. Despite problems in this system, the Department's process for allocation resources is substantially more efficient than that of any other department or agency. It should be noted that trends in the organization are moving in the right direction, numerous improvements have been implemented, particularly in the last two years. However, much remains to be done especially in light of the more severe fiscal constraints currently anticipated for the immediate future and the increasing and changing nature of the threats to American security.  
(Locher, 1985).

Chapter seven of the Staff Report to the Committee on Armed Services of the United States Senate is devoted to the PPBS. The criticisms of PPBS on this report fall into seven major categories:

- Ineffective strategic planning.
- Insufficient relationship between strategic planning and

fiscal constraints.

- Absence of realistic fiscal guidance.
- Failure of the PPBS to emphasize the output side of the defense program.
- Inability of the JCS to make meaningful programmatic input.
- Insufficient attention in the PPBS to execution oversight and control.
- Length, complexity, and instability of the PPBS cycle.

These problems focus on strategic planning, fiscal constraints, the role of the JCS and simple realistic procedures (Graham, 1986).

The Congressional study put forth biennial budgeting as the answer to the fundamental problems associated with PPBS of DoD. Finally, in November 1985 "the President signed the FY86 Defense Authorization Act, otherwise designated P.L.99-145. Section 1049 of the Act not only directed the Secretary of Defense to henceforth present biennial budget proposals to the Congress, but it also tasked the Congress to authorize and appropriate both years of the budget. The legislation designated the FY88/89 Defense budget proposed to be the inaugural biennial budget" (Lawrence, 1988).

The Blue Ribbon Commission on Defense Management appointed by President in September 1985 was headed by David Packard. The panel's final report was not published until June 1986. A summary of panel's findings is listed below:

1. The National Security Council (NSC) on behalf of the President should review, update and disseminate national objectives, policy and fiscal constraints to appropriate federal agencies.

2. The Secretary of Defense, using NSC guidance, will direct the JCS to assess the threat and develop national military strategy.

3. Within the constraints provided by the Secretary of Defense, the chairman, JCS will develop feasible plans to carry out national policy.

4. The Secretary of Defense should direct chairman, JCS, other members of the national military hierarchy, and the Director of Central Intelligence, to prepare an assessment of military capability to deal with threats to US worldwide interests.

5. The Secretary of Defense will review all military recommendations and ideas. Following the review, the Secretary will recommend to the President a national military strategy.

6. Using the information provided by the SECDEF, the President will define a national military program and affiliated budget. This decision becomes binding on the defense biennial budget process.

7. The SECDEF should closely coordinate with the Congress to develop an operationally oriented budget format (Packard, 1986).

Although the Goldwater-Nichols Defense Reorganization Act didn't specifically direct changes to PPBS, it made organizational changes that affect budget planning and execution within the DoD. The Act directed that SECDEF provide annually written guidance for the preparation and review of program recommendations and budget proposals. Moreover, the Act strengthened the role the Chairman of the Joint Chiefs of Staff and Unified Commanders in the planning and budget process. The new duties of the Chairman were:

- the preparation of fiscally constrained strategic plans;
- advising the SECDEF on the extent to which the Services' budget proposals conform with the priorities established in strategic plans and meet the requirements of the CINCs;
- submitting the SECDEF alternate budget proposals in order to achieve greater performance with the priorities established in strategic plans and meet the requirements of the CINCs; and
- recommend to the SECDEF a budget for activities of each CINC (Frazier, 1990).

On 1 April 1986, the National Security Council published NSDD 219 which directed the implementation of the recommendations of the Blue Ribbon Commission on Defense Management. Especially regarding PPBS, these recommendations dealt with:

- strengthening national security planning and budgeting process through which the President provides policy and fiscal guidance to the DoD,

- enhancing the role of the Chairman of the Joint Chiefs of Staff in resource allocation, and
- implementing biennial defense budgeting (Frazier, 1990).

Of course, this is not the end of the PPBS' evolution. It continues to be improved whenever there is a need of change and an agreement of opinion.

## VII. Conclusion

Planning, Programming and Budgeting System (PPBS) was developed in the Department of Defense in 1961 and later. At that time, PPBS was a logical extension of the budget reform movement that has been gradually developing since the beginning of the twentieth century. The reason for the budget reform movement was to enlarge the power of executives over the operations of agencies that they were responsible for. Therefore, PPBS, as well as other reform movements, has had the effect of centralizing power at higher levels of organization.

There are at least three ways to promote economic efficiency in the military use of resources: better understanding of the nature of the problem, systematic quantitative analysis of problems of military choice, and improved institutional arrangements.

The reason the efficient use of military (and other government) resources is a special problem is the absence of any built-in mechanisms, like those in the private sector of the economy, which lead to greater efficiency. There is within government neither a price mechanism which points the way to greater efficiency, nor competitive forces which induce government units to carry out each function at minimum cost.

In the simplest way of saying that, PPBS is DoD's formal process for making resource allocation decisions. PPBS can be

also viewed within the context of the interaction of the two major responsibilities of Defense Department - since DoD is the originating and only department implementing the PPBS today - as mentioned by the Joint DoD/GAO Working Group on PPBS (1983):

- (1) setting national defense policy and choosing resources to enhance the military capability to protect U.S. interests in the future, and
- (2) preparing war plans and maintaining operational forces that provide maximum military capability with the resources on hand today.

Changes in the objectives and management styles of every new administration during its effort to realize those responsibilities have resulted in some variations and problems: In the McNamara years, the emphasis was on programming; the Laird era stressed participatory management; the Carter Administration added zero-based budgeting (ZBB); and so on...

Schick (1966) declares that "Budgeting always has been conceived as a process for systematically relating the expenditure of funds to the accomplishment of planned objectives. In this important sense, there is a bit of PPB in every budget system." He also writes that planning is not the only function that must be considered by a budget system. The management of ongoing activities and the control of spending are the other two functions. He focusses on the fact that these two functions have been given priority over the planning function in the past.

As scrutinized in Section VI, Donald Rice of RAND Corporation characterized the planning "P" in PPBS as **silent** since it failed to provide any meaningful or useful output.

However, Planning should bring strategy into harmony with the current national environment and update defense policy by aligning it with national goals.

Being out of the scope of this thesis, budget formulation is a long and complex process; and the results are influenced considerably by the mechanics and institutions involved. It is a process of bargaining among officials and groups having diverse strengths, aims, convictions, and responsibilities. Also, these participants naturally have various **political** considerations in mind - concerns about the impact of budgetary decisions on the success of rival departments or officials, on the attitudes of voters, on the actions of various group. The effects, as far as reaching sound decisions is concerned, are not all bad - nor are they all good.

In the same way, Lawrence J. Korb (1977) of U.S. Naval War College gives the then-budgetary process' two primary constraints which still remain: its inherent political nature, and the near irrelevancy of planning. He concludes that "Whatever the future changes, the experience of the past 30 years has demonstrated that there are [those] two primary constraints on the process which will be operative no matter what form the defense budgetary evolution takes."

Other notable characteristics of the process are oppressive deadlines and inadequate opportunities for decisionmakers to study exhibits. At best, officials can hardly give attention to

the issues commensurate with their importance. Both civilian and military administrators have other day-to-day decisions to make.

Moreover, there is often severe personal penalty for originating mistakes, yet little or no penalty for perpetuating past decisions - except in time of crisis. Consequently there are strong forces against making **new** decisions (in budget formulation as well as in other governmental problems of choice) except when palpable crises occur.

In the wake of the 46th anniversary of DoD's unification, there is still considerable room for improvement while much progress has been made in the budgetary process of the United States Department of Defense, namely Biennial Planning Programming and Budgeting System. Unfortunately, BPPBS operates in an ever-changing, often uncertain, environment and must be **flexible** enough to adjust as circumstances requires.

In brief, deciding upon the defense budget is a tremendous task that must be performed under difficult circumstances. One cannot expect to identify or achieve **optimal** solutions. Nonetheless, looking at the problem in the right way can aid us in reaching **better** solutions. It can help officials get better results with existing institutions - and it may point toward institutional modifications that can improve budgetary decision.

## Appendix A: Highlights of the Planning Phase

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### PLANNING

#### MAJOR STEPS:

- \* Identify National Interest
- \* Examine World Security Environment
- \* Define National Military Strategy

#### PLANNING DOCUMENTS:

- \* National Security Strategy of the United States
  - \* National Military Strategy Document
  - \* Defense Planning Guidance
- 

The Defense Planning and Resource Board (DPRB): A high level committee that is active in all three phases of PPBS. The functions of the DPRB are

- reviewing proposed Defense Planning Guidance
- resolving major program and budget issue
- advising SECDEF on policy, planning, programming and budget issues and proposed decisions
- directing evaluations/reviews/studies of high priority programs and issues on a regular basis.

The DPG signed by the SECDEF is the final product of the planning phase of PPBS and the basis for the programming phase.

## Appendix B: Highlights of the Programming Phase

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### PROGRAMMING

#### MAJOR STEPS:

- \* Program Appraisal
- \* POM Development
- \* OSD Program Review

#### PROGRAMMING DOCUMENTS:

- \* Program Objectives Memorandum (POM)
- \* Future Years Defense Program (FYDP)

---

The Secretary of Defense of the United States, after reviewing the recommendations of the DPRB, forwards his decisions on the POMs in the form of Program Decision Memoranda (PDMs) to the military department and defense agencies. This step represents the completion of the programming phase, and the beginning of the budgeting phase.

## Appendix C: Highlights of the Budgeting Phase

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### BUDGETING

#### MAJOR STEPS:

- \* Formulation and Review of the Appropriation-based budgets within the Military Services and Agencies.
- \* Review and Approval of the Individual Budgets, as well as the Overall DoD Budget, by the Secretary of Defense, the Director of the Office of Management and Budget, and the President.
- \* Justification of the Budget, and then Execution and Management of the DoD Budget, once approved by Congress.

#### BUDGETING DOCUMENT:

- \* President's Budget.
- 

The budgeting phase is completed when the President's Budget including the DoD portion is sent to Congress in February. By sending the President's Budget to Congress, both the DoD PPBS and the first phase of the federal budget process is ended. Consequently, the other two phases of the federal budget process follow: Congressional action, and budget execution and control.

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### Vita

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