

WESTERN ARMS SALES IN THE POST-COLD WAR ERA
A TREND ANALYSIS OF FOUR NATIONS

by

LEO JOSEPH WEEKS

BGE., University of Nebraska (Omaha), 1969

A MASTER'S REPORT

submitted in partial fulfillment of the
requirements for the degree

MASTER OF ARTS

Department of Political Science

KANSAS STATE UNIVERSITY
Manhattan, Kansas

1976

Approved by:


Major Professor

LD
2668
R4
1976
W44
C.2
Document

309

ACKNOWLEDGMENT

I wish to express my sincerest gratitude to Professors Joseph Hajda, T. Alden Williams, and Thomas J. Sloan for inspiration, patience, and guidance: to my wife Ilse for love, encouragement, and assistance: to my children Michael and Claudia for cooperation and tranquility: to my parents Samuel and Phyllis Weeks for having taught me some degree of perseverance, which assisted me daily during the preparation of this study: and to the United States Army for having given me the opportunity to expand my horizons through the pursuit of this degree.

ABSTAINER

This paper represents the views of the writer and does not necessarily reflect the official opinion of the Department of the Army, Department of Defense, or the United States Government. It has been prepared for academic use only within the Political Science Department of Kansas State University. It is not to be reproduced, in whole or in part, or redistributed outside of Kansas State University without the expressed permission of the writer.

TABLE OF CONTENTS

LIST OF TABLES	vi
INTRODUCTION	1
Chapter	
I. THE MILITARY-INDUSTRIAL COMPLEX	5
The Early Theory and Its Writers	
Refining and Enlarging the Early Theory	
Linking Arms Sales to the Enlarged Theory	
II. THE INTERNATIONAL ARMS TRADE	17
Free-Wheeling Days before World War I	
Changes During the Interwar Years	
Related Trends in the Post-Cold War Era	
III. BUILDING THE INVESTIGATIVE MODEL	27
Selecting the Population and Period	
Selecting the Economic Variables	
Relating Arms Sales to National Foreign Policy	
IV. WEST GERMANY'S ARMS INDUSTRY	35
Rebuilding the Economy and the Armed Forces	
Arms Policies, Controls, and Trends	
Arms Sales and the Economy--1963-1973	
V. BRITAIN'S ARMS INDUSTRY	45
Period of International Bankruptcy	
Arms Policies, Controls, and Trends	
Arms Sales and the Economy--1963-1973	
VI. FRANCE'S ARMS INDUSTRY	57
Attempts to Regain World Power	
Arms Policies, Controls, and Trends	
Arms Sales and the Economy--1963-1973	

Chapter	
VII. THE UNITED STATES' ARMS INDUSTRY	69
Exercising World Power	
Arms Policies, Controls, and Trends	
Arms Sales and the Economy--1963-1973	
CONCLUSIONS	85
FOOTNOTES	89
BIBLIOGRAPHY	96

LIST OF TABLES

1. West German, British, French, and United States Military Expenditures--1963-1973	25
2. World Arms Exports by Major Participants--1964-1973	28
3. West Germany's GNP, Total Exports, and Arms Exports--1963-1973	42
4. West Germany's Domestic and Export Arms Sales--1963-1973	44
5. Britain's Arms Exports by Recipient Countries--1963-1973	52
6. Britain's GNP, Total Exports, and Arms Exports--1963-1973	54
7. Britain's Domestic and Export Arms Sales--1963-1973	56
8. France's Arms Exports by Recipient Countries--1963-1973	65
9. France's GNP, Total Exports, and Arms Exports--1963-1973	66
10. France's Domestic and Export Arms Sales--1963-1973	68
11. United States' Arms Exports by Recipient Countries--1963-1973	81
12. United States' GNP, Total Exports, and Arms Exports--1963-1973	83
13. United States' Domestic and Export Arms Sales--1963-1973	84
14. West Germany, Britain, France, and the United States Comparison of Total Arms Sales as a Percentage of the GNP--1963-1973	86

INTRODUCTION

The international trade in nonnuclear arms now tops \$18 billion annually--up from a mere \$300 million in 1952 and a jump of more than 550% since 1964.¹

Sales of American-made weapons have risen from about \$2 billion in 1967 to about \$11 billion in the last fiscal year. . . .²

. . . The corporate groups within the United States will over the next 12 months produce \$35 billion worth of weapons, spare parts, and military services for the United States and 136 other countries.³

These three quotes appeared in articles in 1975 along with scores of other similar writings sounding the same warning. Television, radio, newspapers, periodicals, and professional journals have carried this message to the public. Have the United States and the other industrialized nations of the West become the "Merchants of Death" of the 1970s? A look at a trend of the past decade provides some insight into the origins of this school of thought.

In the 1960s it became an increasingly popular notion within some American student circles and among a number of Congressmen, academicians, and journalists that a conspiracy had come into being in the form of the so-called military-industrial complex. The advocates of this idea contended that extra-constitutional agreements existed between the Pentagon and other governmental agencies and the national arms industry. It was contended that unnecessary wars would be perpetrated by the military, thus allowing the arms industry to continue production to the monetary advantage of all concerned, except the uninformed taxpayers who unknowingly supported the

activity and the citizens who would be called upon by the government to use the products in war. In recent years this idea has been markedly widened and refined and has acquired a degree of legitimacy resulting from increased public support and the controversies which surrounded the Vietnam Conflict. The criticism also extended beyond America and encompassed other Western nations as well.

The major thesis of this school of thought in the 1970s contends that several Western industrialized nations, and most specifically the United States, have pushed arms sales to dangerously high levels as a means of national income. In essence, increasing arms sales is the manifest result of the lengthy and conspiratorial relationship between government and industry. In view of the present delicate state of international relations, the possible existence of such a condition takes on a meaning of profound international importance.

Western economic reliance upon the sale of arms could have negative repercussions in at least five critical areas of international relations. First, a nation using arms sales as a means of economic stability would suffer restrictions in such a setting as the ongoing Strategic Arms Limitation Talks between the United States and the Soviet Union. Equally handicapped would be the present attempts by the United States and its North Atlantic Treaty Organization allies to arrange a mutual reduction of forces in Central Europe with the Soviet Union and the other members of the Warsaw Pact Treaty Organization. Third, if the arms sales indictment were to prove true the present East-West detente would also surely suffer. This could lead to a gradual reintensification of hostilities between the Superpowers. Fourth, the credibility of American attempts to assist the nations of the Middle East toward a peaceful solution of their differences would surely be

rendered untenable. Finally, the strained relations between the developed nations of the West and the struggling new nations of the Third and Fourth Worlds would only become more intensified if the latter were to acquire the feeling that the former colonial rulers and their allies were practicing a form of economic colonialism through the sale of arms to them. One can easily envision the swift loss of diplomatic leverage and general credibility by the United States and its Western allies in all of these areas of international relations should the arms sales allegations, in fact, prove true. The recognition of this potential danger motivated the writing of this report.⁴

This study investigates the question of arms sales in the United States and three major West European nations--West Germany, Britain, and France, since the decline of the Cold War era. In so doing it delves into several related questions. Have arms sales truly increased over this period, and, if this should be the case, is this consistent with the foreign policy goals of the nations concerned? Also, are arms sales motivated primarily by economic considerations, or is this activity simply one of the many elements which make up the rational foreign policy of these nations? Specifically, this study pursues the central research question--What are the trends of Western arms sales in the post-Cold War era and to what extent are these trends consistent with foreign policy ends? This study attempts to move away from the isolated presentation of large dollar figures recently associated with the subject of arms sales, examples of which appear at the beginning of this introduction, and places the matter in its relationship to other pertinent areas of the national economies. Is the American economy, for example, truly increasing its arms sales, or does a different picture emerge when sales are viewed in constant dollars (which takes inflation into

account), and in comparison with increases in the total economy, annual military expenditures, annual exports as a percentage of the total economy, and other categories of associated data? This is the question this report sets out to answer.

Beyond this brief introduction, this report is arranged into seven main chapters and a conclusion. The first chapter sets the background for the investigation through the presentation of an overview of the military-industrial complex writings and their evolvement to the present arms sales proposition. Primary emphasis in this chapter is placed on showing the evolutionary trend toward the current question. Chapter Two deals with the evolution of the international trade in arms. This chapter concentrates upon the arms sales history of the four countries covered in the study, and recent general trends. The next chapter presents an outline of the investigative model selected for use in this study. It includes the rationale for the population selection (the four nations to be studied), the time period covered by the study (1963-1973), and the selection and operationalization of the economic variables used in the study. Chapters IV through VII are devoted, individually, to the four nations. Pertinent political, economic, and arms sales occurrences since World War II are discussed along with the presentation of the comparative economic data. The results of the investigation of each nation's arms sales, as well as general trends and foreign policy implications, are presented in the conclusion.

I. THE MILITARY-INDUSTRIAL COMPLEX

The current proposition that some Western nations are pushing arms sales to dangerously new levels and purely for economic gains stems from a theory of the military-industrial complex. Looking further back into the early post-World War II period, one finds that the military-industrial complex theory of the 1960s is based upon a related theory of that earlier era. This chapter reviews these three stages through which the theory has proceeded; (1) the early theory; (2) refining and enlarging the early theory; and (3) the emergence and evolution of the current notion of the role of Western arms sales. In essence, it will trace the movement of the theory from the late 1940s to the present and provides the theoretical base from which to conduct the research of the central question.

The Early Theory and Its Writers

C. Wright Mills sounded a warning in 1956 that a dangerous triumvirate of power existed in the United States.

Within the American society, major national power now resides in the economic, the political, and the military domains. . . . These hierarchies of state and corporation and army constitute the means of power; as such they are now of a consequence not before equaled in human history.⁵

He presented the proposition that the collaboration of politicians, the military, and industry, which had played such a vital role in bringing forth victory in World War II, was still very much an active force in being. He further contended that the Cold War atmosphere between the United States

and the Soviet Union was being exploited by those at the very top of these three national elements--the power elite--to further institutionalize the wartime relationship for their own personal gains. Mills' theory continued that the United States had always been controlled by a similar power elite. However, the unprecedented changes in American domestic and foreign policies, resulting from World War II and the Cold War, had given the new power elite a position of prominence and power never experienced by their predecessors. He further postulated that the military had become the most powerful element, with those from the corporate circle and the political element sharing the bottom of the pyramid of national power.⁶ He concluded his work by sounding a critical warning.

The men of the higher circles are not representative men; their high position is not a result of moral virtue; their fabulous success is not connected with meritorious ability. Those who sit in the seats of the high and the mighty are selected and formed by the means of power, the sources of wealth, the mechanics of celebrity, which prevail in their society.⁷

Even though Mills is generally credited with being the main architect of the early theory, he was far from being alone in his efforts. The political scientist and professor of law, Harold D. Lasswell, had already presented similar warnings in 1950, in National Security and Individual Freedom. Less broad in concept and more future-oriented than Mills' later writings, he warned of the potential national power-base open to the military as the nation pursued an exaggerated policy of national security. Lasswell outlined his conception of the potential danger in his chapter on "The Threat Inherent in the Garrison-Police State."

No one needs to be told that a third world war would devastate man and his works on a scale without precedent. A more insidious menace is that even if we avoid a general war, continuing crisis may undermine and eventually destroy free institutions. . . . The continuing call for national security will doubtless strengthen pressure for defense expenditures. . . . Once large expenditure

programs are undertaken, special interests develop. . . . As productive capacities become committed to defense materials, businesses gradually begin to rely on defense projects.⁸

Lasswell continued his thesis that the Cold War atmosphere of increased defense would lead to more centralization of government, more secrecy from the public, a decline in the strength of the Congress, and a stronger reliance on the military. Professor Lasswell's contribution also served to influence Mills' in his later and broader warnings of the power elite.

Even before the writings of Mills and Lasswell, Bruce Catton, a journalist of wide military and writing experience, had written of the dangers of allowing the military to retain too much power in the postwar era. In The War Lords of Washington (1948), Catton charged the military with wartime collusion with corporate industry and attempts to scuttle the postwar reconversion of industry. He accused the higher political levels of Washington, along with the military and industry, of taking actions to block the return of the nation to a military and industrial peacetime footing.⁹ Catton's contribution lent further assistance to the building of the early theory.

A host of other scholars--Alan Barth (The Loyalty of Free Men, 1951), William Appleman Williams (The Tragedy of American Diplomacy, 1959), R. W. Van Alstyne (The Cold War and Its Origins, 1961), to name but a few--made their contributions to the early theory as well. On the eve of President Eisenhower's farewell address to the nation in January 1961, C. Wright Mills' theory of the power elite, as expanded and confirmed by the other writers of the period, had survived and was enjoying a modest following. Eisenhower's address provided the turning point from which the early theory moved forward under its new title--military-industrial complex--and with a new aura of legitimacy.

Refining and Enlarging the Early Theory

In the councils of Government, we must guard against the acquisition of unwarranted influence, whether sought or unsought, by the military-industrial complex. The potential for the destructive use of misplaced power exists and will persist. . . . Only an alert and knowledgeable citizenry can compel the proper meshing of the huge industrial and military machinery of defense with our peaceful methods and goals, so that security and liberty may prosper together.¹⁰

Since January 1961 practically every writer dealing with this subject has used this excerpt from President Eisenhower's farewell address. In many cases it has been presented as evidence of the existence of such a complex; other writers have used it as a starting point from which to describe the theory. Eisenhower's use of the term--military-industrial complex--was also adopted at that point and has been used ever since.

As a result of the early warnings of Mills, Lasswell, and others, combined with Eisenhower's warning of potential danger, a great amount of effort went into the empirical refinement and enlargement of the general theory over the following decade. Retaining Mills' basic idea of collusion among the higher echelons of the military, industry, and Congress, the newer writers added to it in at least six additional areas; (1) Cold War condemnation; (2) American exportation of capitalism; (3) empirical studies of the defense budget and the procurement of weapon systems; (4) collusion between the universities and the complex; (5) collusion between labor union leadership and the complex; and (6) general condemnation of the complex by an enlarged element of Congress. A review of each of these sub-theses will show how the early theory underwent change after 1961, leading to the present arms sales proposition.

Many of the newer theorists questioned the basic tenets of the Cold War. Could the Soviet Union, having lost 25 million people in World War II

and a full generation behind the United States industrially, really be considered a threat to Western Europe and the United States? Or, was the Cold War a fabrication of the military-industrial complex which facilitated the continuation of a wartime economy, thus allowing both the monetary and personal power advantages to continue to flow to the new power elite? Many accepted the "fabrication" notion and presented their arguments in its behalf. John M. Swomley, Jr., in his book The Military Establishment (1964), used the following argument regarding the Cold War:

The Cold War tends to heat up and spy scares tend to become active each year at about the time Congress is getting ready to decide the size of the military appropriations. . . . Cold War is almost a guarantee against a bad depression.¹¹

Sidney Lens in The Military-Industrial Complex (1970), described the Cold War atmosphere even more strongly. "Convincing the American people that they ought to spend nine times as much on guns as on human welfare was an act of mesmerism by the military establishment without parallel."¹²

Another proposition added to the early theory, and one of direct importance to the central question of this paper, centered on the possible expansion of American capitalism throughout the world for the purpose of increasing American profits. Fred J. Cook, writing The Warfare State in 1962, described this aspect of the military-industrial complex in these words:

America has been changed, without any general popular recognition of the fact, from a peace-loving and isolationist democracy into a Warfare State whose real intent, avowed on many occasions and in high places and low, is not the preservation of peace and law and order in the world, but the extension of our own capitalistic system throughout the world.¹³

Nearly every volume or article published on this general subject since 1961 contains a large section on the military budget, inefficiencies in the procurement of weapon systems, and prescriptions of how to curtail

these expenditures. This theme was second only to Eisenhower's farewell address in frequency of appearance. In addition to extensive work by Cook and Lens on this subject, two other writers deserve mention. Adam Yarmolinsky's The Military Establishment (same title as Swomley's book) in 1971, and The Pentagon Watchers, edited by Leonard S. Rodberg and Derek Shearer in 1970, are both strongly keyed on the topic of the defense budget and the procurement of arms.¹⁴ The next area which received attention during this period was the military-academic complex.

It was contended that universities had become reliant upon military research contracts for their continuing existence to the detriment of their role of providing higher education. During World War II the government enlisted the services of several universities in the pursuit of scientific and technological research. The resultant efforts of the academic community played no small role in the success of the national war accomplishments. This wartime relationship remained above criticism in the earlier period, however, the continuing relationship during the Cold War era offered yet another area for investigation by the critics of the period. Clark Kerr, former president of the University of California, noted in his book The Use of the Universities (1972), that, "Intellect has also become an instrument of national purpose, a component part of the military-industrial complex."¹⁵ Nearly all the newer writers added to this subject, however, Seymour Melman, in Pentagon Capitalism: The Political Economy of War (1970), offers perhaps the most precise indictment.

Federal funds for research and development in the universities grew from \$813 million in 1963 to \$1.3 billion by 1966-68, an increase of 55 percent. . . . The Pentagon . . . and allied agencies . . . accounted for 46.5 percent of the total in 1967.¹⁶

Melman continued his argument of the existence of a military-academic complex by pointing out the dangers of the increasing dependency of the universities upon the research and development contracts from the military. He also stated that these contracts encompass research into weapons systems, detection devices, intelligence activities, information science, and a host of other areas which in themselves detract from and degrade the institutions of higher education.¹⁷ Another major national element to come under fire at the same time as the university was the leadership of the nation's labor unions.

The critics of labor union relationship with the complex argued that this collaboration encompassed both domestic labor union interference and overseas involvement as well. In addition to accusing labor union leadership of collusion with the complex, in order to keep industry moving and unemployment at an acceptable level, these critics also attempted to place the union leadership into a conspiratorial role on the international scene for the purpose of assisting the government in keeping overseas markets open to the United States. Again, Sidney Lens provides some insight into the mechanics of the criticism aimed at this element. After stating that all 65 labor attaches in American embassies abroad answered to AFL-CIO leadership as well as to the State Department and the Department of Labor, he also proposed the same relationship for all elements of the Agency for International Development (AID) working overseas as well. He concluded, in speaking of both groups as one;

If its numbers are not particularly large, it is a formidable machine nonetheless, shaping the views and guiding the actions of union leaders in many countries. It is a machine that does not hesitate to interfere in the internal life of foreign nations on behalf of the cold war policy it shares with the rest of the military-industrial complex.¹⁸

Congressional critics have also been strong in their condemnation of union leadership in this respect as well. The study now turns to this element of Congress to conclude the discussion of the six newer ideas which have been added to the early theory.

The group within Congress which joined in criticizing the military-industrial relationship increased rapidly in size during the late 1960s. Even though the Congressmen who have voiced criticisms and warnings of the military-industrial relationship at various times now number in the dozens, the following five members of the Senate were the strongest critics; William Proxmire (D-Wis.), Stephen Young (D-Ohio), Gaylord Nelson (D-Wis.), George McGovern (D-N.D.), and J. William Fulbright (D-Ark.). Their primary criticism and suspicion centered upon the defense budget and military-industrial collaboration. Senators Nelson and McGovern, in their co-authorship of the introductory chapter of Erwin Knoll's American Militarism 1970 (1969), stated their feelings on the subject of the military-industrial complex.

. . . The nature of the national security bureaucracy . . . is closely linked to the aerospace and armaments industry, segments of the labor movement, universities with defense research contracts, and a new class of scientists, engineers, and businessmen. This complex is not a conspiracy; it is an enormous, self-perpetuating institutional organism.¹⁹

J. William Fulbright, the charter member of the Congressional critics, stated his position in even more serious terms in his book The Pentagon Propaganda Machine (1970).

. . . Militarism as a philosophy poses a distinct threat to our democracy. . . . At a minimum, it represents a dangerously constricted but highly influential point of view when focused on our foreign relations. . . . The root cause of militarism is war, and so long as we have the one we will have the other.²⁰

Thus, the original idea of a military-industrial-political complex, as put forth by Mills in the 1950s, underwent rather large changes in the following decade. By the early 1970s it had, in reality, become a theory of a military-industrial-political-academic-labor-complex. The final section of this chapter provides the linkage between this newer theory and the current criticism directed toward the sale of arms.

Linking Arms Sales to the Enlarged Theory

Few contemporary subjects received more attention in the United States in the 1960s than the military-industrial complex theory. From 1961 to 1970 more than 700 articles and books were written on the subject.²¹ The major assertions have been covered in the previous section. Since 1971 the writings on this subject have not decreased, but have instead adopted an additional major sub-theory. Holding generally to the established tenets of the 1960s, many writers of the 1970s have added the "Merchants of Death"²² idea and have extended geographically to include some major nations of Europe. This proposition postulates that the United States, and to a lesser degree some West European nations, are now providing the rest of the "Free World" with massive amounts of sophisticated and expensive arms in order to acquire profits needed to retain their national economic solvency. These critics further contended that this unprecedented policy of arms sales by governments is a modern-day manifestation of the military-industrial complexes which have resulted from the defense production orientation of the economies in the 1960s. In essence, the growing economic orientation of the 1960s upon defense-related industry now requires selling the production overflow (those amounts beyond the requirements of the national military establishments) in order to maintain national economic stability. Major

economic and political occurrences of the 1970s, such as the United States' withdrawal from the Vietnam Conflict, the oil embargo of 1973, and the general economic recession in the West, are put forward as additional evidence in support of the necessity of increasing arms sales to further shore up the otherwise sagging economies. This section reviews three aspects of this latest theory; its origination, geographical expansion, and some of the more recent indictments.

The early threads of arms sales and economic relationship first start appearing in the literature in the late 1960s. Robert L. Heilbroner presented a low-keyed warning of the possibility.

No attempt to speak of the long-run prospects of American capitalism can overlook the central fact that it is now a semi-militarized economy and that it will probably become even more so during the next decade.²³

In 1968 Ralph E. Lapp, in The Weapons Culture, offered a more direct warning. "Gradually the United States' involvement with defense industry has proceeded to the point where weapons-making begins to dominate our society."²⁴ He concluded his book with the words, "America the beautiful; now America, arms-maker and arms merchant of the world."²⁵

By 1970 such writers as Seymour Melman were devoting attention to the idea as well. In the section of his book entitled "International Arms Sales," Melman stated the new thesis most clearly.

From 1949 to 1966 the United States sold . . . and gave away . . . \$46.3 billion in arms. From 1962 to 1968 arms sales alone amounted to \$11.1 billion and the sales goal up to 1975 is for \$2 billion of armament sales each year. This export trade helps to maintain and enlarge the military-industrial production network. . . .²⁶

These writings by Heilbroner, Lapp, and Melman are but a sample of the trend of relating arms sales to the military-industrial complex. These scattered writings of the 1966-1970 period are overshadowed by the

comparatively massive amount of work which has appeared on this subject over the past five years. A look at a sampling of these writings will illustrate the geographical enlargement and present state of the indictment.

In early 1972 Newsweek presented an article on the French arms industry. After declaring that the French had tripled their arms exports over the previous five years, thus making it the third largest arms supplier in the world, the article went on to describe the French arms sales tactics. These allegedly included governmental officials actively assisting in sales, illicit entertainment for potential customers, and large kickbacks to foreign purchasing agents. The article concluded;

France's . . . huge expensive domestic armaments industry is too large to be economically run if its only customers were France's own armed forces . . . some 270,000 French workers owe their livelihood to the arms industry.²⁷

A year later, amidst many other similar writings, U.S. News and World Report presented an article which outlined the entire international arms market and offered comments on British reliance upon the market.

It is a fiercely competitive business, with the U.S., the Soviet Union, France, and Great Britain the principal suppliers . . . accounting for about 90 percent of the sales with the rest divided up among Sweden, Canada, Belgium, Israel, West Germany, Italy and Czechoslovakia. . . . For Great Britain the arms trade . . . is "no longer just a welcome shot in the arm to the balance of payments. In many sectors of the defense industry it has become vital to staying in business."²⁸

By 1974 hardly a week passed without the appearance of at least one or more arms sales articles in the leading news periodicals and professional journals. Stanley Karnow's article in the New Republic in the spring of 1974, entitled "No Recession in the Arms Business: Weapons for Sale" typifies the heightening tempo.

. . . The global weapons business is breaking all records, and there is little prospect of it slowing down. Total international sales in 1973 ran close to \$15 billion, more than twice what they

were three years ago. . . . Administration officials currently contend that the arms trade is indispensable to the United States' balance of payments and jobs.²⁹

Thus one sees that during the 1970s the arms sales idea expanded to encompass several European countries and has steadily intensified on the American scene as well. It presently represents a much more refined thesis than in the days of C. Wright Mills and his earlier writings on the general theory.

This chapter has presented some of the more important aspects of the military-industrial complex theory, and more specifically, its direct relationship to the central question of this study. Steven Rosen clearly summarizes the impact of the theory in one of the newer and more thorough works done on the subject; Testing the Theory of the Military-Industrial Complex (1973).

In a mere fifteen years, Mills' theory, legitimized by Eisenhower, has come from relative obscurity to being one of the foremost analytical tools employed by laymen to explain events and tendencies, particularly unhappy ones, in American foreign and strategic policy. The theory is employed to explain the high cost of defense, the longevity of the Cold War, the persistence of anti-communist mythology, the "perverted priorities" of the Federal budget, the interventionist proclivities of American foreign policy, and even the generation of cultural values giving rise to riots and assassinations. The theory is part of the consciousness of every attentive student of politics and society (italics added).³⁰

From this review of the theory from which the central question has arisen, the report now moves to complete the general analytical framework for this study--a look at the historical highlights and post-World War II trends of the international trade in arms.

II. THE INTERNATIONAL ARMS TRADE

In 1975 international arms sales reportedly exceeded \$18 billion. This would categorize it as one of the larger areas of international trade in current times. Is this a new phenomenon, or has there always been such a proportionally large traffic in arms? When did it start? How do governments control it, if they do? And how do the arms sales of Germany, Britain, France, and the United States compare with the other countries of the world which are major participants in this market? This chapter answers these questions and also outlines the historical involvement of these four nations in the arms trade. After reviewing the origins and the changes which governments imposed during the interwar years, this chapter also presents some of the more important general trends in arms sales and associated activities in more recent times.

Free-Wheeling Days before World War I

Arms sales began in the Middle Ages with the importation of gunpowder into Europe. In 1576 as the Duke of Alva brought his Spanish legions into the Low Countries, in addition to the arms produced in his own factories in Toledo and Seville, his soldiers were also armed with rifles purchased from the arms-makers of Liege, Belgium, which had become the center of armament production in Europe. This transaction represented the first recorded international sale of arms.³¹

The Krupps of Essen, Germany were one of the arms dynasties which arose in Europe in the nineteenth century. Alfred Krupp, who inherited his father's iron works in 1826, managed to produce a cannon of crucible steel by 1842. It was destined to acquire world fame for its accuracy and durability. The War of 1870 between Prussia and France was a triumph for Krupp cannons. By 1912 the Krupps had manufactured 53,000 cannons, of which 26,000 had gone to the German government and 27,000 to 52 foreign countries. In 1914 Krupp's Essen plant alone was employing 80,000 workers and the firm had expanded its efforts (with the assistance of the German government) into shipbuilding and other armaments as well.³² Krupp's world-wide sale of arms was not, however, free from competition. The Schneider family in the French province of Burgundy was enjoying nearly equal success in this flourishing business.

The Schneiders offered nothing new in the development of the arms industry, but appropriated instead the techniques of other successful arms merchants in other countries. Similar to the rise of the Krupps, the Schneiders turned their iron works into a cannon and munitions-oriented activity in the mid-nineteenth century. By the conclusion of the Franco-Prussian War, Schneider had amassed a fortune from the sale of armaments to his ill-fated government. At the turn of the century the firm experienced difficulties in breaking into the international arms business, primarily due to the monopoly already established by the Krupps. However, through political cunning and by using the proffered assistance of the French government, M. Eugene Schneider was able to introduce his famous "French 75" cannon in large numbers into Russia and Eastern Europe. By 1914 the Schneider-Creusot arms firm had also branched out into other armaments and shipbuilding and had established itself as one of the three major

arms-producing firms in Europe.³³ The third major arms firm in Europe was Vickers of England.

Vickers has also risen from a meager general engineering and iron works establishment built up at the beginning of the nineteenth century. During the 1860s Thomas E. Vickers turned to arms-making and filled his government's large orders for artillery pieces and naval cannons. By the 1890s the Vickers had also moved into shipbuilding and general armaments and had hired Basil Zaharoff as their chief sales representative. H. C. Engelbrecht, in his book Merchants of Death (1934), described this turning point in Vickers' movement toward the international arms scene.

Zaharoff shook Vickers out of the humdrum business of dealing solely with the British government . . . and Vickers took his first halting steps on the soil of arms internationalism with the sale of rapid-fire guns to the hostile Boer Republic.³⁴

Under the sales genius of Zaharoff, Vickers arms sales had reached worldwide proportions by the outbreak of World War I. The only noteworthy competition to the international arms sales efforts of the Krupps, Schneiders, and Vickers in the days before World War I was offered by the arms-makers of the United States.

Several arms firms had also risen up in America in the mid-nineteenth century. Due to the pioneering efforts of Eli Whitney and Samuel Colt, the concept of interchangeability of small arms parts had given the American arms manufacturers a slight edge over their European counterparts. By the latter half of the 1800s the names of Remington, Winchester, Colt, and Du Pont had become synonymous with superior firearms and gunpowder, both in America and abroad. George Thayer, in The War Business: The International Trade in Armaments (1969), used a twelve year period of Remington's international

business as an example of the breadth of the American involvement in the international sale of arms in the late nineteenth century.

The Remington Arms Company, in the years immediately following the Civil War, carried on a spirited trade in arms; it sold 85,000 rifles to Spain in 1867; the following year it sold 30,000 rifles to Sweden and 50,000 to Egypt. France was to buy 145,000 Remingtons, Puerto Rico 10,000, Cuba 89,000, Spain another 130,000, Mexico 50,000, and Chile 12,000 in the decade ahead. In 1879 Remington made handsome profits by selling to both sides in the Russo-Turkish War.³⁵

By World War I the arms industries of both Europe and the United States were fully developed. They provided the twenty-seven nations which took part in the war with an array of comparatively sophisticated weapons. From the 66,103,164 men mobilized for the conflict 37,494,186 became casualties.³⁶ The world had never before witnessed a conflict of this magnitude. It is small wonder that during the interwar years many individuals and organizations came to feel that the free-wheeling sales of arms had played a role in the outbreak of the war. Public demand for tighter control of the sales of armaments was a natural outcome.

Changes During the Interwar Years

The period between the two world wars was one of transition for the international arms sales trade. The sales impetus moved from private manufacturer to national government. This shift occurred due to public pressure, activities by the League of Nations, and as a result of two major investigations conducted by the American and British governments in the 1930s.

During the interwar period . . . it was generally supposed . . . that the companies with large arms-manufacturing empires, such as Krupp, Schneider-Creusot and Vickers, had a major responsibility for the cataclysm of World War I. The prime need was seen to be the control--some thought by wholesale nationalization--of the activities of their arms-manufacturing giants. . . .³⁷

This general public mood of arms sales control, described by John Stanley and Maurice Pearton in their recent book The International Arms Trade (1972), gave the League of Nations the encouragement to act.

In the Convention of St. Germain-en-Laye in 1919, the League attempted to institute an international system for the licensing and publicizing of international arms sales. Even though the agreement was signed by 26 nations it did not become effective due to the refusal of the United States, in her postwar mood of isolation, to ratify it. The League's attempts in a similar action in 1925, called the Geneva Convention for the Supervision of the Arms Trade, was ratified by the United States in 1935 under the condition that the other arms-producing nations would also comply. The rise of Hitler's Germany in that period doomed the Geneva Convention to failure also.³⁸ Actions taken by the American and British governments during the same general time period were more successful.

During the period 1934-1936 the United States Munitions Inquiry, known as the "Nye Committee," and the British Royal Commission on the Private Manufacture of and Trading in Arms, conducted separate investigations into the international sales of arms by their national industries. George Thayer described some of their findings.

Both investigations unearthed an enormous number of unsavory practices; bribery, collusive bidding, profiteering, the violation of arms embargoes, illegal financial transactions, the production of shoddy equipment, and even sales to the enemy.³⁹

The publicity from these inquiries caused several other nations to also conduct similar investigations. As a general result, most arms-producing nations imposed new legislation on their arms sales which required export licensing for international sales and prohibited exports to certain countries. Thus national governments became an important element in the

sales process. This control by government has been further refined over the years and continues to be the practice of present times.

In spite of these national efforts for control the trade continued to prosper during the interwar years, even though at a level far reduced from pre-World War I days. President Roosevelt's transfer of fifty American destroyers to the British in 1940 changed the international arms trade setting drastically. In March 1941, with the passage of the Lend-Lease Act, the United States led the world into a new era in the international transfer of arms. By the end of World War II the United States had given away \$48.8 billion worth of arms to 46 nations.⁴⁰ Even these unprecedented figures were to prove small, however, in comparison to the total arms trade picture scheduled to unfold in the post-World War II era.

Related Trends in the Post-Cold War Era

Since World War II, and especially since the early 1960s, several trends have appeared which must be considered in reviewing the present world arms trade. The five more important such trends which have taken place over the past fifteen years are; (1) increases in the cost of arms; (2) high annual rates of inflation; (3) increases in military personnel costs; (4) a world-wide deceleration in military expenditures in the 1970s; and (5) a dramatic increase in the total world arms sales. A closer look at each of these trends will provide a clearer understanding of the current arms sales question.

Two main factors have directly influenced the recent and dramatic increase in the cost of arms. Ever-increasing weaponry sophistication is the first consideration. As a result of technological advancements, facilitated by an unprecedented enlargement of the research and development

effort, the weaponry of today bears little resemblance to the arms of World War II and even the Korean War. This fact remains true in both cost and capability. As an example, one can compare the cost of development of the F-84 fighter aircraft of the Korean War with the F-15 of the present day. In 1946 the first F-84 prototypes cost \$3.4 million each, while by 1972 the F-15 prototypes cost \$66.3 million each.⁴¹ One need only draw further comparisons between the nuclear-powered submarine and the nuclear-powered aircraft-carrier of the 1970s with their antiquated predecessors of World War II and Korean War vintage to grasp the quantum technological advancements (and associated cost increases) which have taken place in recent years. The second factor which has led to spiraling arms costs is inflation.

During the period 1963-1973 the overall inflation among the more stable Western nations was 46 percent.⁴² In considering the increased costs of weapons due to technological advances in addition to the total inflation factor, it becomes an easier matter to appreciate the absolute increase in the cost of modern arms. Thus, as an example, as one is presented with the fact that a nation is now spending \$10 billion annually for arms in comparison to only \$6 billion in 1960, it no longer can be considered that the more recent figure represents an increase in the total amount of arms acquired. In reality, that nation could, quantitatively, be receiving fewer arms today at the much higher total dollar figure.

The third major trend in recent times is the rapidly increasing proportion of military expenditures being devoted to manpower. In addition to the visible increase caused by inflation, this has occurred as a result of social pressures to bring the military's standard of living into line with the civilian sector and also due to the movement away from conscription and toward volunteer forces. By fiscal year 1973 \$42.8 billion of the total

defense budget of \$76.5 billion was devoted to personnel costs in the United States. In Britain 49.7 percent of the defense budget of the same year was earmarked for personnel.⁴³ In Germany the movement of military funds to personnel expenditures has been even more pronounced. By 1973 41 percent of the defense budget was scheduled for military pay and allowances alone.⁴⁴ This trend is of direct importance to arms sales since it represents a strong swing away from the purchase of new weapons and equipment in the West and the funneling of those funds into increased salaries, personnel facilities, increased personnel benefits, and other "people-oriented" expenditures. Thus one can see that a proportionally smaller amount of the defense budget remains available for the purchase of arms and equipment. Let us now look at the trend in world-wide military expenditures.

The 136 nations of the world spent \$2.5 trillion directly on military security between 1963 and 1972. However, military expenditures (expressed in constant 1972 dollars) were about \$197 billion in 1963, and are estimated at about \$241 billion in 1973. The growth of military expenditures has apparently decelerated in the 1970s; the increase during the 1969-1972 period was less than the increase during the 1963-1966, or the 1966-1969 periods.⁴⁵ This trend becomes even clearer in looking at the four nations included in this study and their comparative military expenditures. Even though the United States moved from an annual military expenditure of \$71.3 billion in 1963 to an all-time high of \$96.5 billion in 1968, at the height of the Vietnam Conflict, it had returned to \$74.3 billion by 1973. West Germany, Britain, and France also arrived at the end of the period with approximately the same small degree of increase. Of equal importance all four nations decreased the percentage of Gross National Product (GNP) used for military expenditures appreciably over the eleven years. Understanding

that this occurred, to a large degree, due to the steadily rising annual GNP, it is nevertheless significant that the percent spent on defense decreased significantly in all four cases. As total military expenditures are not directly germane to the primary direction of this study, Table 1 is presented at this point only to demonstrate the general deceleration trend and to provide a comparative overview of the degree of military expenditures of these four nations.

TABLE 1
WEST GERMAN, BRITISH, FRENCH, AND UNITED STATES MILITARY
EXPENDITURES IN CONSTANT DOLLARS (1972) AND AS A
PERCENTAGE OF THE GNP--1963-1973
(\$ millions)

Year	Germany		Britain		France		United States	
	MILEX	% GNP	MILEX	% GNP	MILEX	% GNP	MILEX	% GNP
1963	8,974	5.19	7,390	6.12	6,767	5.55	71,301	8.86
1964	8,570	4.65	7,675	6.01	6,916	5.32	68,748	8.10
1965	8,424	4.33	7,648	5.86	7,034	5.17	68,311	7.57
1966	8,275	4.13	7,544	5.66	7,218	5.02	81,527	8.48
1967	8,642	4.32	7,739	5.67	7,593	5.03	93,753	9.50
1968	7,672	3.58	7,639	5.40	7,595	4.79	96,456	9.34
1969	8,276	3.57	7,182	4.98	7,373	4.32	92,827	8.75
1970	8,085	3.29	7,113	4.81	7,316	4.05	84,117	7.97
1971	8,471	3.35	7,487	4.96	7,344	3.87	77,388	7.10
1972	9,008	3.47	8,182	5.31	7,296	3.65	77,638	6.70
1973	9,351	3.41	8,135	5.00	7,177	3.62	74,298	6.06

SOURCE: U.S., Arms Control and Disarmament Agency, World Military Expenditures and Arms Trade 1963-1973 (1974), pp. 32, 34, and 61.

Finally, let us look at the upward trend in arms sales in recent years. George Thayer suggests that the postwar increase in the arms trade stemmed from three pressures of the times.

The first was a direct response to the Soviet expansionist policies under Premier Stalin. Stalin wished to foment rebellion in the colonies and in the newly independent states. . . . The United States had no alternative but to contain this threat; to do it Washington began a large-scale arms distribution program known as Military Aid. . . . The second pressure is a by-product of the central arms race between the Western and Eastern camps. . . . The third stems from an enormous thirst for armaments in the third world.⁴⁶

The world's export of arms rose sharply during the 1963-1973 period. In 1963 the total amount of arms exported was \$4.4 billion. By 1973 that figure had nearly doubled to \$8.7 billion.⁴⁷ Germany, Britain, France, and the United States accounted for \$35 billion, or 60 percent, of the total sales of \$58 billion over the eleven year period.⁴⁸ From this overview of the history and trends of the international arms trade the study now moves to the building of the investigative model which is used to pursue the answer to the research question within each of the four nations.

III. BUILDING THE INVESTIGATIVE MODEL

This model explains the approach selected to acquire the answer to the research question and the tools of measurement used in the process. Explanations are offered as to why these four nations were selected as well as the rationale for the selection of the specific period covered in this study. The economic variables are explained as well as how they are to be employed in establishing arms sales trends which are of central importance to the research question. Finally, this model describes how pertinent foreign policy and arms sales trend are combined to answer the central question. This study is based upon the arms sales and related activities of four nations, therefore the rationale behind their selection is the first matter deserving of attention.

Selecting the Population and Period

The selection of Germany, Britain, France, and the United States was based upon their historical involvement in the sales of arms, their present levels of arms exports, their relatively important roles currently in international relations, and, due to the fact that they are the primary targets of the present attack by the media regarding their arms sales activities. Further explanation of each of these four points is appropriate.

These four nations were the original arms traders. No other nations came close to competing with them in the nineteenth century up through World War II. In recent times their activities in this area again places

them in the forefront. Table 2 shows them as the four leading exporters of arms in the Western world. The Soviet Union and the other Eastern nations, who are also active in arms trading, were given no further consideration for inclusion in this study since the central research question is keyed toward Western arms sales in the post-Cold War era.

TABLE 2
WORLD ARMS EXPORTS BY MAJOR PARTICIPANTS--1964-1973
(\$ millions current)

Total	57,936	Poland	1,344
U.S.A.	29,688	Czechoslovakia	1,295
USSR	15,678	Germany	1,184
France	2,409	Canada	1,144
Britain	1,770	All others	1,816
China (PR)	1,608		

SOURCE: U.S., Arms Control and Disarmament Agency,
World Military Expenditures and Arms Trade 1963-1973 (1974),
p. 67.

There can be little disagreement that these four nations are key participants in current international relations. This appeared to be a relatively important consideration in view of the potential international difficulties which could result if these nations were found to be truly pursuing increasing arms sales purely for economic consideration. This conclusion lent further strength to the selection of these four nations for the study.

Finally, the arms sales charges have been made primarily against these four nations. In addition to the material presented in an earlier part

of this report outlining the arms sales allegations by American writers, it is pertinent to note that similar charges are being voiced by individuals within these European countries as well. As an example, Fritz Vilmar, a West German political scientist writing in the Journal of Peace Research (1973), described the German armament dependency setting in his article entitled, "Military-Industrial Complex in West Germany and the Consequences for Peace Policy."

. . . There are . . . totally independent of external causes . . . powerful private economic interests which would welcome reinforced armament and higher government expenses. . . . In Germany armament expenses have not been so misused as a means of capitalist full employment policy as they have in the United States, but here also, nearly one million people are active in military and armament industrial sections already.⁴⁹

In considering these related factors, these four nations were selected for study. After selection of the population the next step concerned the determination of the appropriate period to be considered in the study.

The period of 1963-1973 was selected as the inclusive period in which the comparative study would be conducted. This determination was based upon five considerations; (1) the shift in American military aid in 1961; (2) the decline of the Cold War; (3) the beginning of a relatively stable period in Western Europe; (4) a period of adequate duration to produce trends; and (5) data availability. A review of the reasoning based upon these five factors will clarify why this period was selected.

Under President Kennedy the United States' government changed its policy of giving weapons and equipment to its allies, under the Military Aid Program (MAP), to a policy of Foreign Military Sales (FMS). This was done primarily to ease the balance of payment deficit which had been running an average of \$3.4 billion per year from 1958 to 1961.⁵⁰ Those nations which were able to purchase defense materials were expected to do so. By 1963 a

large portion of American arms transfers were being conducted through sales. This fact assisted in the selection of 1963 as a feasible starting point for the study.

The decline of the Cold War after the Cuban missile crisis in October 1962, and the subsequent beginning of a period of relative political and economic stability in Western Europe, also offered strong argument for picking 1963 as a starting point. Notwithstanding the United States' increased involvement in Vietnam in the latter half of the 1960s, the West Europeans were well into a productive, stable, and relatively independent period. This appeared to be a logical point at which to start studying their arms production and sales, as compared with their general industrial output.

The final two factors, of selecting a period of adequate duration to produce trends and data availability, are closely related. Eleven years offered a sufficient period to disclose trends and the latest arms sales data available presently extends through 1973. Thus with all factors considered, 1963-1973 appeared to be the best period to be used. With the population and study period questions attended to the next task involved the selection of test variables.

Selecting the Economic Variables

In selecting the variables to be tested it was necessary to again focus upon the arms sales portion of the central research question--What are the trends of Western arms sales since the decline of the Cold War? To answer this question two measurable approaches appeared possible. First, a determination of the total national populations employed in the production and marketing of arms, as a percentage of the total national work

forces, offered a possible method of measurement. The second approach--and the one selected--was to tabulate all arms sales in relation to the nations' GNPs. The second option was selected since it offered a manageable and relatively reliable data base which could provide dependable data of a type needed to answer the research question.

It was determined in the early stages of the study that presentation of only the international arms sales data would not sufficiently disclose the entire picture. All four nations have large armed forces which are by far the biggest customers of each nations' arms industry. Therefore all arms sales were studied and placed into two categories; those sold in the international market (hereafter referred to as arms exports) and those sold to the nation's own armed forces (hereafter referred to as domestic arms sales). The variables selected for the measurement of the arms exports receive first attention.

Seven variables were selected for measuring the relationship of arms exports by year over the eleven year period.

- (1) GNP in current dollars
- (2) GNP in constant dollars
- (3) total exports in current dollars
- (4) total exports as a percent of the GNP
- (5) arms exports in current dollars
- (6) arms exports in constant dollars
- (7) arms exports as a percentage of total exports

By displaying the GNP and arms exports in both current and constant dollars the influence of inflation becomes immediately available for the purpose of comparison. This is an important point as one considers that most of the recent critical data presented by the media on arms exports are done so in

current dollars, which gives no consideration to the impact of inflation and, accordingly, represents an unrealistic picture. Second, total exports as a percentage of the GNP places exports, as a whole, in their appropriate relationship to the overall economy. Finally, by comparing each nation's arms exports as a percentage of total exports, one is able to visualize their relative importance within both total exports and the economy as a whole.

In order to evaluate the impact of domestic arms sales and for the purpose of presenting total arms sales data (covering both exports and domestic sales), an additional six variables were selected.

- (1) domestic arms sales in current dollars
- (2) domestic arms sales in constant dollars
- (3) domestic arms sales as a percent of the GNP
- (4) domestic and export sales combined in current dollars
- (5) domestic and export sales combined in constant dollars
- (6) domestic and export sales combined as a percent of the GNP

Domestic arms sales, again in both current and constant dollars for the sake of comparison, represents those arms sold by the national arms firms to their own governments. Variables 4 and 5, in this category, represent the total arms sales effort.

These thirteen variables are applied within each nation over the eleven year period. The results are presented in tabular form in each of the four following chapters as they pertain to each nation. These individual arms sales trends are then compared and related to the foreign policy of the four nations in the conclusion of this report. Before moving to the discussion of how the foreign policy aspect of the central question is handled, it seems appropriate at this point to advise the reader that a

list of terms and definitions widely used throughout this report is available in the notes.⁵¹

Relating Arms Sales to National Foreign Policy

Pertinent foreign policy aspects of each nation are investigated on a parallel basis with the economic considerations discussed above. Each of the following four chapters, devoted individually to each nation, start with a section which traces the nation's major foreign policy activities since World War II. Those policy occurrences which directly influenced the nation's acquisition or sale of arms are delved into in as much detail as time and space allows in order to lay the basic groundwork for the analysis of the relationship between the nation's foreign policy and arms policy since the decline of the Cold War. Those historical occurrences which did not directly influence national arms policy at the time (the Berlin Wall and the Cuban missile crisis are two examples), but in the long-run were responsible for noteworthy change, are also discussed in order to complete the general analytical framework. The second section of each chapter focuses more specifically upon arms sales policies.

Arms policies, controls, and trends of each of the four nations are discussed in some detail to complete the overview of the relationship between the nation's arms sales and foreign policy. By reviewing each government's official position concerning arms sales, in relation to both recent occurrences as well as trends disclosed by use of the economic variables discussed above, it becomes possible in the conclusion of this report to offer an answer to the central research question.

The study of the four nations is accomplished in the reverse order of their magnitude of arms sales participation--Germany, Britain, France,

and the United States. Thus the study now moves to the analysis of Germany's arms industry.

IV. WEST GERMANY'S ARMS INDUSTRY

Several key political and economic events have taken place in this nation and in its relationship with the Allied Powers during its return to normalcy after World War II. Such pertinent occurrences as Marshall Plan assistance, the currency reform of 1948, the Adenauer/Erhard laissez-faire government, joining NATO in 1955, rearmament, and more recent economic successes are discussed in some detail in the first section of this chapter to form the basic analytical framework. The second section of the chapter delves into the government's arms sales policy, which clearly rejects the existence of a military-industrial relationship. Germany's reliance upon the United States for rearmament assistance in the 1950s is also reviewed in relationship to subsequent arms purchases from the United States in the 1960s and the nation's arms exports in the 1963-1973 period. In the concluding section the nation's arms sales, GNP, and total exports during the 1963-1973 period are critically analyzed, resulting in the findings that Germany's total arms sales have actually declined over the period, which remains consistent with its stated national policy objectives. The study starts with a review of the early post-World War II events.

Rebuilding the Economy and the Armed Forces

The industrial might of Germany was not destroyed during World War II. Most of the more critical industry was moved underground during the latter years of the war, thus 80-85 percent of the heavy industry was still

intact in May 1945 as the nation surrendered.⁵² The civil sector of the nation, however, suffered massive devastation. As the three Western Powers took over their zones and started their mission of occupation in June 1945 their goals were clearly defined as demilitarization, denazification, decentralization of power, and the democratization of the people and their governmental institutions.⁵³ In order to attain these goals it soon became obvious that the German industrial base would play an important role in the recovery program.

The European Recovery Plan, commonly called the Marshall Plan, was initiated by the United States in 1947 to provide economic assistance. Germany received \$1.4 billion which allowed it to reharness its industry and associated areas of the economy.⁵⁴ As the Marshall Plan officially ended in June 1952, the groundwork had been completed for Germany's economic recovery.

Germany's economic recovery has been called an economic miracle. From a position of economic chaos in 1945, it rose to become the third largest industrial nation (measured in industrial turnover) by 1972, and second only to Japan as the largest exporter of manufactured goods in the world.⁵⁵ An understanding of this phenomenal success is best achieved by a look at certain men and events of the times.

Beyond the Marshall Plan assistance the next most important single event which fostered the economic recovery was the currency reform of 1948. Ludwig Erhard, the recognized leader of the economic recovery, described the results of the currency reform.

A meaningful development in the Federal Republic's foreign trade became possible only with the currency reform of June 1948. . . . It was the initiation of the market economy which awakened entrepreneurial impulses.⁵⁶

By the mid-1960s Germany's economic recovery under Erhard's policy of laissez-faire was practically complete when the country suffered its first

postwar recession. The recession led to the imposition of governmental fiscal and monetary controls, the eventual fall of the Adenauer/Erhard Government, and the rise of the Social Democrats to power.

Economic activities have moved dynamically ahead under the Social Democratic government. Increases in foreign trade, loans and grants to developing nations, and offset agreements with the United States and Britain (which guarantee the purchase of certain amounts of American and British arms), highlight the economics of this more recent period. The West Germans have combined trade issues with their diplomatic efforts to the East (Ostpolitik). In 1973 their trade with seven Eastern countries (including the Soviet Union and the People's Republic of China) stood at \$1.3 billion in imports and \$2.1 billion in exports. In 1974 foreign trade with the same countries increased 43 percent. Bonn's total foreign trade in 1973 stood at \$64.4 billion imported with \$83 billion exported, for a total trade surplus of \$18.6 billion, the highest ever.⁵⁷ By November 1973, Germany had moved into third place among developed nations in its aid to developing nations, with an overall contribution of \$2.4 billion.⁵⁸ Finally, by April 1975, this nation was enjoying the lowest unemployment rate in the European Community with 3.0 percent; and lowest annual inflation rate of 7.1 percent; and, the highest currency reserve in Europe which stood at \$33.1 billion.⁵⁹ Let us now turn our focus back to the return of sovereign control and the rebuilding of the nations armed forces, which relates to both German and American arms sales.

Under the leadership of Konrad Adenauer, the Federal Republic of Germany came into being on September 21, 1949. Over the next five years all governmental controls were gradually returned to the German people. The Paris Agreements, which facilitated the return of sovereignty to the German

nation, were ratified by the Western Powers in early 1955. Thus on May 5, 1955, Germany again became an equal partner in the concert of nations and was called upon to take part in the common defense.⁶⁰

Germany's rearmament and entry into NATO was given strong impetus in June 1950 when the Communists attacked South Korea. As a result of the United States' involvement in Korea and the instable situation in Western Europe caused by the intensification of the Cold War and continuing threats from the Soviet Union, new American foreign policy objectives were developed. James L. Richardson, in Germany and the Atlantic Alliance (1966), described these new directions.

The three major policy innovations of September 1950--the establishment of a NATO Supreme Commander, the reinforcement of American troops in Europe, and the decision to rearm Germany--had already been widely discussed. . . . If the United States were to make unprecedented military commitments in Europe, then the Europeans would have to create an effective military defense.⁶¹

The rearmament of Germany received opposition from several directions. The French, the Soviets, and even the opposition party in Germany, resisted the proposal. However, through the high level of cooperation of Chancellor Adenauer's government, and political pressures applied by the United States within the alliance, Germany entered NATO in 1955 and rearmament seriously began. Rearmament efforts continued through 1961, at which time the nation reached its force goal of that period of 350,000. In this ten year period (1945-1955) the West Germans had moved from the position of a defeated nation to become a full partner participating in the common defense. The new nation's arms policies began taking independent form at approximately this point in time.

Arms Policies, Controls, and Trends

The rearmament of the nation's new armed forces in the late 1950s was largely accomplished by the United States under its Military Aid Program. After the 1961 shift in the United States' policy on arms transfers, from military aid to foreign military sales, Germany continued to acquire a large portion of its weapons and military equipment from the United States. Under the cooperative aspects of the Offset Agreements, Germany agreed to purchase weapons and equipment from the United States and Britain to assist in offsetting the balance of payment deficits both nations were suffering as a result of having forces stationed in Germany. As an example, the 1972 Offset Agreement (covering 1973-1974) called for the purchase of \$2.2 billion in arms, material, and services from the United States over the following two year period. During the 1964-1973 period, Germany imported \$3.3 billion in arms, of which \$3 billion was purchased from the United States.⁶²

As the nation regained its full industrial capacity in the 1960s, it also began producing military arms and equipment, both for its own armed forces and for export. It became the fourth largest Western exporter of arms during this period. In the Defense White Paper for 1973/1974, the government presented its official position on arms production and sales.

For military and technological reasons as well as for reasons of international cooperation in arms technology the Federal Republic of Germany cannot abstain from arms production altogether and concentrate on civilian production exclusively. On the other hand, the German economy is far from being dependent on defense contracts. In the Federal Republic a military-industrial complex does not exist. Defense production accounts for less than two percent of the national output (*italics added*).⁶³

Before proceeding to a close observation and discussion of the thirteen economic variables, to determine the validity of the official governmental

position, let us review some comments made in two other recent studies concerning Germany's arms sales.

In 1973 Lawrence Martin, in Arms and Strategy, made the following statement concerning German arms sales:

West German foreign arms sales have been chiefly to the less-developed members of NATO, Greece, Portugal and Turkey. . . . West German's defense industries have been kept small in proportion to overall industrial capacity as a result of political restrictions carried over from defeat in World War II.⁶⁴

Notwithstanding this relatively negative appraisal of Germany's participation in arms sales, at another point in his book Martin shows Germany producing several categories of modern sophisticated arms, ranging from the utility helicopter through surface-to-air missiles, submarines, and field artillery pieces.⁶⁵

John Stanley and Maurice Pearton, in discussing the general policy of most arms-exporting countries of not sending arms to areas where there is war or the likelihood of immediate war, had this to say about Germany's arms sales in the Middle East: "This has been the policy of the German Government also since 1965, following threats by the Arab countries to recognize East Germany when they discovered that Germany was supplying arms to Israel."⁶⁶ Stanley and Pearton gave Germany fullest recognition as being one of the leading arms-exporting nations of the many countries evaluated in their extensive study.⁶⁷ From this broader view of Germany's arms policy and activities the study now moves to specifics.

Arms Sales and the Economy--1963-1973

During this period the nation's GNP rose from \$96 billion to \$346.7 billion annually. At the same time its annual total exports rose from \$14.9 billion in 1963 to \$68.6 billion in 1973, or as a percentage of the

GNP, from 15.5 to 19.8 percent. This significant growth in both the GNP and total exports occurred in generally regular annual increases until 1972-1973. In this two year period the increases were markedly sharper. In comparison to the general upward trend of the nation's economy and exports over this period, arms exports differed sharply.

In 1963 Germany exported \$71 million in arms. However, in relationship to the general economy, arms exports continued over the period in a most sporadic manner. It also continued at a relatively insignificant level throughout most of the period. In 1964 the arms exports nearly tripled over the previous year to a level of \$180 million, but fell to a low of \$58 million by 1967. By 1972 it had again accelerated, to a point of \$226 million and then fell to an all-time low of \$26 million in the final year of the period. The average annual arms exports were \$113.5 million.

The most important aspect of this portion of the data centers on the relatively insignificant proportional influence of arms exports, in considering the nation's total exports. Over the entire eleven years arms exports exceeded the one percent level only one year (1964) and generally stayed beneath even the 0.50 percent level throughout the period. Thus, in proportional terms, considering Germany's full economic output one must draw the conclusion that even though the nation's arms exports were the fourth largest in the Western world it was insignificant in relation to the total export picture and even less significant in view of the entire economy. Table 3 presents the data from all seven variables in comparative format. The next step in the analysis is to look at Germany's domestic arms sales. Export sales data will be combined with domestic sales to demonstrate the total trend.

TABLE 3
WEST GERMANY'S
GNP, TOTAL EXPORTS, AND ARMS EXPORTS--1963-1973
(\$ millions in current and constant 1972)

Year	GNP		Total Exports		Arms Exports		
	current	constant	current	% of GNP	current	constant	% exports
1963	96,000	172,959	14,914	15.5	71	97	0.48
1964	105,225	184,487	16,215	15.4	180	242	1.11
1965	115,270	194,751	17,892	15.5	102	134	0.57
1966	122,709	200,488	20,540	16.7	68	87	0.33
1967	124,273	199,978	22,106	17.8	58	72	0.26
1968	135,274	214,540	25,202	18.6	98	117	0.38
1969	154,339	232,092	29,610	19.1	101	115	0.34
1970	188,054	245,606	34,849	18.5	189	204	0.54
1971	218,296	252,586	39,757	18.2	130	134	0.33
1972	259,848	259,848	47,116	18.1	226	226	0.48
1973	346,748	274,140	68,571	19.8	26	25	0.04

SOURCES: United Nations, Department of Economic and Social Affairs, Statistical Office, Statistical Yearbook 1974 (1975), pp. 408-9; United Nations, Department of Economic and Social Affairs, Statistical Office, Statistical Yearbook 1969 (1970), pp. 370-1; U.S., Arms Control and Disarmament Agency, World Military Expenditures and Arms Trade 1963-1973 (1974), pp. 34 and 92.⁶⁸

The purchase of arms and equipment for its own armed forces declined steadily over the entire period until 1973. From a point of \$1.4 billion in domestic purchases in 1963, the government moved to the low point of the decade in 1968 with the purchase of \$1.07 billion, and even lower to \$1.03 billion in 1971. Domestic purchases increased to \$1.7 billion in 1973.

Again, the more important side of the domestic arms sales data centers on their proportional relationship to the GNP. While the GNP rose from \$96 to \$346 billion domestic arms sales rose only from \$1.4 to \$1.7 billion by 1973. Also, due to the high degree of increase in the GNP over

the period, the domestic arms sales' relative percentage declined from 1.54 to 0.51 percent.

The final step in the presentation and discussion of this data encompasses the combining of both exports and domestic sales. Export figures, found in Table 3, are combined with domestic sales (as shown on the left side of Table 4) to complete the total arms sales picture. Due to the comparatively low annual export rates, as compared to domestic sales, the composite annual figure does not increase significantly beyond what was tabulated for domestic sales singularly. In 1963 the total arms sales for Germany was \$1.5 billion compared with \$1.8 billion in 1973. The percent of the GNP represented by total arms sales follows the same pattern as discussed above concerning domestic sales alone. Moving from 1.51 percent of the GNP in 1963, the relationship of total arms sales to the GNP has steadily declined over the eleven year period to about .50 percent. Table 4 gives both the domestic sales and combined sales data.

A close review of the data presented in Tables 3 and 4 show that Germany's arms sales have not developed a significant role, either as a part of the nation's total exports or in relationship to the nation's economy as a whole. In fact, the opposite has occurred as total arms sales have decreased steadily over the period. The study now moves to an equally close analysis of Britain's army industry and associated national policy.

TABLE 4

WEST GERMANY'S
DOMESTIC AND EXPORT ARMS SALES--1963-1973
(\$ millions in current and constant 1972)

Year	Domestic Arms Sales			Domestic and Export Sales		
	current	constant	% of GNP	current	constant	% of GNP
1963	1,380	2,676	1.5	1,451	2,773	1.51
1964	1,443	2,620	1.4	1,623	2,862	1.54
1965	1,270	2,211	1.1	1,372	2,345	1.19
1966	1,115	1,893	0.9	1,183	1,980	0.96
1967	1,315	2,185	1.1	1,373	2,257	1.15
1968	1,074	1,737	0.8	1,172	1,854	0.87
1969	1,221	1,913	0.8	1,322	2,028	0.86
1970	1,027	1,389	0.6	1,216	1,593	0.65
1971	1,041	1,244	0.5	1,171	1,378	0.54
1972	1,173	1,173	0.5	1,399	1,399	0.54
1973	1,733	1,328	0.5	1,759	1,353	0.51

SOURCES: Federal Republic of Germany, White Paper 1970 on the Security of the Federal Republic of Germany and on the State of the German Federal Armed Forces (1970), p. 197; White Paper 1971/1972: The Security of the Federal Republic of Germany and the Development of the Federal Armed Forces (1971), p. 155; White Paper 1973/1974: The Security of the Federal Republic of Germany and the Development of the Federal Armed Forces (1974), p. 215. U.S., Arms Control and Disarmament Agency, World Military Expenditures and Arms Trade 1963-1973 (1974), pp. 34 and 92. See footnote 69 for explanation on data compilation.

V. BRITAIN'S ARMS INDUSTRY

Britain's post-World War II recovery problems were of a different nature from those of Germany. Even though its larger cities had suffered some war damage it was not faced with the reconstruction problems of the former enemy. Instead, it was confronted in 1945 with economic problems of unprecedented magnitude, which in many ways, placed it in an equally weak position. These important economic aspects are given first attention. Additionally, Britain's involvement in NATO, the Korean War, and colonial disengagement are discussed in the first part of this chapter. Of equal importance, the nation's continuing world trade difficulties are reviewed, as they pertain to the national foreign policy and arms sales activities of the 1960s and early 1970s. The second portion of this chapter looks specifically at Britain's arms sales in the 1963-1973 period and its associated national policy, which caused the nation to fall behind France in the 1960s in total arms exports. The final portion of the chapter covers the economic analysis of the nation's arms sales effort and shows that both Britain's total arms exports and total arms sales have declined over the period. This decline in sales does not appear consistent with Britain's stated arms sales objective. A close look at Britain's early economic problems receives first attention.

Period of International Bankruptcy

The British economy has moved through several periods of crisis since World War I which have shaped its present posture, to include its arms industry. The nation really never recovered from World War I. Although new industries were developed during the interwar years, exports never returned to their 1913 level.⁷⁰ With the additional economic hardships experienced during World War II, Britain emerged from the war in 1945 close to complete economic collapse. William C. Mallalieu, in British Reconstruction and American Policy 1945-1955 (1956), offered six reasons for Britain's postwar economic crisis.

. . . (1) thirty years of relative stagnation prior to World War II; (2) destruction, neglect, and sale of economic assets during the war; (3) accumulation of a large external debt (\$11 1/2 billion); (4) heavy overseas military expenditures after the war (\$300 million in 1946); (5) disturbed conditions in other countries which prevented resumption of pre-war trade relations; and (6) American inflation (1946-1948) which greatly worsened Britain's terms of trade and reduced the real value of American and Canadian loans.⁷¹

The Marshall Plan played a key role in assisting Britain's recovery from the immediate postwar economic crisis. Between April 1948 and December 1950, it received a total of \$2.7 billion.⁷² The formation of NATO in 1949, however, required a strengthening of the British Army of the Rhine which increased balance of payment difficulties for the nation for many years to come.

The outbreak of the Korean War in 1950 also gave further impetus to the nation's reintensification of arms production and armament research and development. It also required an additional increase in the nation's armed forces, which had gone from 5,000,000 men at the close of the war to less than 700,000 by 1950. The early 1950s witnessed Britain markedly increasing

its annual defense budgets and the size of its armed forces. It was during this time that it also became a member of the club of nuclear nations.⁷³

The British Defense White Paper of 1957, written in the aftermath of the Suez Canal and Hungarian Crisis, signalled a drastic shift in the nation's defense policy which had been formed earlier in the decade.

. . . For the last five years defence has absorbed on average 10 percent of the gross national product, 7 percent of the working population, and one-eighth of the output of the metal using industries; and that cannot go on. . . . Forces stationed in Germany are to be reduced from 77,000 to 64,000.⁷⁴

Thus one sees Britain starting to reduce its armed forces in the late 1950s in an attempt to shore up its economy. This policy of force reduction continued through the next decade and into the 1970s, with the results of lowering the force structure to 370,000 by 1973.⁷⁵

During the earlier period Britain continued to experience economic difficulties, precipitated by the loss of world trade. The decline in Britain's share of world trade was continuous from the early 1950s. Between 1951 and 1959 her share in exports of manufactured goods went down from 22 to 17.7 percent, and further to 13 percent by 1965-1966.⁷⁶ For the period 1948 to 1969, Britain suffered a balance of trade deficit twelve of the twenty-two years, with ten of those twelve occurring consecutively between 1959 and 1968.⁷⁷

The European Economic Community (EEC), consisting of six West European nations, was formed in 1957 to facilitate ease of trade among its participants. Britain, in order to retain its flexibility with its Commonwealth nations, declined an offer to join. In 1959, realizing that it was losing trade on the continent due to the EEC, Britain responded by initiating the creation of the European Free Trade Association (EFTA), with six other outer West European nations. By 1963, realizing that it had erred

badly in not having joined the EEC at its inception, Britain applied for membership. Fearing British domination and expansion, coupled with the British public's uncertainty concerning EEC membership, President DeGaulle of France vetoed the British request.⁷⁸ It was ten years later that Britain finally acceded to the EEC. Meanwhile, the loss of trade with the members of the EEC during the 1960s and early 1970s, had further intensified Britain's trade dilemma.

Britain's economic difficulties have continued into the 1970s. In a recent article in U.S. News & World Report (November 1975), Prime Minister Harold Wilson is quoted as saying,

Over the last 20 years, for every extra unit of output we have obtained in this country from a given amount of new investment, France and Italy have gained half as much output again, Japan twice as much, and West Germany well over 2 1/2 times as much.

The article continues:

[The] state-owned British Steel Corporation, for example, produces 122 tons of steel per man per year. The West German figure is 370 and the Japanese 520. . . . Government spending, which accounted for 51 percent of gross national product in 1973, this year is expected to claim 56 percent. . . . Meanwhile British industry is in the dumps. Manufacturing's share of gross domestic product has dwindled. Plants are obsolete. Years of price control have melted the return on capital from 10 to 6 percent between 1965 and 1973.⁷⁹

Thus, in this brief review, one sees the dilemma of Britain's economy. The nation's near economic collapse after the war, loss of world trade in the postwar era, increased defense expenditures during the height of the Cold War, and finally, a lost decade of meaningful trade with the main countries of continental Europe, have all played important parts in forming the economic uncertainties facing the nation in the 1970s. It would seem at this point that Britain's level of arms sales could be of a higher degree of importance to the government, in light of its trade losses, than

was the case found in Germany. This study now turns to Britain's arms sales and related policies to pursue this inquiry.

Arms Policies, Controls, and Trends

During the early postwar years Britain exported large quantities of arms to its former colonies. Approximately one-half of the nation's arms exports went to the Middle East. Until 1962 Britain was the predominant supplier to India. By 1965 the British government, in recognizing the economic advantages of participating in arms exports, appointed an overall governmental coordinator for arms sales. In 1966 the Defence Minister offered the following comment on the government's arms sales policy:

. . . While the Government attaches the highest importance to making progress in the field of arms control and disarmament, we must also take what practical steps we can to ensure that this country does not fail to secure its rightful share of this valuable commercial market.⁸⁰

Unlike the military aid policy of the United States prior to 1961, Britain's transfer of arms even in the early postwar period was generally always on a cash basis. Upon starting its withdrawal from its colonial possessions, Britain filled the defense void with arms rather than mutual defense pacts as France did. British intervention in countries previously under British rule has been rare. Non-intervention made arms sales even more important. Also many countries whose armed forces had been trained by the British and who had experience with British weapon systems preferred British equipment. This aspect also assisted the nation in its arms sales.⁸¹

Britain's arms sales to the third world fell drastically from the end of the 1950s. This appears to have occurred due to two factors. First, Britain was torn in the early postwar era between extending its hegemony

over its withering empire, and on the other hand, in needing cash markets for its arms, rather than only the political appreciation normally received from a client state upon acquiring free defense materials. As a result, Britain's attempts to acquire the best of both worlds forced their Third World recipients toward other sources. In essence, the newly independent nations could not politically afford to buy their arms from the former mother country due to the political strings attached to each purchase.

The second factor which determined the temporary decline in British arms exports during that period centered on the over-sophistication of British weapons. Britain attempted to maintain a defense industry that was comparable in both breadth and sophistication to that of the United States. The expense of this program made exports so important that it limited the nation's ability to offer favorable trade terms. Also, as it became obvious that the entire defense industry could not be retained, the government elected to keep and place more emphasis on the sophisticated types of weapons.⁸² By the mid-1960s several programs had been cancelled and the industry had realigned itself with the needs of the market.

Britain's comparatively high amount of arms sales in the 1960s can be attributed to several key factors. Lawrence Martin summarized them.

. . . The performance of British armour in Israeli hands has been a good selling point and it must be recalled that almost continuous British counter-insurgency operations since 1945 have permitted the battle testing of many simpler weapons well suited to the third world. Meanwhile the rising sophistication of the military environment in the Middle East has facilitated the sale of British air defence systems. Another category in which Britain has done well is the sale of major naval vessels. . . .⁸³

The British government's arms exports are generally confined to non-belligerent nations in accordance with the rules established by the International Arms Exporting Coordinating Committee. This committee,

established under the auspices of NATO in 1949, was initially charged with keeping Western arms exports from the Communist bloc nations. It has, however, in more recent years attempted to prohibit the exporting of arms into war or potential war areas. In reality, Britain's arms exports are considered on a case-by-case, ad hoc basis and are closely observed by Parliament.⁸⁴

In reviewing Britain's arms exports since World War II two trends emerge. During the earlier postwar period through the early 1960s, one sees that the nation's economic difficulties, compounded by its failure to accept a less hegemonious role over its former colonies, caused a decline in its arms exports. As a result of this as it moved into the 1960s it also moved from its former position of second only to the United States in arms exports in the West to third place behind France. However, as it came to accept its somewhat lesser world role, and readjusted its defense industry accordingly, it again became a favored arms supplier of several of its former colonies. During the 1963-1973 period it exported \$1.8 billion in arms, of which the larger portion was purchased by its former colonies and Commonwealth partner nations. Table 5 (page 52) shows the major recipient nations during this period.

Britain's present arms sales have thus been influenced by three major factors which have unfolded over the postwar period; (1) economic chaos immediately after the war; (2) reluctance to withdraw from its role as a major world power; and, (3) continuous testing and world recognition of its superior arms. In the 1970s this nation continues to be a strong participant within the relatively small group of nations which export the bulk of world arms. Have the economic uncertainties of the British economy caused the government to become dangerously reliant upon arms sales as a

means of shoring up the sagging economy? The nation's more recent arms sales will now be scrutinized in light of the thirteen previously selected economic and arms sales variables to seek the answer to this question.

TABLE 5
BRITAIN'S ARMS EXPORTS BY RECIPIENT COUNTRIES--1963-1973
(\$ current millions)

Guinea.....13	Portugal.....22	Israel.....53
Kenya.....18	Sweden.....23	Jordan.....52
Libya.....62	Switzerland.....37	Kuwait.....60
Nigeria.....30	Argentina.....17	Oman.....20
Rhodesia.....87	Brazil.....39	S. Arabia.....90
Zambia.....12	Chile.....21	U.A. Emirates.....10
Malaysia.....102	El Salvador.....15	Canada.....25
Singapore.....46	Peru.....59	U.S.A.....340
Thailand.....13	Venezuela.....23	Australia.....92
Germany.....17	Iran.....129	New Zealand.....43
Norway.....18	Iraq.....15	India.....89

SOURCE: U.S., Arms Control and Disarmament Agency, World Military Expenditures and Arms Trade 1963-1973 (1974), pp. 67-71.

NOTE: Only those nations receiving \$10 million or more are listed.

Arms Sales and the Economy--1963-1973

Over the eleven year period the nation's GNP, in current dollars, practically doubled, moving from \$85.5 billion in 1963 to \$170.9 billion in 1973 (by comparison the German GNP nearly quadrupled over the same period--\$96-\$346.7 billion). Annual exports moved from a low of \$12.2 billion in 1963 to \$30.5 billion in 1973. With annual exports increasing generally more swiftly than the GNP, it is not surprising to see that they moved from 14.3 percent of the GNP in 1963 to 17.9 percent by the end of the period. Thus, one can observe two distinct trends regarding the GNP and trade over the period. First, notwithstanding the continuing economic crisis previously

discussed, the GNP experienced modest increases nearly every year (1968 was the one exception). Second, steady annual export increases (1965 and 1967 were the only two exceptions) were proportionally more accelerated than the GNP, resulting in an absolute gain of 3.6 percent of the GNP over the period. Thus the influence of exports on the economy, as a whole broadened, between 1963 to 1973. Let us now turn to the proportional relationship of arms exports to total exports.

Arms exports, figured in current dollars were at \$241 million in 1963. Starting in the following year these exports declined in two phases over a nine year period, reaching lows of \$97 million in 1967 and \$83 million in 1970. The arms export figure of \$241 million in 1963 was not surpassed, even in current dollars, until 1972 which saw arms exports rise to \$311 million and remain steady at \$333 million for the final year of the test period. Britain's average annual arms exports were \$182.5 million. These figures generally support the previous discussion of Britain's arms sales difficulties of the 1960s.

Arms exports as a percentage of total exports have never regained their relatively prominent relationship of 1.97 percent in 1963. Following the downward pattern of arms exports in the 1960s, in relation to increasing total exports, the arms exports percent reached a negligible low of 0.42 percent in 1970. By 1973 it had risen to 1.09 percent. Even with the arms exports at \$333 million in 1973, in relationship to total exports of \$30.5 billion, they remain at an insignificant level. One percent of total exports does not represent a degree of economic magnitude. The annual data is shown in Table 6. The study now analyzes domestic sales and the combined data in order to present the total relationship of arms sales to the British economy.

TABLE 6
BRITAIN'S
GNP, TOTAL EXPORTS, AND ARMS EXPORTS--1963-1973
(\$ millions in current and constant 1972)

Year	GNP		Total Exports		Arms Exports		
	current	constant	current	% of GNP	current	constant	% exports
1963	85,545	120,725	12,222	14.3	241	329	1.97
1964	93,184	127,689	12,353	13.3	142	191	1.15
1965	99,788	130,553	13,238	13.3	120	158	0.91
1966	106,279	133,326	14,676	13.8	147	189	1.00
1967	110,394	136,415	14,379	13.0	97	121	0.67
1968	103,353	141,455	15,365	14.9	159	190	1.03
1969	110,478	144,146	17,515	15.9	197	225	1.12
1970	121,747	147,896	19,347	15.9	83	90	0.42
1971	138,514	150,987	22,367	16.1	178	184	0.80
1972	154,224	154,224	24,345	15.8	311	311	1.28
1973	170,885	162,860	30,535	17.9	333	315	1.09

SOURCES: U.S., Arms Control and Disarmament Agency, World Military Expenditures and Arms Trade 1963-1973 (1974), pp. 61 and 119. United Nations, Department of Economic and Social Affairs, Statistical Office, Statistical Yearbook 1974 (1975), pp. 408-9; United Nations, Department of Economic and Social Affairs, Statistical Office, Statistical Yearbook 1969 (1970), pp. 370-1.

Similar to the situation found in Germany, the purchase of arms and new equipment for the British armed forces generally declined over the period. Both the decrease in the size of the force and the ever-diminishing proportion of the annual defense budget available for procurement strongly influenced this occurrence. In 1963 the British government spent \$2.03 billion on the purchase of domestic arms. Throughout the remainder of the 1960s domestic purchases declined at a rapid annual rate until 1969, which was the lowest point of the period at \$1.2 billion. With some increases in the first part of the 1970s, total domestic purchases reached \$1.9 billion

by 1973. This represented, however, a much larger actual decline than that shown in current dollars.

Domestic arms sales as a proportional percentage of the annual GNP also declined steadily. This, of course, occurred not only due to declining domestic purchases, but also as a result of modest annual GNP increases. As seen in Table 7, this percentage figure dropped from 2.4 percent of the GNP in 1963 to 1.1 percent by 1973. The final step in reviewing Britain's arms sales involves combining both export arms sales (Table 6) and domestic arms sales (left portion of Table 7), and showing the relationship of that total figure to the annual GNP.

The composite arms sales figures do not deviate from the general decline noted in domestic sales only. Even though 1972-1973 were comparatively high years for export sales, the combined figure in 1973 of \$2,258 million represents a much greater actual decline than the visible \$13 million difference in relation to the 1963 total of \$2,271 million. In using the constant dollar approach one finds that total arms sales actually declined by nearly one-third over this period. Finally, in viewing all arms sales as a percentage of the annual GNP, the decrease has markedly moved from 2.7 percent in 1963 down to 1.3 percent at the end of the period.

In summarizing Britain's arms sales over the eleven year period, two elements appear significant; a decline in total arms sales, and the proportional relationship of 1.3 percent of the GNP in 1973. Similar to the results found in Germany, Britain's total arms sales have declined in recent years when viewed in their overall relationship to total exports and the economy as a whole. Thus instead of increasing in significance, in relationship to the British economy, the opposite has actually occurred. The possible significance of increase in 1972 and 1973, in both exports and

TABLE 7
BRITAIN'S
DOMESTIC AND EXPORT ARMS SALES--1963-1973
(\$ millions in current and constant 1972)

Year	Domestic Arms Sales			Domestic and Export Sales		
	current	constant	% of GNP	current	constant	% of GNP
1963	2,030	2,866	2.4	2,271	3,195	2.7
1964	1,912	2,623	2.1	2,054	2,814	2.2
1965	1,876	2,454	1.9	1,996	2,612	2.0
1966	1,868	2,342	1.8	2,015	2,531	1.9
1967	1,769	2,184	1.6	1,866	2,305	1.7
1968	1,305	1,850	1.3	1,464	2,040	1.4
1969	1,242	1,679	1.1	1,439	1,904	1.3
1970	1,585	1,934	1.3	1,668	2,024	1.4
1971	1,786	1,950	1.3	1,964	2,134	1.4
1972	2,008	2,008	1.3	2,319	2,319	1.5
1973	1,925	1,835	1.1	2,258	2,150	1.3

SOURCES: Institute for Strategic Studies, The Military Balance 1967-1968 (London: Institute for Strategic Studies, 1967), p. 48; Institute for Strategic Studies, The Military Balance 1973-1974 (London: Institute for Strategic Studies, 1973), p. 76; U.S., Department of Commerce, Bureau of the Census, Statistical Abstract of the United States 1974 (1974), p. 308; U.S., Arms Control and Disarmament Agency, World Military Expenditures and Arms Trade 1963-1973 (1974), pp. 61 and 119.

domestic sales, as well as overall foreign policy implications will be addressed in the conclusion of this report. The study now moves to an analysis of the arms industry of France, the second largest arms-exporting nation in the Western world.

VI. FRANCE'S ARMS INDUSTRY

The present economy of France has been almost entirely rebuilt during the thirty years since World War II. To better understand the role of the arms industry within the framework of national policy and the economy, one must look at several interrelated occurrences during the post-war period. Similar to Germany and Britain, France's early postwar economic difficulties were partially alleviated through the assistance of the Marshall Plan. In 1949 it became a charter member of NATO and received a comparatively massive infusion of American arms. The long-range implication of these foreign relations, as well as those associated with France's colonial disengagement, membership in the EEC, and general rejuvenation during the DeGaulle era, are brought into perspective in the first portion of this chapter. The second section looks specifically at arms sales trends and associated national policy since the decline of the Cold War. An aggressive national policy of arms sales, which brought France to its present position in Western sales of second only to the United States, is outlined and discussed to form the analytical framework for the comparative economic analysis presented in the final section. A trend of increasing arms exports, but decreasing total arms sales is developed as a result of the analysis, which appears highly consistent with the nation's foreign policy objectives in this area. The study now returns to the early events which influenced the nation's subsequent arms activities and associated foreign policy.

Attempts to Regain World Power

In September 1944 as General Charles DeGaulle attempted to form the first postwar government, large portions of the nation lay in ruin and the war was still being fought in the eastern sector of the country. Reparation of the devastation caused by the retreating enemy and the bombardments by the liberating armed forces, was the first matter to be attended to by the new government. DeGaulle's policy of immediately allowing general wage increases sparked the postwar inflationary spiral that was to continue throughout the first decade of the new era. The immediate postwar period was one of confusion, political bickering, and internal strife. DeGaulle resigned as head of the government in January 1946.⁸⁵

The Fourth Republic was equally unsuccessful in uniting the nation and by 1947 the general situation had become desperate. Food was scarce, production was stagnate, and inflation had become rampant. It was against this background that the Marshall Plan was announced by General George Marshall in June 1947. France initially reacted with suspicion to the American offer, but did finally agree to participate with the other West European recipients.⁸⁶ Against the opposition of the French Communist Party, American aid was brought in and resulted in playing a key role in the revitalization of the nation's economy during this early period.

The Communist coup in Czechoslovakia in February 1948 served clear warning to France and its allies of the Soviet Union's aggressive designs in Europe and added even greater incentive for cooperation beyond the degree of European consolidation required of Marshall Plan recipient nations. In March 1948 France joined Britain and the Benelux nations in Brussels to sign a mutual defense pact. In April 1949 France joined its North American and West European allies in forming NATO.

The nation's entry into NATO is significant within the framework of this study since it necessitated the reintensification of the nation's arms industry and also resulted in the receipt of \$4.2 billion in military aid from the United States, as well as \$96.6 million in excess military stock during the period 1950-1966.⁸⁷

The national economy slowly moved forward in the 1950s, still plagued by inflation, lack of a cohesive national economic plan, and over-taxation for military expenditures. In addition to its NATO force commitment, France also had large elements of its armed forces involved in attempting to regain its prewar predominance in its former colonies. Its attempts in Indo China ended in failure in 1954. By 1958 the rebellion in Algeria was threatening to disrupt the nation, both economically and politically. It was in this setting that General DeGaulle returned to power.

In France Since 1930 (1972), John E. Talbott described DeGaulle's outlook as he again took over the French government in 1958.

. . . DeGaulle considered France's inability to resolve a long colonial war merely a symbol of fundamental domestic weaknesses, especially of the feebleness of the state. . . . No solution to the Algerian question could be found until the crisis of governmental authority had been surmounted by France.⁸⁸

DeGaulle's Fifth Republic was formed with an unprecedented degree of power being proffered upon the president. DeGaulle used his near absolute powers swiftly and thoroughly over the next decade. By 1962 he had negotiated Algeria's independence and the gradual economic upswing, which had started under the Fourth Republic, was intensified under the DeGaulle government. In the area of foreign policy, DeGaulle had assumed the leadership of the EEC in 1958 and denied British entry in 1963. His questioning of the realities of France's dependence upon NATO for national security in the early 1960s, resulted in the nation's military withdrawal from NATO

in 1966. His emphasis upon foreign policy activities aimed at restoring France to its prewar position as a leading world power bred both alienation with the nation's allies and unrest within the population. The nation plunged into near political and social collapse in May 1968 as the French people rose up against his lack of attention to domestic needs. After an unsuccessful referendum in April 1969, General DeGaulle resigned from office.⁸⁹ Even though he was unsuccessful in returning France to its pre-World War II position of world power, DeGaulle's emphasis upon France's independence strongly affected the nation's foreign policy, and most specifically its arms export policy, which is outlined in the next section.

The French government of the post-DeGaulle era continues to stress a greater concern by the government for progressive social policy but has been plagued in its efforts by the emergence of large-scale unemployment. These occurrences have brought forth changes in the national economy, which includes both prescriptive and conciliatory measures. French policy encompasses direct support of national industry (which directly influences the national arms industry), long-range national economic planning, and both fiscal and monetary controls of the economy. A recent U.S. News & World Report article, which summarized the West European outlook at the conclusion of the mid-November 1975 Economic Summit Conference, offered these comments concerning the French economy:

The French, for the most part, realize that the days of a swift and steady rise to prosperity are gone for the moment and possibly for some time to come. . . . The Government itself has sketched a "new kind of growth"--more moderate, less rapid, less continuous. . . . Higher taxes are ahead for the French. . . . With a million people already jobless there are also plans to reduce the retirement age from 65 to 60.

The article concludes with a view of the individual Frenchman's economic position and confidence in the government and the future.

For those who are working, wages in general have kept slightly ahead of inflation, and French savings are strong. Thus many of the ordinary French are not doing too badly, yet they seem to have little--if any--confidence in their Government's ability to surmount today's economic crisis, battle inflation, or increase employment.⁹⁰

In summary, France has suffered through many of the same economic problems which beleaguered its West European neighbor states since World War II. Its rate of GNP increase and present state of economic stability exceed those of the British, but are less than those enjoyed by Germany. In order to combat the domestic difficulties which came to a head during the DeGaulle era the government has moved closer to a controlled economy. Let us now look at how all these foreign policy economic trends have effected arms sales.

Arms Policies, Controls, and Trends

France is presently the third largest arms exporting nation in the world (behind the United States and the Soviet Union) and second only to the United States in the West. France achieved this position by surpassing Britain in arms exports in the 1960s through the adoption of an aggressive governmental arms sales policy and by taking advantage of the restrictive arms sales policies of other nations.

France's early postwar arms sales activities underwent a major change in the early 1960s. During the previous decade the level of arms exports was far behind that of Britain and was not strongly supported by the government of the Fourth Republic. Under the redirection of DeGaulle's Fifth Republic toward national economic and political independence, the French defense establishment was reorganized in 1961. As a result of the reorganization a special department was created in the Ministry of Defense for the purpose of coordinating the production and sale of arms. This

department, known as the Delegation Ministerielle pour l'Armement (DMA), was directly answerable to the Minister of Defense. In 1965 the DMA was expanded to include a section exclusively for international arms sales (Direction des Affaires Internationales--DAI), and was given the direct responsibility of coordinating international sales for both the private arms manufacturing sector as well as the government-owned and operated arms industry.

The DAI assisted in the French arms export drive in numerous ways. It dispatched and controlled military missions into foreign countries to assess the defense needs of potential customers. When it became desirable to arrange the demonstration of weapon systems for potential customer nations, the DAI coordinated this activity with the French armed forces and private industry. The task of organizing the display of French weapons at both national and international arms shows was also the responsibility of the DAI. In essence, this agency attended to the international promotion of French arms for both the government and private industry.⁹¹ The energetic assistance of the French government in increasing the nation's arms exports played a major role in the dramatic increase in the volume of sales. The other important factor concerning this increase in arms sales centers on French freedom from the political inhibitions affecting the arms sales of other Western suppliers.

Differing from the national policies of the United States and Britain, of using arms transfers primarily as tools of international politics, French arms exports were more strongly impelled by economic considerations. Consequently, the French moved decisively in several instances in the 1960s to take advantage of American and British political difficulties and, as a

result, achieved large arms sales. Lawrence Martin sums up this aspect of French policy.

When South Africa accelerated its arms purchases after the declaration of the United Nations embargo in 1964, France became the main source of supply. Between 1961 and 1969 45 per cent of South African arms imports came from France. Similarly, France increased its exports to Pakistan after the Anglo-American embargo of 1965. In Latin America, France contributed to thwarting efforts by the United States to discourage the acquisition of supersonic aircraft by promoting sales of the Mirage. . . .⁹²

France's arms exports have added to the nation's total export business and have allowed the nation to maintain a sophisticated arms industry. Again, Martin offers some insight into the degree of success experienced by the French in this regard. He also comments on the possible political advantages realized in the process.

In its efforts to use exports to sustain a French arms industry, France has met with remarkable success. No less than 30 per cent of French arms production is exported. Out of the first 700 Mirages produced, 400 were exported; similarly some 700 Alouette helicopters were sold abroad out of a production of 1300. On the other hand, it would be a mistake to overlook the political element in French export policy. There can be little doubt that French governments have welcomed the opportunity to undermine American preponderance in certain areas and similarly to challenge British influence.⁹³

The French government's policy of assisting industry in the sale of arms notwithstanding, one finds its system of arms sales control to be quite thorough. The French arms exporter is required to get governmental authority before drawing up a contract with the potential customer. The DMA is the agency authorized to approve such requests, however should the application to draw up a contract be at all controversial, it is then referred to an inter-ministerial committee. Both the Foreign Ministry and the Treasury are represented within the committee, as well as the General Secretariat for National Defense. After approval for contract negotiation has been given, the final contract must also receive approval by the DMA before the export

license is issued. Thus one finds the French government exercising strong control which also provides the government the ability to supervise quality control and to keep exports properly meshed with domestic armament requirements.⁹⁴ Governmental assistance and the redirectioning of arms exports since the early 1960s have resulted in two noteworthy trends. During the 1964-1973 period France's arms exports were \$2.4 billion. Even though less than one-tenth of the United States exports of \$29.7 billion during the same period, it was by far the leading West European exporter, with Britain next in line with \$1.8 billion.⁹⁵

The second trend during this period has to do with an analysis of the nations receiving French arms. The nation's policy of arms sales to those countries who were experiencing political difficulties in acquiring support from other suppliers becomes most obvious in viewing the volume of arms sales by recipient nations. Table 8 shows that from the twelve largest customer nations six fall within this category. It also should be noted that even though France has not been a military member of NATO since 1966, its second most active export area is to the NATO nations both in Western Europe and in North America. In summary, France has achieved its level of arms exports by rushing to fill the market voids which have occurred due to political peculiarities and by continuing its concentrated sales efforts within the Atlantic Community.

From this overview of France's postwar foreign and arms sales policies, one finds that it has been more openly aggressive and more successful in the international sale of arms than its two neighboring countries previously studied. The results achieved in the next section, by subjecting France's arms sales and economy to the relationships disclosed by using the thirteen selected variables, is somewhat surprising.

TABLE 8

FRANCE'S ARMS EXPORTS BY RECIPIENT COUNTRIES--1963-1973
(\$ current millions)

Ivory Coast.....15	Netherlands.....96	Saudia Arabia.....55
Libya.....261	Portugal.....138	Canada.....11
Malagasy Rep.....14	Spain.....93	U.S.A.....87
Morocco.....18	Switzerland.....16	Australia.....56
South Africa.....208	Argentina.....73	India.....48
Tunisia.....10	Brazil.....75	Pakistan.....214
Zaire.....17	Colombia.....54	Israel.....127
Cambodia.....20	Ecuador.....12	Lebanon.....73
Malaysia.....27	Peru.....55	Greece.....42
Belgium.....33	Venezuela.....85	Italy.....73
Germany.....184		

SOURCE: U.S., Arms Control and Disarmament Agency, World Military Expenditures and Arms Trade 1963-1973 (1974), pp. 67-71.

NOTE: Only those nations receiving \$10 million or more are shown.

Arms Sales and the Economy--1963-1973

France's GNP more than tripled from \$83.5 billion in 1963 to \$258 billion by 1973. By comparison Britain's GNP had doubled and Germany's had quadrupled over the same period. Concurrently the nation's exports accelerated from \$8.1 to \$35.6 billion, which proportionally placed its rate of acceleration far ahead of Britain (from \$12.3 to \$30.5 billion) and approximately in line with Germany's (\$14.9 to \$68.6 billion). Total exports as a percentage of the GNP moved from 9.7 to 13.8 between 1963 and 1973. In comparison with the other two nations, France's 1973 relationship between total exports and GNP left it in a position of lesser reliance on exports than Germany at 19.8 percent and Britain at 17.9 percent. Thus in looking at the movement of France's GNP and total exports over the period, the trend has been upward and in a generally comparable relationship with

Germany and Britain. Table 9 shows these annual movements of the GNP, total exports, and arms exports.

TABLE 9
FRANCE'S
GNP, TOTAL EXPORTS, AND ARMS EXPORTS--1963-1973
(\$ millions in current and constant 1972)

Year	GNP		Total Exports		Arms Exports		
	current	constant	current	% of GNP	current	constant	% exports
1963	83,468	122,021	8,082	9.7	105	143	1.30
1964	92,524	130,083	8,993	9.7	144	193	1.60
1965	99,929	136,184	10,051	10.1	103	136	1.02
1966	108,395	143,817	10,889	10.0	215	276	1.97
1967	116,817	150,960	11,380	9.7	86	107	0.76
1968	127,203	158,446	12,672	10.0	181	216	1.42
1969	141,573	170,714	14,876	10.5	216	246	1.45
1970	148,351	180,728	17,739	12.0	198	214	1.12
1971	164,096	189,724	20,420	12.4	154	159	0.75
1972	199,679	199,679	25,848	12.9	541	541	2.09
1973	258,076	212,259	35,565	13.8	571	541	1.61

SOURCES: U.S., Arms Control and Disarmament Agency, World Military Expenditures and Arms Trade 1963-1973 (1974), pp. 32 and 90; United Nations, Department of Economic and Social Affairs, Statistical Office, Statistical Yearbook 1974 (1975), pp. 408-9; United Nations, Department of Economic and Social Affairs, Statistical Office, Statistical Yearbook 1969 (1970), pp. 370-1.

The nation's arms exports increased sporadically over the period. From \$105 million in 1963 arms exports increased until 1967 when they fell to \$86 million. Subsequent years, however, witnessed a general increase until 1972 when the level increased dramatically to \$541 million and remained at that comparatively high level through the final year with \$571 million. In current dollar terms this represents more than a five-fold increase, from \$105 to \$571 million. In the more realistic view afforded by the use of the

constant dollar approach one still finds an appreciable degree of increase, from \$143 to \$541 million. France's annual average export sales were \$228.5 million. Arms exports as a percentage of total exports kept pace and actually finished the period with a slight increase. This percentage in 1963 stood at 1.30 and rose to 1.61 by 1973. Although France's arms exports in 1973 represent a larger portion of total exports than was found in Germany and Britain (0.04 and 1.09 respectively), it is insignificantly low in comparison to the same factor to be seen in the study of the United States. Let us now proceed to the analysis of France's domestic arms sales.

France's domestic arms purchases declined steadily from \$1.8 billion in 1963 to a low of \$1.7 billion in 1971. This can be attributed to two factors; the size of the French armed forces also steadily declined from 735,000 in 1963 to 560,000 by 1972,⁹⁶ and the portion of the annual defense budget available for the procurement of arms dropped from 35 percent in 1965 to 25 percent by 1972.⁹⁷ In considering the ever-increasing annual GNP factor, along with the decreasing rate of domestic sales, one can readily understand why domestic sales, as a percentage of the GNP, fell from 2.2 to 0.8 percent over the period.

As the final step in the analytical process, both exports and domestic sales are combined to establish the total impact of arms sales on the economy. This combined figure was \$1.9 billion in 1963, or 2.3 percent of the GNP. However, by 1973 with a figure of \$2.7 billion the relative percentage level had fallen to 1.0 percent. Thus with all arms sales considered France has an arms/GNP relationship of 1.0 percent, which coincidentally and in inverse order, places it between Germany with .51 percent and Britain with 1.3 percent. Thus one finds that total French arms sales have also declined, both in constant dollars and as a proportional percentage of

the total economy. The increase in export sales and related foreign policy implications will be addressed in the conclusion of the report. Table 10 presents the domestic and combined data. The study now moves to the last and largest nation of the four being studied--the United States.

TABLE 10
FRANCE'S
DOMESTIC AND EXPORT ARMS SALES--1963-1973
(\$ millions in current and constant 1972)

Year	Domestic Arms Sales			Domestic and Export Sales		
	current	constant	% of GNP	current	constant	% of GNP
1963	1,812	2,652	2.2	1,917	2,795	2.3
1964	1,776	2,503	1.9	1,920	2,696	2.1
1965	1,732	2,362	1.7	1,835	2,498	1.8
1966	1,773	2,352	1.6	1,988	2,628	1.8
1967	1,800	2,327	1.5	1,900	2,434	1.6
1968	1,814	2,261	1.4	1,995	2,477	1.6
1969	1,758	2,121	1.2	1,974	2,283	1.4
1970	1,769	2,037	1.2	1,967	2,251	1.3
1971	1,706	1,974	1.0	1,860	2,133	1.1
1972	1,806	1,806	0.9	2,347	2,347	1.2
1973	2,133	1,636	0.8	2,704	2,175	1.0

SOURCES: U.S., Arms Control and Disarmament Agency, World Military Expenditures and Arms Trade 1963-1973 (1974), pp. 32 and 90; Institute for Strategic Studies, The Military Balance 1967-1968 (London: Institute for Strategic Studies, 1967), p. 48; Institute for Strategic Studies, The Military Balance 1973-1974 (London: Institute for Strategic Studies, 1973), p. 76; U.S., Department of Commerce, Bureau of the Census, Statistical Abstract of the United States 1974 (1974), p. 308.

VII. UNITED STATES' ARMS INDUSTRY

The thirty years which have elapsed since the end of World War II constitute a period of world power by the United States unequalled by any other nation in recorded history. A bi-product of this period of world power has been the nation's absolute supremacy in the field of arms production and international transfers. No other nation, to include the Soviet Union, can even remotely compare with the magnitude of the United States in this area. To provide the framework for a detailed analysis of the nation's arms sales activities, it is desirable to look at several events involving the United States since 1945. These events, some of which were of an international crisis nature while others were more in the form of trends, have shaped American foreign policy. The execution of these shifts in foreign policy has, more often than not, involved the use or provision of arms. A review of American foreign policy in the postwar era provides a concurrent overview of the growth and prominent role of the nation's arms industry. The second section of this final chapter concentrates directly upon the subject of United States arms transfers and related policies, controls, and trends. The chapter concludes with a detailed analysis of the United States' arms sales as viewed over the 1963-1973 period and in relationship to the nation's economy and export trade.

Exercising World Power

The United States emerged from World War II as the uncontestedly strongest nation in the world. Its war efforts in terms of manpower had far exceeded those of any of the allies and its advanced state of technology facilitated the development of the atomic bomb which had brought the Asian war to an earlier than expected conclusion. Additionally, and of central importance to this study, its advanced industrial base had provided weapons and war materials worth \$48.8 billion to some 46 nations during the conflict.⁹⁸ It thus became an almost automatic transition for the United States to assume the leadership of the immediate postwar era also. President Truman, at that point still new and relatively untested in office, turned his full energies toward the task of postwar leadership.

The solidarity among the Allied Powers, and more specifically between the United States and the Soviet Union, did not extend far into the postwar era. The first difficulties were experienced in deciding how to administer Germany after its surrender. Dexter Perkins, in The Evolution of American Foreign Policy (1966), summed up this first confrontation between the wartime allies.

The Western powers, in their own interest, had no desire for a weakened Germany, or any disposition to carry the economic burdens of a German people denied the opportunity for recovery. . . . As time went on and it became clear that they could not get immense gains from the West, Stalin and Molotov, his foreign minister, obviously came to the conclusion that it was best to keep Germany disunited, to build up Communist strength in the zone that they occupied, and to go it alone. By September 1946, it was evident that understanding was impossible.⁹⁹

Even though temporary agreements were reached on dividing the defeated nation and its capitol city of Berlin into four zones of occupation, Germany

was destined to remain the central point of United States-Soviet Union tensions for some twenty years.

In 1946 and 1947 two further developments took place which intensified the polarization of Superpower relations; the forced evacuation of Soviet Union troops from northern Iran and American aid to Greece and Turkey. In Cold War and Coexistence (1971), William E. Griffith offers an overview of these situations which represented the United States first actions under the Truman Doctrine.

Soviet reluctance to evacuate their troops from northern Iran (Azerbaijan) in 1946 led to something close to an ultimatum from Truman, which contributed to the troops being withdrawn. At the end of the war the British had forcibly suppressed a Communist-led attempt to take power in Greece. . . . By 1947 the British, in the first major sign of their postwar exhaustion, declared themselves unable to further carry the burden of aid to Greece and Turkey, and Truman took it over--thus making clear that the United States was determined, as the British had been, to keep the Soviets out of the Mediterranean, and, indeed, in the universality of the Truman Doctrine's rhetoric, to contain them throughout the world.¹⁰⁰

Aid to Greece and Turkey represented the first postwar American transfer of arms.

The Truman Doctrine originated in the President's message to the Congress on March 12, 1947, in which he asked for emergency aid to Greece and Turkey.¹⁰¹ In sweeping language he declared that the United States was ready to

help free peoples maintain their free institutions and their national integrity against aggressive movements that seek to impose on them totalitarian regimes. This is no more than a frank recognition that totalitarian regimes, imposed on free peoples, by direct or indirect aggression, undermine the foundations of international peace, and hence the security of the United States. I believe that it should be the policy of the United States to support free peoples that are resisting attempted subjugation by armed minorities or by outside pressures.¹⁰²

The Truman Doctrine of containment established the legitimacy of American military and political intervention throughout the entire postwar era.

By 1948 the Cold War had become a reality. The Western powers had combined their zones of Germany to facilitate the economic aid authorized by the Marshall Plan. This action, along with a currency reform initiated in West Germany, resulted in the Soviet Union's abandonment of their seat on the Allied High Commission and the blockade of the Western Sector of Berlin in 1948. Even though the United States and its western allies were successful in resupplying West Berlin by air, which resulted in the U.S.S.R.'s lifting of the blockade in 1949, this confrontation marked the first high point of tension between the former allies. It also necessitated a strengthening of American forces in Europe.

The Cold War atmosphere received further intensification in 1948 as the Communists succeeded in taking power in Czechoslovakia. Subsequent fears of Russian expansionism led to the Brussels Treaty in the same year. This agreement, among Britain, France, and the Benelux nations, laid the groundwork for the formation of NATO in April 1949. NATO required a further intensification of the American arms effort in Europe, both in the form of reinforcing its own armed forces stationed in Europe and in supplying additional arms to its West European allies. The Korean War pushed the nation further toward a wartime footing.

The outbreak of the Korean War in June 1950 signalled the next major American-Russian confrontation, even though by proxy on the part of the Soviet Union, who supplied the North Koreans with the necessary arms and war materials. President Truman reacted swiftly by providing an American ground force and emergency supplies to the South Koreans. The Korean War also brought about a redirectioning of the United States' foreign policy in Europe.

The Korean War caused a great fear to sweep through the leadership of the United States and Western Europe. William E. Griffith described it in these words:

For most Americans, and certainly for their government, the Russian-supported and Russian-supplied attack on South Korea was essentially a Soviet move, and it made dangerously likely a Soviet attack on Western Europe. . . . Nor was this view of the Korean War peculiar to Americans; its outbreak led to widespread alarm, for example, in West Germany, and the British and French governments were also seriously concerned. . . . This led directly to the establishment of the North Atlantic Treaty Organization (NATO), and, perhaps even more importantly, to the rearmament of West Germany.¹⁰³

These fears of Russian aggression in Western Europe resulted in a massive enlargement of the American arms effort in that area. Julius W. Pratt provides the following evaluation of the breadth of the American effort in Europe in the early 1950s.

. . . From October 1949 to the end of 1953, the United States supplied nearly \$6 billion worth of arms and military equipment to its European allies, as well as \$1.7 billion worth to other countries. The United States also increased its divisions stationed in Germany and Austria from two to six. . . .¹⁰⁴

By July 27, 1953, as the Korean War Armistice was signed, the United States' armed forces were deployed in large numbers in both Europe and Asia and the nation's arms manufacturers were supplying the armed forces of scores of allied nations as well as their own. These forces, which had been deployed under the policy of the Truman Doctrine, would generally remain in position under the policies of the new president--Dwight D. Eisenhower.

American-Russian tensions continued into the post-Korean War era under President Eisenhower and Stalin's successor, Nikita S. Khrushchev. The Soviet Union's suppression of uprisings in East Germany in 1953 and in Hungary in 1956, kept the NATO nations alert to the existent dangers. By 1958 Berlin had again become the main point of contention, with the Soviets

extending an ultimatum to the West concerning the official recognition of the East German government as the sole power in Berlin if the Western powers did not end their occupation of West Berlin.¹⁰⁵ Solidarity among the Western powers in the face of the Russian challenge caused Khrushchev to extend his deadline. A series of summit meetings were attempted over the next two years. They ended in failure on May 17, 1960, resulting from Khrushchev's reaction to the U-2 spy plane incident which had taken place over the Soviet Union earlier in the month. President Eisenhower presented his successor, John F. Kennedy, a tense European situation in January 1961.

American-Russian relations entered a new era in June 1961 as Kennedy and Khrushchev met for the first time, in Vienna.

Although the meeting was on the surface friendly and courteous, the aide-memoire which Khrushchev handed to the President resurrected the Berlin crisis in much the same terms as before and again with a six-month time limit. . . . In a nationwide broadcast, July 25, the President told the country: "We cannot and will not permit the Communists to drive us out of Berlin, either gradually or by force." Kennedy announced that he was asking Congress for a \$3.25 billion increase in the defense budget. . . . Congress gave the President what he asked for, and an additional 45,000 men were moved to Europe.¹⁰⁶

Berlin continued as the central point of tension between East and West until its final act of the 1960s--the building of the wall in August 1961. Again, the world watched as the two Superpowers appeared to be moving on a collision course. An army battle-group stationed in West Germany was dispatched over the autobahn access route into West Berlin as a test of the Russian's resolve to again blockade the city and also as a symbol of American determination not to desert its responsibility to the West Berliners. As crucial as the Berlin Wall crisis appeared at the time, it paled in comparison to the final Cold War confrontation of the following year--the Cuban missile crisis.

The most tense, and perhaps therefore, the last true crisis which arose between the Superpowers occurred in October 1962. American intelligence had detected offensive Soviet missiles being installed in Cuba.

Graham T. Allison, in Essence of Decision: Explaining the Cuban Missile Crisis (1971), quotes President Kennedy's remarks concerning the gravity of the crisis.

The Cuban missile crisis was a seminal event. History offers no parallel to those thirteen days of October 1962, when the United States and the Soviet Union paused at the nuclear precipice. Never before had there been such a high probability that so many lives would end suddenly. Had war come, it could have meant the death of 100 million Americans, more than 100 million Russians, as well as millions of Europeans. Beside it, the natural calamities and inhumanities of earlier history would have faded into insignificance.¹⁰⁷

The Cuban missile crisis, similar to the event of the Berlin Wall, was not an occasion which precipitated an immediate increase in the production and movement of American arms. Instead, it illustrates the level of international tensions in the early 1960s which fueled the arms race between the two Superpowers. The Cuban missile crisis is generally cited as having demonstrated the severe dangers of continuation of the Cold War atmosphere to both of the Superpowers. It is generally agreed that it marked the beginning of the decline of the Cold War. Meanwhile, America's involvement in Vietnam continued unabated.

Before his assassination in November 1963, President Kennedy had authorized the increase of American military advisors in Vietnam to be 16,500 by year's end. American aid to the South Vietnamese government, which for the period 1955-1962 exceeded \$2 billion, rose to \$500 million annually by 1963. By January 1965, President Johnson had increased the American presence in Vietnam to 23,000.¹⁰⁸ By 1969, as Richard M. Nixon became President, the American force level in Vietnam had reached 542,000,

the South Vietnamese armed forces were approximately 700,000, and several divisions and elements from other SEATO nations were participating as well.¹⁰⁹ The vast majority of these armed forces were equipped with American arms. Under President Nixon's phased reduction of American presence in Indo China in the early 1970s, American foreign policy emphasis moved again to encompass the Middle East.

While American foreign policy focus had been on Southeast Asia during the late 1960s, a constant state of tension between the new postwar state of Israel and its Arab neighbor states had erupted into open warfare in the Six Day War of 1967. As the Soviet Union rushed military aid to its Arab client states, Israel turned to the United States for military assistance. Echoes of two decades past, concerning keeping Soviet influence out of the Mediterranean, guided the United States' support of Israel. Thus one finds, again, a battle by proxy taking place between the Superpowers--this time in the Middle East, to include the Arab-Israeli War of 1973. As it is beyond the purpose of this review to delve into the detailed involvement of the United States in each of these confrontations, but rather to draw attention to them only as they affected the United States' arms industry, it will suffice to state that American military assistance to Israel reached mammoth heights by the autumn of 1973. Many months were to elapse before the reserve stocks of the United States Army in Europe were to be replaced after their emergency depletion in support of Israel's war losses in 1973.

In summary, this review has touched upon those critical events which held center stage in influencing the United States' foreign policy and, concurrently, its production, use, and distribution of arms since World War II. From aid to Greece and Turkey under the Truman Doctrine in 1947, American arms have followed the nation's foreign policy into every continent

during the postwar period, returning to the Mediterranean area under the Nixon Doctrine in the most current example. Another trend which threads its way throughout the Cold War era and on into the late 1960s is the almost continuous arms race between the Superpowers, as the Soviet Union sought to achieve strategic weapons parity with the United States while the latter sought to maintain its superiority. In view of the United States' worldwide involvements over this thirty year period it appears small wonder that its arms reached such preponderant proportions. The study will now move to a concentration upon American arms as a single entity during this historic period.

Arms Policies, Controls, and Trends

The expansion of American arms sales to their present level dates only from 1961, even though the policy was gestating for the previous twenty years. The first large-scale transfers of American arms to allied powers were a result of the Lend-Lease Act of March 1941. The Cold War atmosphere of the late 1940s and a vast surplus of weapons from World War II facilitated the transfer of large shipments of arms in the immediate postwar era under the newly established Military Assistance Program (MAP). In 1947 Greece and Turkey were the first recipient nations. John Stanley and Maurice Pearton offer a comparison of the magnitude of those early transfers.

During the first five years of MAP (FY 1952-FY 1956) American equipment was given away at a prodigious average of \$2.2 billion per year. The volume of weapons implied by this figure can be better appreciated when it is remembered that the value of American arms sales are now hardly \$2 billion a year, and that the cost of weapons today is at least four times greater in money terms than in the early 1950s.¹¹⁰

They continue with a comparison of grant aid transfers in relation to sales in the late 1950s.

. . . Though the vast bulk of American arms transfers in the early 1950s took the form of grant aid, the possibility of sales rather than gifts was not entirely ignored. Whilst MAP was averaging \$2.2 billion annually from FY 1952-FY 1956, sales were ticking over at \$0.2 billion each year. However, during the next five years, FY 1957-FY 1961, sales had increased to \$0.7 billion a year as against MAP grant aid of \$1.3 billion.¹¹¹

The Mutual Defense Assistance Act of 1949 authorized the MAP under which the early transfers of arms were accomplished. This original law was further amended through the Mutual Security Acts of 1951 and 1954, and the Foreign Assistance Act of 1961. Under the latest act, responsibility for the overall coordination of the MAP with the foreign policy of the United States is vested in the Department of State. The Department of Defense, the Agency for International Development, and the Joint Chiefs of Staff also have responsibilities in the conduct of the program. The Department of Defense's Military Assistance and Advisory Groups (MAAGs), located in American embassies in each nation receiving MAP equipment, were given the responsibility of conducting the MAP program, to include the Foreign Military Sales Program as well.¹¹²

Even though the MAP program has continued since 1961, American policy concerning the transfer of arms underwent a dramatic shift in that year. The Kennedy Administration became alarmed with the United States' balance of payment deficit which totalled \$3 billion in 1961. After President Kennedy's decision to, "Urge the purchase of the newer weapons and weapons systems by those of our allies who are financially capable of doing so"; the Joint Chiefs of Staff recommended the formation of a specific arms sales organization within the Pentagon. Thus in October 1961 the Office for

International Logistics Negotiations (ILN) was established for this purpose and Henry Kuss was placed at its head.¹¹³

The following decade witnessed the successful efforts of the ILN in moving the bulk of arms transfers from grant aid to sales.

. . . From FY 1952-61 the value of military exports was \$22 billion, but of this \$17.5 billion was grant aid and only \$4.5 billion was sales. However, the stated objective for the period FY 1962-71 was at least to maintain the total money value of military exports by boosting sales from \$4.5 to \$15 billion at a time when the aid programme was sharply in decline. . . . The Pentagon sales teams exceeded this target comfortably, sales up to July 1970 alone reached some \$17.5 billion out of total military exports worth some \$24.5 billion.¹¹⁴

As singularly convincing as these dollar figures may appear, that American arms transfers were strongly predicated upon economic considerations, it is equally important to consider the government's foreign policy considerations concerning the export of arms.

In 1958 President Eisenhower was concerned with the national security advantages actually being acquired through the MAP program. In November he appointed a committee to look into all aspects of the nine year old program. In order to assure receiving an impartial and critical evaluation of the existing program, he selected a distinguished group from a variety of backgrounds, including representatives from the business world and the academic community.¹¹⁵ In their report to the President the study group concluded:

The Mutual Security Program is now and will remain an essential tool of foreign policy. Accordingly, the Committee proposes that the Congress and the Executive Branch take the necessary legislative and administrative steps to put the Mutual Security Program on a continuing basis. . . .¹¹⁶

Under the Nixon Doctrine of the 1970s the transfer of arms received even further emphasis as an instrument of foreign policy. In his annual

report to the Congress in 1971, Secretary of State Rogers emphasized the transfer of arms rather than the use of American forces.

. . . The Nixon Doctrine proposes an adjustment in both the security role and the responsibilities that the United States expects to assume in the years immediately ahead. What we seek is a reduction in military presence in certain areas, while at the same time helping our partners to develop their own self-defense capabilities. The two parts of the Nixon Doctrine are interdependent: as allies improve their defense posture, the threshold at which U.S. forces are likely to be called upon for support under existing treaty commitments will be correspondingly raised.¹¹⁷

Arms control by the United States is accomplished through the Office of Munitions Control in the State Department. This office processes over 30,000 license applications per year from the 1,400 munitions firms in the United States which must be registered with it by law. Those applications of a questionable nature are passed to the State/Defense Coordinating Committee. This committee consists of high-ranking officials from the State Department, Department of Defense, Agency for International Development, Arms Control and Disarmament Agency, and the Treasury Department. Those applications which cannot be resolved by the committee are forwarded to the Under Secretary of State for Political Affairs and, if necessary, to the Secretary of State and the President for final resolution. Thus one finds that the controls prohibit the possibility of arms export licenses being issued by one department over the opposition of another without a decision being taken at the highest political level.¹¹⁸

In overviewing the United States' arms exports since World War II, trends appear both in the methods of transfers and recipient nations by time periods. Based upon the necessity of eliminating balance of payment deficits in the early 1960s, the method of transfers moved from grant aid to sales. During the same time period NATO Europe was the principal recipient of American arms. Later in the decade the emphasis on direction of

transfers moved to Southeast Asia. The Middle East now maintains the location of primary importance for American arms. Table 11 shows the larger recipients of American arms over the period 1963-1973.

TABLE 11

UNITED STATES' ARMS EXPORTS BY RECIPIENT COUNTRIES--1963-1973
(\$ current millions)

Ethiopia.....114	Denmark.....192	Ecuador.....32
Libya.....72	France.....429	Guatemala.....29
Morocco.....65	Germany.....2,969	Mexico.....21
Nigeria.....11	Greece.....792	Nicaragua.....14
South Africa.....24	Italy.....873	Paraguay.....15
Tunisia.....25	Netherlands.....274	Peru.....83
Zaire.....49	Norway.....433	Uruguay.....27
Burma.....42	Portugal.....49	Venezuela.....107
Cambodia.....387	Turkey.....1,353	Iran.....1,310
China, Rep.....1,066	Britain.....1,563	Iraq.....18
Indonesia.....91	Austria.....65	Israel.....1,274
Japan.....673	Spain.....560	Jordan.....279
South Korea.....2,624	Sweden.....100	Lebanon.....16
Laos.....685	Switzerland.....162	Saudi Arabia.....348
Malaysia.....34	Argentina.....169	Canada.....676
Philippines.....232	Bolivia.....27	Australia.....737
Thailand.....437	Brazil.....232	New Zealand.....104
South Vietnam...6,948	Chile.....89	Afghanistan.....256
Belgium.....201	Colombia.....85	India.....88
Singapore.....42	Dominican Rep.....24	Pakistan.....160

SOURCE: U.S., Arms Control and Disarmament Agency, World Military Expenditures and Arms Trade 1963-1973 (1974), pp. 67-71.

NOTE: Only those nations receiving \$10 million or more are shown.

Finally, even though the balance of payment advantages accrued through the sale of arms is not to be dismissed, the government maintains the position that arms transfers remain primarily a tool of foreign policy. A detailed analysis of the nation's arms sales in relationship to the GNP and total exports will now be presented in the last section of this chapter.

Arms Sales and the Economy--1963-1973

The GNP of the United States more than doubled, in current dollars, between 1963 and 1973, moving from \$590.5 to \$1,294.9 billion. As a matter of comparison, the United States' 1973 GNP was nearly twice the combined GNPs (\$775.7 billion) of the three West European nations included in the study. Over the same period the nation's exports more than tripled, increasing from \$23.1 to \$70.2 billion. Total exports, as a percentage of the GNP, moved from 3.9 to 5.5 percent.

Arms exports increased nearly five-fold over the eleven year period from \$1.2 to \$5 billion per year. The most significant aspect of this portion of the data centers on the percentage of total exports represented by arms exports. Total arms exports of \$1.2 billion in 1963, accounted for 5.2 percent of the nation's exports. As exports increased over the period the rate of increase in arms exports, after 1964, was more accelerated. This resulted in a total proportional relationship of 9.3 percent at the height of the Vietnam Conflict in 1968. By 1973 it had regressed to 7.1 percent, which is of comparative significance in relation to the same data seen in the study of the European nations. Annual average exports for the eleven year period were \$2.7 billion. These data covering the United States' GNP, total exports, and arms exports are given in Table 12. The next step in this analysis looks at domestic arms sales, both individually and in combination with exports, to acquire the total relationship with the nation's economy.

Domestic arms sales over the 1963-1973 period present an unusual pattern due to the Vietnam War. Sales in 1963 were at \$16.7 billion and moved to a high of \$24.2 billion in 1969. However, by 1973 they had fallen

TABLE 12

UNITED STATES'
GNP, TOTAL EXPORTS, AND ARMS EXPORTS--1963-1973
(\$ millions in current and constant 1972)

Year	GNP		Total Exports		Arms Exports		
	current	constant	current	% of GNP	current	constant	% exports
1963	590,500	805,112	23,104	3.9	1,198	1,633	5.2
1964	632,400	849,932	26,300	4.2	1,124	1,509	4.3
1965	684,900	902,739	27,189	4.0	1,490	1,964	5.5
1966	749,900	961,694	29,998	4.0	1,887	2,420	6.3
1967	793,900	986,518	31,243	3.9	2,232	2,774	7.1
1968	864,200	1,032,518	34,199	4.0	2,685	3,208	7.9
1969	930,300	1,060,339	37,462	4.0	3,497	3,986	9.3
1970	977,100	1,055,707	42,590	4.4	3,117	3,368	7.3
1971	1,054,900	1,158,499	43,492	4.1	3,378	3,492	7.8
1972	1,158,000	1,158,000	48,979	4.2	4,102	4,102	8.4
1973	1,294,900	1,226,322	70,233	5.5	5,018	4,752	7.1

SOURCES: U.S., Arms Control and Disarmament Agency, World Military Expenditures and Arms Trade 1963-1973 (1974), pp. 61 and 119; United Nations, Department of Economic and Social Affairs, Statistical Office, Statistical Yearbook 1974 (1975), pp. 408-9; United Nations, Department of Economic and Social Affairs, Statistical Office, Statistical Yearbook 1969 (1970), pp. 370-1.

to \$16.3 billion, which, in considering the use of current dollars, was even below the level of sales in 1963. In more realistically viewing the trend in constant 1972 dollars, domestic arms sales declined from \$22.7 to \$15.4 billion over the period. Consequently, it is not surprising that these sales as a percentage of the GNP also declined from a high of 2.8 percent in 1963 to 1.3 percent in 1973. These data are shown in Table 13.

The last and most important step in the analytical process (the results are also given in Table 13) combined exports and domestic sales to present the full relationship to the economy. Total arms sales in 1963 were \$17.9 billion, or 3 percent of the GNP, which was proportionally significant.

TABLE 13

UNITED STATES'
DOMESTIC AND EXPORT ARMS SALES--1963-1973
(\$ millions in current and constant 1972)

Year	Domestic Arms Sales			Domestic and Export Sales		
	current	constant	% of GNP	current	constant	% of GNP
1963	16,664	22,721	2.8	17,862	24,354	3.0
1964	14,767	19,823	2.3	15,891	21,332	2.5
1965	12,350	16,279	1.8	13,840	18,243	2.0
1966	15,820	20,288	2.1	17,707	22,708	2.4
1967	20,257	25,171	2.5	22,489	27,945	2.8
1968	23,233	27,758	2.7	25,918	30,966	3.0
1969	24,218	27,603	2.6	27,715	31,589	3.0
1970	20,833	22,509	2.1	23,950	25,877	2.5
1971	17,815	18,416	1.7	21,193	21,908	2.0
1972	16,922	16,922	1.5	21,024	21,024	1.8
1973	16,306	15,440	1.3	21,324	20,192	1.6

SOURCES: U.S., Arms Control and Disarmament Agency, World Military Expenditures and Arms Trade 1963-1973 (1974), pp. 61 and 119; U.S., Department of Commerce, Bureau of the Census, Statistical Abstract of the United States 1974 (1974), p. 308; U.S., Department of Commerce, Bureau of the Census, Statistical Abstract of the United States 1969 (1969), p. 245.

However, it is in this final framework that one sees how the rate of annual GNP acceleration moved beyond the annual rate of arms sales. The Vietnam War accounted for a four year proportional rise from the low point of 2 percent in 1965. As the intensity of the Vietnam War declined so did the proportional percentage of arms sales to the GNP. Thus by 1973, total arms sales represented only 1.6 percent of the nation's GNP. The major findings will now be compared and summarized in the conclusion.

CONCLUSIONS

This trend analysis of the arms sales of these four nations has resulted in six findings. First, annual arms exports have truly increased in France and the United States over the 1963-1973 period. However, in viewing the increase in current dollars the nearly five-fold rate of increase is grossly misleading since such an evaluation is based upon the 1973 dollar being of the same value as in 1963. In the more realistic approach allowed by use of the constant dollar, one finds that the degree of increase of France's and the United States' arms exports is closer to four and three-fold, respectively. German and British arms exports fluctuated throughout the period without any appreciable increase except in Britain in 1972-1973.

The second finding centered on the percentage relationship between arms exports and total national exports. The increase in the rate of arms exports was slightly steeper than the annual increase in total exports in France and the United States. The rate moved from 1.30 to 1.61 in France and from 5.2 to 7.1 percent in the United States. In Germany and Britain the relative percentage fell from 0.48 to 0.04 and 1.97 to 1.09 percent, respectively.

The third finding disclosed that all four nations decreased their domestic arms purchases over the eleven year period. Even in viewing this data in current dollars all four nations had decreased their local arms purchases by the 1970s. The constant dollar relationship reveals Germany

having decreased 51, Britain 38, France 41, and the United States 32 percent. With this information in mind, and recalling the swift acceleration of all the national GNPs over the period, it comes as no surprise that the fourth finding discloses that domestic arms sales as a percentage of the GNPs, fell drastically in all four cases. In 1963 the average domestic arms sales relationship to the four national GNPs stood at 2.2 percent. By 1973 the average had fallen to 0.9 percent. This factor plays an important role in the results of the combined exports and domestic data.

The fifth finding was achieved by combining exports and domestic sales to arrive at total sales. The sixth finding, and the main result of the study, is the percent of the GNP represented by arms sales in each of the four countries. For ease of comparison Table 14 contains this information brought forward from the appropriate tables presented earlier in the study.

TABLE 14

WEST GERMANY, BRITAIN, FRANCE, AND THE UNITED STATES COMPARISON OF
TOTAL ARMS SALES AS A PERCENTAGE OF THE GNP--1963-1973
(\$ millions current)

Year	Germany		Britain		France		United States	
	sales	% of GNP	sales	% of GNP	sales	% of GNP	sales	% of GNP
1963	1,451	1.5	2,271	2.7	1,917	2.3	17,862	3.0
1964	1,623	1.5	2,054	2.2	1,920	2.1	15,891	2.5
1965	1,372	1.2	1,996	2.0	1,835	1.8	13,840	2.0
1966	1,183	1.0	2,015	1.9	1,988	1.8	17,707	2.4
1967	1,373	1.2	1,866	1.7	1,900	1.6	22,489	2.8
1968	1,172	0.9	1,464	1.4	1,995	1.6	25,918	3.0
1969	1,322	0.9	1,439	1.3	1,974	1.4	27,715	3.0
1970	1,216	0.7	1,668	1.4	1,967	1.3	23,950	2.5
1971	1,171	0.5	1,964	1.4	1,860	1.1	21,193	2.0
1972	1,399	0.5	2,319	1.5	2,347	1.2	21,024	1.8
1973	1,759	0.5	2,258	1.3	2,704	1.0	21,324	1.6

Even in current dollars, as shown in Table 14, each nation's total arms sales increased only marginally (Britain's actually decreased). The relatively higher exports of France and the United States do also not add significantly when combined with domestic sales in the presentation of the total.

The most significant finding in this study focuses on the uniform decrease of the percentage of arms sales in relation to the GNPs over the period of 1963-1973. From an average representation of 2.4 percent in 1963, this factor fell to 1.1 percent by 1973. Thus one finds that arms sales by these four Western nations in 1973 were playing a much less significant role, in view of the entire economies, than was the case in the early 1960s. Thus in view of the data it is possible to state that Western arms sales, as a whole, have not increased in relationship to the arms-producing economies since the decline of the Cold War, but have instead significantly declined. Let us now review the compatibility of this general trend with the foreign policy of the four nations concerned in an attempt to arrive at an answer to the second part of the central research question.

The trends uncovered in the economic analysis appear to be consistent with the stated and implied foreign policy objectives of Germany, France, and the United States. The consistency and goal attainment appear to be less certain in the case of Britain. A closer look at each country and the foreign policy relationship focuses first on Germany.

Germany's national objectives of acquiring arms production technology, increased arms acquisition independence, and international military cooperation are being achieved. Increasing arms exports are not a necessary outcome of the government's arms production and sales policy. This is consistent with both the decrease in arms exports and domestic sales

and will most probably continue at an ever-decreasing proportional rate. Still strongly cognizant of the nation's historical militaristic image, and comforted by the most stable economy in Western Europe, it appears highly unlikely that Germany's arms sales policy will shift to a more aggressive stance in the foreseeable future. A different picture unfolds as one views Britain's related situation.

Britain's arms sales activities have generally fallen short of the nation's stated and implied objectives. Even though a high degree of arms production independence has been maintained, the use of arms as both a tool of foreign policy influence and a means of achieving a balance of payment equilibrium have not been entirely effective. Britain's ever-increasing economic difficulties could result in a renewed emphasis upon the export of arms more directly for the purpose of economic advantage.

Both France and the United States have experienced increased arms exports and decreased total sales, which appear consistent with their national policies. Even though France's economic motivations are construed as receiving stronger emphasis than is the case in the United States, both nations rely heavily upon arms exports to implement foreign policy ends. The state of international affairs is not conducive to decreases in the arms exports of these four Western nations, as a whole, in the contemporary setting.

FOOTNOTES

1. "The Arms Dealers: Guns for Everyone," Time Magazine, March 3, 1975, p. 34.

2. "U.S. Arms-Sale Rise Stirs Capital Concern," New York Times, October 19, 1975, p. 1.

3. "Arms Lobby Relies on Varied Sources," New York Times, October 20, 1975, p. 52.

4. It seems appropriate to point out that I am a soldier whose career encompasses a recent tour of duty at the American Embassy in Bonn (1970-1973) which placed me squarely into a typical military-industrial complex setting as the United States' principal representative for Government liaison concerning the sales of armor and infantry armaments to Germany. This personal and related experience has proven most helpful in addressing the basic issues involved in this study.

5. C. Wright Mills, The Power Elite (New York: Oxford University Press, 1956), pp. 5-6.

6. Ibid., p. 276.

7. Ibid., p. 361.

8. Harold D. Lasswell, National Security and Individual Freedom (New York: McGraw-Hill Book Company, Inc., 1950), pp. 23-7.

9. Bruce Catton, The War Lords of Washington (New York: Harcourt, Brace and Company, 1948), pp. 248-57.

10. An excerpt from President Eisenhower's Farewell Address on January 17, 1961, quoted in Tristram Coffin's The Passion of the Hawks (New York: Macmillan Company, 1964), p. 158.

11. John M. Swomley, Jr., The Military Establishment (Boston: Beacon Press, 1964), p. 110.

12. Sidney Lens, The Military-Industrial Complex (Philadelphia: Pilgrim Press and The National Catholic Reporter, 1970), p. 1.

13. Fred J. Cook, The Warfare State (New York: Macmillan Company, 1962), p. 350.

14. Adam Yarmolinsky, The Military Establishment (New York: Harper & Row, Publishers, 1971), pp. 237-395, and Leonard S. Rodberg and Derek Shearer, eds., The Pentagon Watchers (New York: Doubleday & Company, Inc., 1970), pp. 225-372.
15. Lens, p. 126.
16. Seymour Melman, Pentagon Capitalism: The Political Economy of War (New York: McGraw-Hill Book Company, 1970), pp. 97-8.
17. Ibid.
18. Lens, pp. 104-5.
19. Erwin Knoll and Judith Nies McFadden, eds., American Militarism 1970 (New York: The Viking Press, 1969), p. 3.
20. J. W. Fulbright, The Pentagon Propaganda Machine (New York: Liveright Publishing Company, 1970), pp. 141-3.
21. James L. Clayton, The Economic Impact of the Cold War: Sources and Readings (New York: Harcourt, Brace & World, Inc., 1970), p. 3.
22. A term adopted by the critics of the 1960s from the works of H. C. Engelbrecht and F. C. Hanighen, Merchants of Death (New York: Dodd, Mead & Company, 1934).
23. Quoted by Ralph E. Lapp, The Weapons Culture (New York: W. W. Norton & Company, Inc., 1968), pp. 170-1.
24. Ibid., p. 171.
25. Ibid., p. 181.
26. Melman, pp. 92-3.
27. "France: Arms for Sale," Newsweek, February 14, 1972, pp. 36-9.
28. "Now: A Worldwide Boom in Sales of Arms," U.S. News & World Report, January 22, 1973, pp. 50-4.
29. "No Recession in the Arms Business: Weapons for Sale," New Republic, March 23, 1974, pp. 21-3. Also for further pertinent articles appearing in the 1974/1975 period see "Armaments: Global Growth in Guns," Time, March 11, 1974, pp. 84-7; "The Pentagon Bleeds the Third World," The Progressive, June 1974, pp. 21-6; "The Political Economy of Arms Sales," Society, September-October, 1974, pp. 41-9; and "America on Top among World's Arms Peddlers," U.S. News & World Report, January 13, 1975, pp. 24-5.
30. Steven Rosen, Testing the Theory of the Military-Industrial Complex (Lexington, Mass.: D. C. Heath and Company, 1973), p. 1.

31. Engelbrecht, pp. 12-4.
32. Ibid., pp. 70-4. For a detailed coverage of the Krupp dynasty see William Manchester, The Arms of Krupp: 1587-1968 (Boston: Little, Brown and Company, 1968).
33. Engelbrecht, pp. 121-39.
34. Ibid., pp. 109-10.
35. George Thayer, The War Business: The International Trade in Armaments (New York: Avon Books, 1969), p. 26.
36. Engelbrecht, p. 155.
37. John Stanley and Maurice Pearton, The International Trade in Arms (New York: Praeger Publishers, 1972), p. 18.
38. Ibid., pp. 18-9.
39. Thayer, p. 32.
40. Ibid., pp. 33-4.
41. Frank Barnaby, Dir., SIPRI Yearbook 1974 (Cambridge, Mass.: The MIT Press, 1974), p. 137.
42. U.S., Arms Control and Disarmament Agency, World Military Expenditures and Arms Trade 1963-1973 (1974), p. 6.
43. Lawrence Martin, Arms and Strategy (New York: David McKay Company, Inc., 1973), pp. 278-9.
44. Barnaby, p. 132.
45. U.S., Arms Agency, World Military Expenditures, pp. 1-2.
46. Thayer, p. 35.
47. U.S., Arms Agency, World Military Expenditures, p. 3.
48. Ibid., p. 67.
49. Fritz Vilmar, "The Military-Industrial Complex in West Germany and the Consequences for Peace Policy," Journal of Peace Research 3 (Special Issue, 1973): 251-7. For another view of the subject by a West German writer, see Ulrich Albrecht's "The Cost of Armamentism," Journal of Peace Research 3 (Special Issue, 1973): 265-83.
50. Emile Benoit and Kenneth E. Boulding, eds., Disarmament and the Economy (New York: Harper & Row, Publishers, 1963), p. 225.

51. U.S., Arms Agency, World Military Expenditures, pp. 5-9 and 10-2. Gross National Product (GNP). The reported GNP represents the total output of goods and services produced by residents of a country and valued at market prices ultimately paid by the consumer. Military Expenditures (Milex) are defined to include current and capital expenditures to meet the needs of the armed forces. They include research and development, military stockpiling, military assistance to foreign countries, and retirement pensions of career personnel as well as day-to-day personnel and maintenance needs. Arms Exports (also synonymous with international arms sales and arms transfer) represents the international transfer under grant, credit, or commercial sales terms of military equipment usually referred to as conventional, including weapons of war, parts therefore, ammunition, support equipment, and other commodities considered primarily military in nature. The data in this study do not include arms to insurgents and terrorist groups. Current Dollars represent the actual amounts spent in any given year and do not include consideration of inflation either before or after the actual purchase period. Constant Dollars represent the proportional amount spent at any given point in time based upon a readjustment allowing for inflation rates. A base year is selected from which the annual rate of inflation is either added or subtracted to show the comparative value of the monetary instrument in previous or future years in relation to the base year.

52. Michael Balfour, West Germany (New York: Praeger Publishers, 1968), p. 141.

53. Werner Feld, Reunification and West German Soviet Relations (The Hague: Martinus Nijhoff, 1963), p. 17.

54. Balfour, p. 172.

55. Frank Vogl, German Business after the Economic Miracle (New York: Halstead Press, 1973), pp. 1-2.

56. Ludwig Erhard, Germany's Comeback in the World Market (New York: Macmillan Company, 1954), p. 21.

57. Federal Republic of Germany, The Bulletin (New York: Press and Information Office, No. 16, Vol. 21, 1973), p. 115.

58. Federal Republic of Germany, The Bulletin (New York: Press and Information Office, No. 39, Vol. 22, 1974), pp. 297-8.

59. Federal Republic of Germany, The Bulletin (New York: Press and Information Office, No. 12, Vol. 23, 1975), p. 83.

60. Klaus Boelling, Republic in Suspense (New York: Praeger Publishers, 1964), p. 30.

61. James L. Richardson, Germany and the Atlantic Alliance (Cambridge: Harvard University Press, 1966), p. 19.

62. U.S., Arms Agency, World Military Expenditures, p. 69.

63. Federal Republic of Germany, White Paper 1973/1974: The Security of the Federal Republic and the Development of the Federal Armed Forces (Bonn: 1974), p. 184.

64. Martin, p. 260.

65. Ibid., p. 254.

66. Stanley and Pearton, p. 16.

67. Ibid., p. 229.

68. Dollar figures were rounded to the nearest million. The trade data taken from the Statistical Yearbooks include the movement of all commodities and services except gold and pure capital.

69. Domestic arms sales figures were achieved through a three-step procedure. The percentage of the total defense budget used for military procurement was extracted, by year, from the three German White Papers. Second, the percentages were then applied to the military expenditures found in the USACDA document to determine the total amount spent on procurement. Third, total arms imports by year, also taken from the USACDA document, were then subtracted from the total procurement figure. The remainder represents that amount of procurement made domestically. This same procedure is used in establishing the domestic sales for Britain, France, and the United States also.

70. William C. Mallalieu, British Reconstruction and American Policy 1945-1955 (New York: The Scarecrow Press, 1956), p. 2.

71. Ibid., p. 33.

72. Ibid., pp. 68-71.

73. C. M. Woodhouse, British Foreign Policy since the Second World War (London: Hutchinson & Co., 1961), pp. 77-85.

74. Ibid., p. 87.

75. U.S., Arms Agency, World Military Expenditures, p. 61.

76. Max Beloff, The Future of British Foreign Policy (London: Secker & Wartburg Ltd., 1969), p. 53.

77. Sir Alec Cairncross, ed., Britain's Economic Prospects Reconsidered (Albany: State University of New York Press, 1969), p. 67.

78. Anthony Haigh, Congress of Vienna to the Common Market: British Foreign Policy 1815-1972 (London: Harrap, 1973), pp. 168-9.

79. "Europe was Waiting for Ford with a Hard-Luck Story," U.S. News & World Report (November 24, 1975), p. 58.

80. Martin, p. 259.

81. Stockholm International Peace Research Institute, The Arms Trade with the Third World (Stockholm: Almqvist & Wiksell, 1971), pp. 27-33.

82. Ibid., pp. 32-4.

83. Martin, p. 259.

84. Stanley and Pearton, pp. 14-5.

85. Herbert Tint, France since 1918 (London: B. T. Batsford Ltd., 1970), pp. 106-9.

86. Ibid., pp. 104-6.

87. T. N. Dupuy et al., The Almanac of World Military Power (New York: R. R. Bowker, 1974), pp. 85-8.

88. John E. Talbott, France since 1930 (New York: The New York Times Co., 1972), p. 27.

89. Ibid., p. 37.

90. "Europe Waiting for Ford," p. 58.

91. Stanley and Pearton, p. 94.

92. Martin, p. 259.

93. Ibid., p. 260.

94. Stanley and Pearton, pp. 30-2.

95. U.S., Arms Agency, World Military Expenditures, p. 67.

96. Ibid., p. 32.

97. Institute for Strategic Studies, The Military Balance 1967-1968 (London: Institute for Strategic Studies, 1967), p. 48, and Institute for Strategic Studies, The Military Balance 1973-1974 (London: Institute for Strategic Studies, 1973), p. 76.

98. Thayer, pp. 33-4.

99. Dexter Perkins, The Evolution of American Foreign Policy (London: Oxford University Press, 1966), p. 110.

100. William E. Griffith, Cold War and Coexistence: Russia, China, and the United States (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1971), pp. 36-7.

101. Lawrence S. Kaplan, Recent American Foreign Policy: Conflicting Interpretations (Homewood, Ill.: The Dorsey Press, 1972), p. 51.

102. Perkins, p. 111.

103. Griffith, p. 50.

104. Julius W. Pratt, A History of United States Foreign Policy (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1972), p. 446.

105. Ibid., p. 452.

106. Ibid., pp. 454-5.

107. Graham T. Allison, Essence of Decision: Explaining the Cuban Missile Crisis (Boston: Little, Brown and Company, 1971), p. 1.

108. Pratt, pp. 498-501.

109. Ibid., pp. 502-3.

110. Stanley and Pearton, p. 86.

111. Ibid., pp. 88-9.

112. U.S., Department of Defense, Military Assistance and Foreign Military Sales Facts (1967), pp. 2-4.

113. Stanley and Pearton, pp. 87-8.

114. Ibid., p. 91.

115. Presidential Committee Report, The United States Military Assistance Program (1959), pp. 189 and 193.

116. Ibid., p. 15.

117. U.S., Department of State, United States Foreign Policy 1969-1970; A Report of the Secretary of State (1971), p. 167.

118. Stanley and Pearton, pp. 32-6.

BIBLIOGRAPHY

Books

- Allison, Graham T. Essence of Decision: Explaining the Cuban Missile Crisis. Boston: Little, Brown and Company, 1971.
- Balfour, Michael. West Germany. New York: Praeger Publishers, 1968.
- Barnaby, Frank, Dir. SIPRI Yearbook 1974. Cambridge, Mass.: The MIT Press, 1974.
- Bartlett, C. J. The Long Retreat: A Short History of British Defence Policy, 1945-1970. London: Macmillan Company, 1972.
- Beloff, Max. The Future of British Foreign Policy. London: Secker & Wartburg Ltd., 1969.
- Benoit, Emile, and Boulding, Kenneth E., eds. Disarmament and the Economy. New York: Harper & Row, Publishers, 1963.
- Boelling, Klaus. Republic in Suspense. New York: Praeger Publishers, 1964.
- Boulding, Kenneth E., ed. Peace and the War Industry. U.S.A., only: Trans-action Books, 1970.
- Brandt, Willie. The Ordeal of Coexistence. Cambridge: Harvard University Press, 1965.
- Cairncross, Alec, ed. Britain's Economic Prospects Reconsidered. Albany: State University of New York Press, 1970.
- Catton, Bruce. The War Lords of Washington. New York: Harcourt, Brace and Company, 1948.
- Clayton, James L. The Economic Impact of the Cold War: Sources and Readings. New York: Harcourt, Brace and World, Inc., 1970.
- Coffey, Peter. The Social Economy of France. New York: St. Martin's Press, 1973.
- Coffin, Tristram. The Passion of the Hawks. New York: Macmillan Company, 1964.
- Cook, Fred J. The Warfare State. New York: Macmillan Company, 1962.

- Dupuy, T. C., and Andrews, A. C., eds. The Almanac of World Military Power. New York: R. R. Bowker, 1974.
- Economic Intelligence Unit. The Economic Effects of Disarmament. London: The Economic Intelligence Unit, 1963.
- Ekirch, Arthur A., Jr. Ideas, Ideals, and American Diplomacy: A History of Their Growth and Interpretations. New York: Appleton-Century-Crofts, 1966.
- Engelbrecht, H. C., and Hanighan, F. C. Merchants of Death. New York: Dodd, Mead & Co., 1934.
- Erhard, Ludwig. Germany's Comeback in the World Market. New York: Macmillan Company, 1954.
- Feld, Werner. Reunification and West German Soviet Relations. The Hague: Martinus and Nijhoff, 1963.
- Fleming, D. F. The Cold War and Its Origins. New York: Doubleday, 1961.
- Frank, Lewis A. The Arms Trade in International Relations. New York: Praeger Publishers, 1969.
- Fulbright, J. W. The Pentagon Propaganda Machine. New York: Liveright Publishing Company, 1970.
- Goodman, Elliot R. The Fate of the Atlantic Community. New York: Praeger Publishers, 1975.
- Gorgol, John Francis. Military-Industrial Firms: A Practical Theory and Model. New York: Praeger Publishers, 1972.
- Greenwood, John. American Defense Policy since 1945: A Preliminary Bibliography. Lawrence, Ks.: University Press of Kansas, 1973.
- Griffith, William E. Cold War and Coexistence: Russia, China, and the United States. Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1971.
- Haigh, Anthony. Congress of Vienna to Common Market: British Policy 1815-1972. London: Harrap, 1973.
- Horowitz, David. The Free World Colossus. New York: Hill & Wang, 1965.
- Hunter, Robert. Security in Europe. Bloomington, Ind.: University Press, 1972.
- Institute for Strategic Studies. The Military Balance 1967-1968. London: Institute for Strategic Studies, 1967.
- Institute for Strategic Studies. The Military Balance 1973-1974. London: Institute for Strategic Studies, 1973.

- International Economic Policy Association. The United States Balance of Payments: From Crisis to Controversy. Washington: International Economic Policy Association, 1972.
- Jensen, Lloyd. Return from the Nuclear Brink. Lexington, Mass.: D. C. Heath, 1974.
- Joshua, Winfred, and Hahn, Walter E. The Washington Papers, Nuclear Politics: America, France, and Britain. Beverly Hills, Ca.: Sage Publications, 1973.
- Kaplan, Lawrence S. Recent American Foreign Policy: Conflicting Interpretations. Homewood, Ill.: The Dorsey Press, 1972.
- Kaplan, Morton A. NATO & Dissuasion. Chicago: University Press, 1974.
- Knoll, Edward, and McFadden, Judith Nies, eds. American Militarism. New York: The Viking Press, 1969.
- Lapp, Ralph E. The Weapons Culture. New York: W. W. Norton & Company, Inc., 1968.
- Lasswell, Harold D. National Security and Individual Freedom. New York: McGraw-Hill Book Company, 1950.
- Lens, Sidney. The Military-Industrial Complex. Philadelphia: Pilgrim Press and the National Catholic Reporter, 1970.
- Macridis, Roy C., ed. Modern European Governments: Cases in Comparative Policy Making. Englewood Cliffs, N.J.: Prentice-Hall, 1968.
- Mallalieu, William C. British Reconstruction and American Policy 1945-1955. New York: The Scarecrow Press, Inc., 1956.
- Manchester, William. The Arms of Krupp 1587-1968. Boston: Little, Brown and Company, 1968.
- Martin, Lawrence. Arms and Strategy. New York: David McKay Company, Inc., 1973.
- McGaffin, William, and Knoll, Erwin. Scandal in the Pentagon: A Challenge to Democracy. Greenwich: Fawcett Publications, Inc., 1969.
- Melman, Seymour. Pentagon Capitalism: The Political Economy of War. New York: McGraw-Hill Book Company, 1970.
- Mills, C. Wright. The Power Elite. New York: Oxford University Press, 1956.
- Myers, William, ed. Conversion from War to Peace: Social, Economic and Political Problems. New York: Gordon and Breach, 1972.

- Neild, Robert, ed. The Arms Trade with the Third World. Stockholm: Almqvist & Wiksell, 1974.
- Perkins, Dexter. The Evolution of American Foreign Policy. London: Oxford University Press, 1966.
- Pratt, Julius W. A History of United States Foreign Policy. Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1972.
- Pursell, Carroll W., Jr. The Military-Industrial Complex. New York: Harper & Rowe Publishers, 1972.
- Richardson, James L. Germany and the Atlantic Alliance. Cambridge: Harvard University Press, 1966.
- Rodberg, Leonard S., and Shearer, Derek, eds. The Pentagon Watchers. New York: Doubleday, 1970.
- Rosen, Steven. Testing the Theory of the Military-Industrial Complex. Lexington, Mass.: D. C. Heath, 1973.
- Russett, Bruce M. What Price Vigilance? The Burden of National Defense. New Haven: Yale University Press, 1970.
- _____, and Stepan, Alfred, eds. Military Force and American Security. New York: Harper & Rowe, Publishers, 1973.
- Sarkesian, Sam C. The Military-Industrial Complex: a Reassessment. Beverly Hills, Ca.: Sage Publications, 1970.
- Schmidt, Helmut. Defense or Retaliation: A German View. New York: Praeger Publishers, 1962.
- _____. The Balance of Power. London: William Kimber & Company Limited, 1971.
- Seabury, Paul, and Wildavsky, Aaron, eds. U.S. Foreign Policy: Perspectives and Proposals for the 1970s. New York: McGraw-Hill Book Company, 1969.
- Stanley, John, and Pearton, Maurice. The International Trade in Arms. New York: Praeger Publishers, 1972.
- Swomley, John M., Jr. The Military Establishment. Boston: Beacon Press, 1964.
- Talbott, John E. France since 1930. New York: The New York Times Co., 1972.
- Thayer, George. The War Business: The International Trade in Armaments. New York: Avon Publishers, 1969.
- Thorp, Willard L. The Reality of Foreign Aid. New York: Praeger Publishers, 1971.

Tint, Herbert. France since 1918. London: B. T. Batsford, Ltd., 1970.

Trager, Frank N., and Kronenberg, Philip S., eds. National Security and American Society: Theory, Process, and Policy. Lawrence, Ks.: University Press, 1973.

Van Alstyne, R. W. The Rising American Empire. New York: Oxford University Press, 1960.

Vogl, Frank. German Business after the Economic Miracle. New York: Halstead Press, 1973.

Williams, Alden, and Tarr, Davis W., eds. Modules in Security Studies. Lawrence, Ks.: University Press, 1974.

Williams, William Appleman. The Tragedy of American Diplomacy. Cleveland: World Publishing Co., 1959.

Woodhouse, C. M. British Foreign Policy since the Second World War. London: Hutchinson & Co., 1961.

Yarmolinsky, Adam. The Military Establishment. New York: Harper & Rowe, Publishers, 1971.

Public Documents

Federal Republic of Germany. Press and Information Office. The Bulletin. New York: no. 16, vol. 21, 1973.

Federal Republic of Germany. Press and Information Office. The Bulletin. New York: no. 39, vol. 22, 1974.

Federal Republic of Germany. Press and Information Office. The Bulletin. New York: no. 12, vol. 23, 1975.

Federal Republic of Germany. Press and Information Office. Facts about Germany. (1975).

Federal Republic of Germany. Press and Information Office. White Paper 1970: The Security of the Federal Republic and the Development of the Federal Armed Forces. (1970).

Federal Republic of Germany. Press and Information Office. White Paper 1971/1972: The Security of the Federal Republic of Germany and the Development of the Federal Armed Forces. (1972).

Federal Republic of Germany. Press and Information Office. White Paper 1973/1974: The Security of the Federal Republic of Germany and the Development of the Federal Armed Forces. (1974).

Her Majesty's Stationary Office. Britain 1975. (1975).

- La Documentation Francaise (Official Publication of the French government). Sixth Economic and Social Development Plan 1971-1975. (1971).
- United Nations. Department of Economic and Social Affairs. Economic and Social Consequences of Disarmament. (1962).
- United Nations. Department of Economic and Social Affairs. Statistical Office. Statistical Yearbook 1969. (1970).
- United Nations. Department of Economic and Social Affairs. Statistical Office. Statistical Yearbook 1974. (1975).
- U.S., Arms Control and Disarmament Agency. Adjustment of the U.S. Economy to Reduction in Military Spending. ACDA/E-156. (1970).
- U.S., Arms Control and Disarmament Agency. World Military Expenditures and Arms Trade 1963-1973. (1974).
- U.S., Department of Commerce. Bureau of the Census. Statistical Abstract of the United States 1969. (1970).
- U.S., Department of Commerce. Bureau of the Census. Statistical Abstract of the United States 1973. (1974).
- U.S., Department of Defense. Military Assistance and Foreign Military Sales Facts. (1967).
- U.S., Department of Defense. OASD Comptroller. Military Prime Contract Awards by Region and State: Fiscal Years 72, 73, and 74. (1974).
- U.S., Department of Defense. Secretary of Defense Report. Annual Defense Department Report FY 1976 and FY 1977. (1975).
- U.S., Presidential Report. The United States Military Assistance Program. Vol. I. (1959).
- U.S., Department of State. A Report of the Secretary of State. United States Foreign Policy 1969-1970. (1971).
- U.S., Department of State. The Foreign Assistance Program: Annual Report to the Congress Fiscal Year 1969. (1970).

Miscellaneous

Army Times

Journal of Peace Research

Military Review

NATO Review

New Republic

Newsweek

New York Times

Political Quarterly

Society

Soldat und Technik

The Progressive

Time Magazine

U.S. News & World Report

WESTERN ARMS SALES IN THE POST-COLD WAR ERA
A TREND ANALYSIS OF FOUR NATIONS

by

LEO JOSEPH WEEKS

BGE., University of Nebraska (Omaha), 1969

AN ABSTRACT OF A MASTER'S REPORT

submitted in partial fulfillment of the

requirements for the degree

MASTER OF ARTS

Department of Political Science

KANSAS STATE UNIVERSITY
Manhattan, Kansas

1976

Since the beginning of the 1970s an ever-increasing public interest has arisen concerning the international sale of arms. The main criticism has centered on arms sales by the United States and the industrialized nations of Western Europe--namely Germany, Britain, and France. This criticism, which has been carried to the public in books, periodicals, professional journals, and newspapers, as well as radio and television, offers the inference that these nations have allowed arms sales to reach dangerously high levels and primarily for economic reasons. These critics further contend that the massive arms sales of the 1970s have resulted from the military-industrial complex relationship of the past decade. In view of the potential dangers which could ultimately befall these Western nations in their international relations should the arms sales indictment, in fact, prove true, this study has been conducted to determine the validity of these criticisms. More precisely, this study seeks to answer the research question--What are the trends of Western arms sales in the post-Cold War era and are these trends compatible with foreign policy?

The current criticism of arms sales is an extension of the military-industrial complex theory. The theory of the power elite, as written by C. Wright Mills in 1956, provided the basic hypothesis. After President Eisenhower's warning in 1961 of the potential dangers of the military-industrial complex, Mill's theory received wide attention and further refinement in the 1960s. Some 700 books and articles were devoted to this subject during the period from 1961 to 1970. By the turn of the decade many of the newer writers on the subject were questioning both the morality and

the economics of arms sales. As arms sales increased in the 1970s the new criticism increased proportionally. By 1975, and at the time of this writing, the subject of Western arms sales was receiving weekly attention from several elements of the national and international media.

A review of the international arms trade places these four nations historically in the forefront of arms sales activities since their beginning in the mid-nineteenth century. By the eve of World War I, Krupp in Germany, Schneider in France, Vickers in Britain, and Remington, Colt, Du Pont, Winchester and several other American arms-makers had succeeded in achieving a monopoly over the trade. The American Lend-Lease Act of 1941, which authorized the United States' transfer of \$48.8 billion in arms to 46 nations during World War II, established the necessary precedence for the postwar era of massive arms transfers by the United States.

A total of thirteen economic and arms sales variables was selected as the analytical tools to be used in evaluating arms sales trends in each of the four nations over the period 1963-1973. These variables, which include the GNP, total exports, arms exports, and domestic sales, are also subjected to both current and constant dollar analysis in an attempt to acquire a truly realistic comparison.

This analysis of the four nations resulted in six findings. First, the arms exports of both Germany and Britain declined between 1963 and 1973. Also, arms exports by France and the United States increased over the period, however, inflation was responsible for much of the dollar value increase.

The second finding disclosed an increase in the percentage relationship of arms exports to total exports in both France and the United States. The degree of increase in the arms exports of these two nations was slightly

more accelerated than the steady annual increase in exports. This relative percentage fell in both Germany and Britain.

A key factor, which represented the third finding, showed that all four nations had decreased their domestic arms purchases over the period. This decrease, which averaged over 40 percent among the four nations, represented an element of information which strongly influenced the final outcome of the study. It also caused the fourth finding, which centered upon the percentage relationship between domestic arms sales and the GNP, to show a dramatic decline in all four countries.

The last two findings, which are the heart of the study, resulted from combining arms exports and domestic sales, which is offered as a total figure and as a percentage of each nation's GNP over the eleven year period. Total arms sales among all four nations averaged 2.4 percent of the GNP in 1963. By 1973 this figure had fallen to 1.1 percent. Thus the study disclosed that instead of arms sales becoming an increasingly influential element of the nations' economies during the 1963-1973 period, the opposite had actually taken place. Total arms sales, as a part of the nations' economies have declined over this eleven year period.

Finally, the study confirms that the arms sales trends were consistent with the general foreign policy goals of the four nations concerned.