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Trading technology with eastern Europe and the U.S.S.R. : power, interests, institutions, and discourse among allies.

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TRADING TECHNOLOGY WITH EASTERN EUROPE AND THE U.S.S.R.: POWER, INTERESTS, INSTITUTIONS, AND DISCOURSE AMONG ALLIES

A Dissertation Presented

by

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JTC, Nashville, 1991

ABSTRACT

TRADING TECHNOLOGY WITH EASTERN EUROPE AND THE U.S.S.R.: POWER, INTRESTS, INSTITUTIONS, AND DISCOURSE AMONG ALLIES

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This dissertation analyses export control programs in the Western state system. The main focus is Western alliance collaboration on East-West technology transfer controls through COCOM. It examines post-1945 intra-alliance and intra-national perspectives on the relationship between East-West trade and Western security. Within four historical periods (1949-1964, 1965-1979, 1979-1989, 1989-1991) four questions are addressed: a) How dces the structural distribution of power and the nature of United States leadership affect collaboration on the form, the nature, and the enforcement of controls?; b) How does the nature of global economic competition affect Western alliance states' collaboration on and Western firms' compliance with export controls?; c) How does the nature and the distribution of power in intra-national politics on this issue affect United States policy and multilateral

collaboration?; d) How does the nature of changing images and representations of security and threats to security affect United States policy and the nature of collaboration?

The project thesis is that a multi-factor analysis is necessary for an appropriate understanding of the dynamics of discord and consensus over the terms of the Western alliance export control program. To conduct such an analysis the project draws on four theoretical frameworks: modified structural realism, a market explanation, institutionalism and discourse analysis.

The study is a contribution to the literature on international relations theory, particularly the role of ideas in international policy collaboration. It draws on work in theories of language and discourse and micro-economic theories of contested exchange.

The dissertaton concludes that emerging opportunities regarding overall global security will result in a transformation of Western collaboration from East-West export control to a multi-directional technology transfer management system. The problems with this transformation and issues that must be addressed in a broader-based program (such as: the proliferation of missile, nuclear, and chemical weapons and environmental management) are considered.

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INTRODUCTION

Everywhere we remain unfree and chained to technology, whether we passionately affirm or deny it. But we are delivered over to it in the worst possible way when we regard it as something neutral; for this conception of it, to which today we particularly like to do homage, makes us utterly blind to the essence of technology.

Martin Heidegger "The Question Concerning Technology"

Collaboration on Export Controls

Since 1949 the United States and its NATO partners have regulated East-West trade through an institution called The Coordinating Committee on Export Controls (COCOM).[1] COCOM has served four main functions in coordinating Western export control efforts. It has been the organization through which criteria are established for export controls. Secondly, COCOM working groups have compiled detailed lists of items and technologies subject to control. Since the late 1950s this included three lists: the international atomic list (IAL), the international munitions list (IML), and the international industrial list (IIL). Thirdly, COCOM has been the forum in which enforcement efforts have been coordinated between states. Finally, COCOM has been the body responsible for evaluating member states applications for particular exceptions to the agreed upon controls.

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[1]COCOM includes all NATO countries except Iceland, plus Japan and Australia.

United States-Western European collaboration on multilateral export controls in COCOM has been a sea of mixed currents. Over the past forty five years a general consensus existed on the need to maintain some form of strategic controls on the transfer of technology to the East. Historically, however, there have been recurrent conflicts over the appropriate nature and function of export controls and, more particularly, over the specification of items subject to regulation. Western European governments generally maintained a minimalist position on the extent of technology transfer regulations and on the substance of such controls. The United States government, the leader in the founding of COCOM, generally pursued a maximalist strategy on these issues, embodied in its complex unilateral export control administration.

Conflicts over this issue have been recurrent at the domestic as well as inter-allied level. In the United States, protracted domestic disputes surrounded passage of the 1979 and 1985 revisions of the Export Administration Act, and the "battle of the branches" over implementation of export controls in the 1980s has been particularly intense. While less visible, tensions have also appeared at times in some Western European states. At the inter-allied level there have been numerous disputes over specific transfers of high technology by COCOM member states to the Eastern Bloc.

The United States has used several means in its occasional attempts to halt some of these transfers. Since 1949 the United States has turned at points from a preferred diplomatic persuasion strategy to an economic coercion strategy to try to bring alliance states and firms into line with a more restrictive policy. This economic coercion strategy has depended on a surveillance system including an array of intelligence networks that monitor global high technology transfers and that gauge compliance by states and firms with export control agreements. The system also includes a broader arrangement of institutionalized and standardized practices, such as the United States export licensing program, that have helped to maintain vigilance on East-West technology trade.

There are several reasons why an inquiry into the past and present dynamics of Western alliance collaboration in this area is justified. First, as the radical transformations in the Eastern bloc since 1989 altered the terrain and the horizons of the East-West strategic balance, and Western states and firms scrambled to take advantage of new economic opportunities, the United States found itself in a precarious position. The United States, seeing itself as the main guardian of Western security, has been the leader of the COCOM program. The United States has led in maintaining the integrity of the multilateral program by

establishing criteria, parameters, and procedures of control, by attempting to get member states to enforce effectively controls; and by obtaining control compliance from firms in both COCOM and non-COCOM states. In the midst of allied governments' demands for broad and immediate cuts in the list of items subject to control and for a restructuring of COCOM, the United States faced the problem of finding a balance between responding to these demands and maintaining an effective strategic embargo in the interest of Western security. In an attempt to reconcile these cross-cutting and conflicting demands, policy makers and policy analysts in the United States and Western Europe began to examine the strategic, economic, and political aspects of this issue. The difficulty and complexity of finding acceptable compromises and a stable ground for consensus on this issue has been exacerbated by the fluidity of the situation in the East.

Secondly, in the mid 1980s this issue had already acquired significant economic and political salience in the United States. Business interest groups and some members of Congress became increasingly concerned with the cost of the United States more restrictive unilateral export control program, particularly in West-West trade. In 1986 and 1988 Congress commissioned the National Academy of Sciences to conduct extensive studies of both the United States

unilateral and COCOM export control systems. The studies of the unilateral program involved an assessment of the administrative and competitive costs to United States firms, the bureaucratic costs to the government, and the inter-allied political costs.

Third, the history of United States-Western European collaboration in the multilateral export control program offers a rich case study of cooperation. This cooperation occurs at an intersection between security, economic, and diplomatic issues in international relations. Assessing this history will enrich our understanding of the dynamics of collaboration in the international political economy.

Finally, there are also broader reasons for such an inquiry. The regulation and control of the diffusion of technology through institutionalized state mechanisms, administrative codes, licensing programs, monitoring organizations, surveillance systems, and legal statutes for rewards and punishments has a lineage in the state system. This state practice, however, has experienced shifts and transformations. The objects of control, the methods of categorizing items and classes of goods subject to control, the techniques used for surveillance, and the magnitude of the apparatuses of enforcement have changed over time. These past efforts at regulating the diffusion of items and technology that were seen to offer advantages in rivalry

between states provide the material for an interpretive history of the present raison d'etre of the multilateral export control program. In placing the present case in historical context we can examine the differences between eras. That is, such an investigation will expose discontinuities by contrasting structures of power and knowledge that helped give rise to, maintain, and transform this practice at particular points in history. I will compare and contrast the rationale and administrative structure of the nineteenth century British export control system with the post-1945 multilateral export control system. In that sense this inquiry into the dynamics of United States-Western European collaboration on technology transfer controls allows for a reconsideration of the history of a state practice. A reconsideration of this practice is significant because it demonstrates the difficulty of establishing and maintaining a collaborative program of export controls between states with divergent administrative histories and political cultures.

The Questions

In light of these issues this project examines the following sets of general questions: First, what have been the goals and the structure of post-1945 multilateral export control collaboration? How do they differ in rationale and form from past examples of export control programs in the

Western state system? Secondly, what specific factors account for the historical periods of greater, or lesser, conflict and consensus in United States-Western European collaborative policy in this area? What have been the significant factors in determining the policy stands of alliance states on this issue? Thirdly, what effect will transformations in the Eastern bloc have on this area of alliance collaboration? How will intensified international economic competition affect the fragile consensus that has supported post-1945 policy coordination on East-West strategic technology transfer controls?

In order to address the broader questions this project contrasts the post-1945 control program with past examples of systematic efforts by governments to regulate the diffusion of particular technologies. The project includes an analysis of the nineteenth century British export control program and then examines the past dynamics of United States-Western European collaboration in COCOM. This is done from the vantage points of a variety of theoretical perspectives that have been used in other studies to explain the sources of conflict and cooperation in the international political economy.

Chapter one defines key terms of reference for the project, reviews the literature on the topic and demarcates the scope of the project. This chapter lays out four

theoretical perspectives and explains how each can be used to interpret the history of the post-1945 multilateral export control program.

Chapter two investigates the question of whether or not, governments have attempted to maintain military, strategic, or economic advantage by controlling the diffusion of particular items and technologies. One of the central issues that is analyzed deals with the factors that determine the nature and scope of such programs. This includes an assessment of how such programs have been shaped by both the material basis of these states' preponderance and by the understandings and representations of the sources of power accepted by these states' policy elites. The main historical analysis in this chapter is a comparison and contrast of nineteenth century British regulations on the transfer of certain technologies with the post-1945 United States control system. The last part of the chapter is an analysis of the elements in technology transfer regulations unique to the post-1945 period.

Chapters three through six are a periodized analysis of the history of the COCOM multilateral control program. The periodization used in these chapters corresponds to shifts in United States-Western European collaboration in this area. This analysis focuses primarily on interactions among the United States, Great Britain, France, and West

Germany. Within each of these historical periods (1949-1963, 1964-1979, 1979-1989, 1989-1991) the project addresses the following specific questions:

a) How does the structural distribution of power among allied states and the nature of United States leadership affect collaboration?

b) How does the nature of global economic competition--particularly among firms and within sectors most affected by controls--affect collaboration?

c) How does the nature, structure, and distribution of power in domestic intra-governmental politics on this issue affect collaboration?

d) How does the power, authority, and nature of representations of the Soviet threat and of the role of strategically significant technology in guarding Western security accepted by allied government officials, affect policy and collaboration within the alliance?

Chapter three runs from the formation of COCOM through the transformations in the program during the 1950s. The chapter explores the roots of the East-West export control program and analyzes the factors behind changes and conflicts in the program within the United States, within Western European states, and at the inter-allied level.

Chapter four runs from 1964 to 1979. It analyzes changes in the multilateral program in the context of intensified West-West economic competition and in the context of detente. Chapter five runs from 1979-1989. It assesses domestic level and inter-allied factors in the move to fortify the multilateral export control program after the invasion of Afghanistan. Chapter six provides a history of the transformation of COCOM during 1989, assesses the outcome of the June 1990 COCOM talks, and then considers the challenges to the future of COCOM given the transformations in the East bloc.

The concluding chapter offers, first, a re-consideration of the contrast between the post-1945 technology transfer control program and past examples of such practices. Secondly, the chapter offers an overall assessment of the strengths and weaknesses of various approaches to explaining the dynamics of inter-allied conflict and consensus in this area. One goal of this study then is to refine some theoretical perspectives by testing the strength of a variety of approaches to account for the dynamics of United States-Western European collaboration on multilateral export controls. I will argue, however, that no one theoretical perspective is sufficient to account for the diverse array of factors that have given rise to conflict or that have helped to produce cooperation in this

area of alliance policy collaboration. My thesis is that a multi-factor analysis provides a full and adequate understanding of the complex dynamics of alliance collaboration in this area. I conduct such an analysis by drawing on four theoretical perspectives: modified structural realism, a market explanation, institutionalism, and discourse analysis. Taken together these perspectives allow us to assess the factors that interact to produce cooperation and discord over multilateral export control policy.

CHAPTER I

THE DYNAMICS OF WESTERN ALLIANCE COLLABORATION ON EXPORT CONTROLS: FOUR MODES OF INTERPRETATION

Introducing the Concepts and the Theories

There have been a number of recent efforts to bring theoretical considerations and analytical paradigms to bear on the history of West-West collaboration on East-West export control policy (Bertsch and McIntyre, 1983; Crawford and Lenway, 1985; Rode and Jacobsen, 1985; Parrot, 1985; Mastanduno, 1985, 1988, and 1989; Jentleson, 1986; Lowenfeld, 1987; Bertsch et. al., 1988; Long, 1989). This area of alliance collaboration lies at a point of intersection between security, economic, and diplomatic questions. It has thus attracted the attention of scholars from divergent backgrounds, who often "speak different languages." The state of attempts to theorize about or to explain the history of collaboration in this area mirrors the complexity of the multiple factors that have produced both cooperation and discord in the Western alliance over East-West trade policy. Recent work has thus directed our attention to the conditions under which collaboration has been created and transformed by assessing economic, political, and perceptual

factors and by evaluating the role of system and domestic influences. This chapter will review some commonly accepted approaches and explanations. It will also introduce some previously under utilized theoretical perspectives as potentially powerful approaches to interpreting the dynamics of United States-Western European post-1945 collaboration on East-West trade policy.

The Scope of the Project

This project does not attempt to analyze the impact of access to Western technology in general on Soviet or Eastern European industrial and military development; nor does it assess the impact of COCOM controls on Eastern Bloc military capability or on Western strategic technology advantage (U.S. DOD, 1981 and 1985; Perle, 1987; Vorona, 1987). While answers to such questions influence policy and thus must be considered in broad terms, the focus of this project is more narrowly on the political, economic, and perceptual factors in inter-allied multilateral collaboration and in the United States unilateral export control program. In that sense then the project's central concern is with factors that form the context and determine the direction of United States-Western European negotiations on export control collaboration. The aim of the project is to contribute to the work that has been done in the study of cooperation and conflict in the international political economy. In

particular, the project aim is to complement recent efforts by Gray Bertsch (1983, 1985, and 1988), Michael Mastanduno (1985, 1988, and 1989), Bruce Jentleson (1986) and Beverly Crawford (1985 and 1988) to bring theoretical considerations and analytical paradigms to bear on collaboration in this area. It is designed to shed light on the broader issue of the conditions under which collaboration in international relations is created and maintained. Before turning to review past literature on this topic, however, I lay out key definitions and points of reference for the project.

Terminology

"Cooperation," "discord," and "collaboration" have often attained the status of shibboleths in the study of international institutions. All three, however, are contested terms. The notion of collaboration is used here to characterize a situation in which the actions of states are brought into conformity with one another through some form of joint policy determination. Within the context of collaboration, however, conflict, disagreement, and divergence of perception persist at various levels. While these conflicts might not result in discord (a situation in which one state's policies actually hinder the realization of other states' goals), collaboration as a concept is intended to accentuate the tension present between those elements that produce cooperation and those that produce

discord in any coordinate policy endeavor. Collaboration, then allows us to avoid conceiving of cooperation and discord as a binary opposition.

The central focus of the export control collaboration has been on restricting the export of strategically significant technology. As we will see, the designation of items as militarily or strategically significant technology has been controversial. However, one of the more intriguing elements in the control program is the place and role that the image of technology has assumed in relation to conceptions of strategic and economic advantage.

The etymological roots of the word <u>technology</u> are only obliquely reflected in contemporary connotations and significations of the word. "Techno," from the Greek <u>tekhne</u> meaning a craft or an art, has become an omnibus prefix connoting all that has to do with a scientifically advanced industrialized society. The first edition of the Oxford English Dictionary (1888) lists seven words with the prefix "techno." The second edition (1988) lists twenty-seven and no doubt the list could be expanded given the industry of proliferating "technologisms." For example, we live in a "technopolis," or a "technosociety" inhabited by "technocentric" "technomaniacs" who communicate in "technospeak." This has lead to "technophobia" and "technostress." The point of this word game is that

contemporary Western society has often been defined in terms of a notion of a technology.

There has been disagreement not only over the consequences of this development, but also over the actual definition of technology. This means by stepping out to define "technology" one quickly finds oneself in a mine-field. For now let us define technology as applied science, or the design and manufacturing know-how required to produce advanced industrialized goods (Mastanduno, 1985). This know-how or technology exists in "disembodied" form as data (e.g., blueprints, operating manuals) and in "embodied" form as items, equipment, and machinery. Technology transfer is the acquisition by one country from another of embodied or disembodied technology that directly or indirectly allows a qualitative or quantitative upgrading of industrial or military systems. The transfer of disembodied technology can take a number of forms including sales of licenses, subscriptions to technical periodicals, word of mouth, and industrial espionage. The transfer of embodied technology involves imports of actual products, particularly capital goods. There is also a distinction between active and passive technology transfer. Active transfers involve ongoing interactions between the seller and the buyer in the form of training personnel and upgrading systems. Passive transfers are one-time exchange transactions.

Technologies can also be classified by end-use, that is, actual application. It is common to use a threefold classification of civilian, military and dual-use technology. A dual-use technology can be employed in both the civilian and the military sector. The notion of military significance refers to the effect of a technology on the military balance between states. Usually technologies with military significance are considered to be "strategic technologies" designed especially or used principally and directly for the development, production, and utilization of arms, ammunition, and military systems. In the broadest sense the transfer of any technology can be said to be militarily significant because economic or industrial gains can be used to increase military power (Mastanduno, 1985; Schaffer, 1985; National Academy of Science, 1987). The narrower definition of military significance refers to technologies with specific and direct military applications. The question of what constitutes a militarily significant technology, particularly in the dual-use area and concerning items that might make an "indirect contribution" to a military system, has been a major issue in United States-Western European debates over the scope of technology transfer controls. The United States policy position on export controls has historically incorporated a broader definition of military significance,

while Western European states, in varying degrees, have advocated narrower definitions.

Review of Past Literature

Until recently works on the post-1945 Western alliance and unilateral United States export control programs lacked a theoretical framework of analysis. The existence of COCOM was initially kept highly secret and multilateral negotiations are still conducted under much stealth. This has been due to the informal nature of the organization and to the fact that Western alliance leaders have always been cautious about raising the profile of the organization because of the conflicts it would generate. As a result most early works on this topic were noble attempts, in the face of sparse information, to document the history of the Western multilateral and United States unilateral export control programs. In addition some works have attempted to assess the role of Western technology in Soviet industrial and military development or to assess the impact of export controls.[1]

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[1]Work that has been done on the role of Western technology in Soviet and Eastern European economic development and on the contribution of Western technology to Eastern Bloc military capability is important, while at the same time complex and controversial. Evaluating the precise impact of Western technology on Eastern bloc states industrial or economic development is difficult and doing so for the military sector is almost impossible. This is due not only to the difficulties of obtaining data, but because of the difficulties of constructing methods to measure in detail its

When scholars have turned to analytical frameworks and theoretical considerations, the focus has usually been on the characteristics of and the debates over forms of what

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impact. This holds true for the West as well as the East. Nevertheless, there have been some noteworthy attempts. Anthony Sutton's three volume study Western Technology and Soviet Economic Development traces the impact of Western technology in industrial development from 1917 to 1965. Sutton argues that Western technology was a decisive factor in Soviet economic development from 1917 to 1930 (Sutton, 1968-1973). In an attempt to assess the impact of Western technology on Soviet economic development and in assessing the ability of the Soviet Union to integrate this technology scholars have also used case-study approaches mostly tracing the development of a single sector. Philip Hanson's work Trade and Technology in Soviet-Western Relations and his analysis of the Soviet mineral fertilizer industry, S.E. Goodman's analysis of the Soviet computer industry, Robert W. Campbell's study of the Soviet energy sector, George D. Holliday's work on the Soviet automotive industry, and Elizabeth Ann Goldstein's study of the Soviet ferrous metal industry are all examples of the case study approach (Hanson, 1981; Goldstein, 1984; Goodman, 1985; Campbell, 1985; Holliday, 1985). Most of the compiled volumes on East-West trade and technology transfer incorporate such case studies (Becker, 1983; Bergson and Levine, 1983; Smith, 1984; Parrot, 1985; Schaffer, 1985; Perry and Pfaltzgraff, 1987) These case studies are important for showing the relationship between indigenous technology and the assimilation and diffusion of transferred Western technology. In many instances these studies have shown the difficulty Eastern Bloc states have had with applying and operationalizing Western technology (Gustafson, 1981). There have also been some creative econometric studies of the impact of Western technology on Soviet industrial output (Green and Levine, 1977; Thomas and Kruse-Vaucienne, 1977; Weitzman, 1979). Determining the effectiveness of technology transfer regulations and export controls in preserving Western alliance lead time over the Eastern Bloc in the application of technology to military systems is also beyond the scope of this project (Costick, 1978). Even if sufficient data were available to show a technology gap across a number of weapon systems over time, the effectiveness of the multilateral export control program would not thereby be proven to be effective. Nor would it be proven to be ineffective if this gap grew smaller. As Julian Cooper, David Holloway, and others

David Baldwin calls economic statecraft (Baldwin, 1985). Adler-Karlsson's (1968) excellent work on the early period of Western alliance export controls and on the formation of COCOM includes an analysis of the objectives of the Western alliance economic statecraft. Drawing inspiration from Albert Hirschman's National Power and the Structure of Foreign Trade (1945) Adler-Karlsson showed the relationship between the economic warfare and the economic defense objectives in the early cold-war Western alliance export control program. Economic warfare is an offensive imposition of sanctions in an attempt to inflict disruption and harm on a target state's economy. Economic defense sanctions, usually called strategic embargoes or national security export controls, are imposed with the goal of limiting exports that have a direct military significance so as not to enhance a rival state's military capability (Jentleson, 1986).

The use of economic statecraft in inter-state relations is quite old. Pericles's Megarian Decree, which excluded a Spartan ally from access to ports in the Athenian

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have shown. factors such as the Soviet Union's ability to absorb and diffuse Western technology, Soviet indigenous technological capability and the ability to apply it, and the efficiency of the United States weapons procurement system must be considered in assessing lead time in the application of technology to military systems (Amann, Cooper, and Davies, 1977; Amann and Cooper, 1982; Bertsch and MacIntyre, 1983; Cooper, 1985; Holloway, 1987).

empire and to the market of Athens is an early example of economic statecraft (Baldwin, 1985). Contemporary literature on this instrument of politics has clarified the characteristics and analyzed the effectiveness of economic statecraft. In this regard an important distinction has been made between foreign policy export controls and narrow strategic export controls (Hirschman, 1945; Baldwin, 1985). Foreign policy export controls can be broken down into policies of economic warfare, policies with particular instrumental objectives, and policies with symbolic-expressive objectives (Galtung, 1967). An economic warfare strategy as outlined above is designed to inflict maximum cost on and to disrupt the economy of a target state. The goals of foreign policy export controls with instrumental objectives, sometimes referred to as a tactical-linkage export control strategy (trade denial or trade inducement), include the following: a) compellence, forcing a state to change a particular domestic or foreign policy; b) deterrence, discouraging future aggressive actions by a rival state by signaling resolve; and c) containment, limiting potential economic and political influence by isolating a state through restrictions on economic interaction; and d) inducement, offering concessions in exchange for desired actions (Schelling, 1966; Baldwin, 1985; Mastanduno, 1985; Jentleson, 1986).

Foreign policy export controls with instrumental objectives can also be designed to affect the allocation of resources in a "target state" (Mastanduno, 1985). The difficulties of operationalizing foreign policy export controls with these sorts of instrumental objectives has been demonstrated in both the theoretical literature (Baldwin, 1985; Mastanduno, 1985) and in particular case studies (e.g., Knorr, 1975; A. Lake, 1977). Irrespective of the actual substantive impact of controls, foreign policy export controls can also be used for symbolic and expressive purposes. Such controls can be used to express disapproval of an action of a target state and, in the tradition of American idealism, they can be used as symbols of moral sanction in the society of states (Galtung, 1967; Jentleson, 1986). These types of controls can be distinguished from narrow strategic export controls where the sole purpose is to deny or delay improvements in the military capabilities of an adversary. Such controls prohibit the export of items that make a direct and specific contribution to a target states' military capabilities.

Debates over issues such as the conceptual distinction, characteristics, substance, and legitimacy of foreign policy export controls and strategic export controls are germane to this project. As we will see these issues are important for understanding the lines of disagreement over export controls and over technology transfer

regulations on both the inter-allied and domestic levels. Some scholars have argued that the alliance collaborative policy program has taken various forms over time from foreign policy controls to strategic controls. Some of these scholars have done work explaining the rise and decline of these various forms of export control policy and contrasting the policy strategy advocated by each of the allied states (Mastanduno, 1985).

The Lacuna

Recent research has attempted to explain and assess the political, economic, and perceptual factors influencing Western alliance collaboration on export control policy. While this past work can be categorized in a number of ways, for the present purposes of analytical clarity, I will argue that three theoretical approaches are articulated. The first approach is a modified structuralist explanation. To account for the dynamics of collaboration, this approach focuses mainly on the distribution of power in the international system. This approach also assesses the factors in the structural distribution of power that determine the United States policy preference and analyzes the willingness of the United States to exercise leadership in the multilateral export control program (Mastanduno, 1985 and 1988; Crawford and Lenway, 1985).

The second approach is a market explanation. This approach focuses on Western competition for Eastern European markets as the main explanatory factor of the dynamics of conflict on multilateral export controls. It is a type of interest group theory approach in that it accounts for policy formation and change and alliance cooperation and discord in reference to the role and interests of particular societal groups in domestic level power games (Vernon, 1979; Bertsch, 1985 and 1988; Jentleson, 1986).

The third approach is an institutionalist explanation. This view focuses on the interests, position, and role of players in intra-governmental and transgovernmental power games to account for the dynamics of policy formation and change and inter-allied collaboration (Bertsch, 1983, 1985 and 1988; Crawford, 1982 and 1988; McIntyre, 1988; Elliott, 1988; Long, 1988 and 1989).

Some of the work done on alliance collaboration on this issue and recent developments in international relations theory offer evidence to support the use of a fourth approach: discourse analysis (Adler-Karlsson, 1968; Bertsch and McIntyre, 1984; Jentleson, 1986; National Academy of Sciences, 1987; Nau, 1987; Hillenbrand, 1988). Discourse analysis allows us to analyze the impact of what Martin Hillenbrand calls the "cultural lag" that has lead to conflicts over this issue between the United States and its

European allies. Discourse analysis is an examination of the production, circulation, and acceptance of representations - symbols, language, images - that constitute meaning and that frame policy makers' understandings of international relations (Foucault, 1972, 1979, 1980; Ashley, 1989; Der Derian, 1987; Der Derian and Shapiro, 1989; Lapid, 1989). The approach focuses on the role of contrasting meaning-constitutive representations of the Soviet Union, of technology, and of the relationship between technology and security among policymakers at the domestic and alliance level (Yergin, 1978; Hoffmann, 1981; Bertsch and McIntyre 1984; Jentleson, 1986; Nau, 1987; Hillenbrand, 1988; Root, 1988). Yet the relative lack of attention to the insights of discourse analysis, a branch of what Robert Keohane calls the "reflective" approach, has meant ignoring significant factors in United States-Western European collaboration over export controls (Keohane, 1988; Der Derian and Shapiro, 1989). This view assesses United States-Western European collaboration on technology transfer controls in terms of how shared understandings, reigning ideas, and meaning-constitutive representations have framed the possibilities and the limits of collaboration.

The vast majority of studies that have been done on post-1945 United States-Western European technology transfer regulations have also failed to consider the history of such

practices in the Western state system. An investigation of the history of such practices and the discourses that sustained such practices will allow us to analyze the relationship between technology transfer control practices and how policy makers have conceptualized and represented the relationship between technology, regulations on its diffusion, and advantage in the state system. In addition, tracing the history of practices designed to control the diffusion of technology uncovers the background on which present cooperation and conflict occurs.

Each of the four approaches, in various forms, have been drawn upon in isolated studies. This is, however, the first attempt to consider simultaneously and systematically the merits of the modified structuralist, market, institutionalist, and discourse analysis explanations of Western alliance collaboration on technology transfer regulations. A comparison of these perspectives on this issue will advance our knowledge of elements that underlie collaboration in this, and possibly other, policy areas within the Western alliance.

Secondly, this study represents an attempt to employ discourse analysis in an empirical case study of international political economy (Keohane, 1987; Biersteker, 1989). The goal is not to delineate a concrete discourse analysis research program that can in turn be placed

alongside rationalist research programs for the purpose of a definitive adjudication. Discourse analysis is not offered as a powerful new theory that can surpass all others in its ability to answer questions about cases of international collaboration. As Richard Ashley points out, this perspective in fact eschews such a promise and in that sense problematizes the search for such a theory. Discourse analysis shows the problems with explanations of international collaboration "that arrest ambiguity and control the proliferation of meaning by imposing a standard and standpoint of interpretation that is taken to be fixed and independent of the time it represents" (Ashley, 1989). This approach should be seen then as a mode of interpretation that resists the move to arrest ambiguity in the name of parsimony. Discourse analysis acknowledges the complexity of accounting for the factors that have given rise to conflict and cooperation in this area of international relations. One of the aims of this project is to contrast this approach, informed by recent work in continental philosophy and literary theory, with some research programs that have dominated the field of international political economy. Comparing these approaches will test their relative merit in explaining and elucidating significant elements in United States-Western European interactions on export control policy. This will not only

illuminate important elements in this particular case, but it aims to raise theoretical issues concerning approaches employed in the study of world politics.

Security, Allies and Technology Transfer: Four Modes of Interpretation

Modified Structuralism

Modified structuralism rests on three basic assumptions: the international system is anarchic rather than hierarchic; it is characterized by interaction among units with similar functions; and the distribution of capabilities across the states in the system varies over time (Waltz, 1979). Simply put, states are seen as unitary rational actors that are guided by their interests in determining strategies to gain desired ends on the basis of calculations about their relative position in the international system.

The most parsimonious version of this approach views the distribution of capability as the principle determinant of outcomes in state interactions at the system level (Waltz, 1979). Resources are fungible (Wolfers, 1962; Knorr, 1970) in that "they can be used to achieve results on any of a variety of issues without significant loss of efficacy" (Keohane, p. 147, 1986). Adherents to this paradigm split over the relationship between system stability and the distribution of capability. One

hypothesis holds that hegemony - disproportionate advantage in capability combined with the willingness and ability to exercise leadership - on the part of one state results in a more stable international system than a system with a roughly balanced distribution of power among several first-rank states (Organski, 1968; Kindleberger, 1973; Krasner, 1976; Keohane, 1981; Gilpin, 1982). This high structuralism is modified by scholars who move away from the system level to account for how actors acquire preferences or perceptions of interest. Cooperation in the formation and maintenance of international regimes requires leadership (a willingness as well as an ability to act) on the part of one preponderant state in the form of setting standards of conduct, getting other states to observe such standards through the use of punishments and rewards, and assuming a disproportionate cost in defending regimes in times of crisis (Krasner, 1983). A shift in the distribution of capability, away from hegemony, can set off changes in states' policies leading to regime instability. According to high structuralism, Western alliance collaboration on export controls waxes and wanes in response to the distribution of these structural determinants. According to a modified view, changes in the system distribution of relative power, along with changes in the United States' role and willingness to provide leadership, can explain whether or not cooperation

or discord will obtain on multilateral export controls (Mastanduno, 1988). It can also explain the strength or weakness of alliance states' commitments to the COCOM program.

Michael Mastanduno of the modified structuralist school has argued that the key factor influencing alliance states' collaboration on technology transfer controls in COCOM is the willingness of the United States to: a) maintain the integrity of the control process; b) set a domestic example; c) minimize the administrative burden of controls; and d) obtain the cooperation of key non-COCOM suppliers of controlled technologies (Mastanduno, 1988). He evaluates the willingness and ability of the United States to provide these elements of leadership in several historical periods of alliance collaboration. He claims that COCOM strength, defined in terms of the commitment of alliance states to maintain a collaborative strategic embargo, is a function of United States leadership. COCOM strength is assessed in terms of four factors: a) embargo exception requests; b) enforcement of the embargo, meaning the willingness of states to devote resources and effort to prevent, or hamper the illegal diversion of controlled items; c) the degree of shared interpretation of items that should belong on the control list; and d) the general attitude of member governments regarding the COCOM effort as

an integral part of a national security strategy (Mastanduno, 1988). He takes these factors and attempts to show that COCOM was weak in the 1970s, but that it gained renewed strength in the 1980s. These turns, Mastanduno argues, were the result of the nature of United States leadership. His argument deserves a reappraisal in this project because it is an attempt to account for the dynamics of collaboration through a type of modified structuralist interpretation. His argument modifies high structuralism in that he contends that despite relative shifts in the system distribution of power the United States had the ability, but not the willingness, to provide leadership in the 1970s; in the 1980s it had both. According to Mastanduno a congruence of interests in the alliance along with United States leadership are essential to maintain the strength of the multilateral export control program.

A subset of this approach distinguishes between the overall interstate power distribution and the distribution of power within particular issue areas (Keohane and Nye, 1977). The distribution of power within particular areas may vary independently from the system level distribution. In addition, power may not be fungible across areas. Shifts in the issue-specific relative power structure can, according to this view, set off policy changes regarding the particular regime (Odell, 1982). According to this view the

dynamics of United States-Western European collaboration are explained by changes in the United States' relative position in the distribution of the development and production of high technology with dual-use potential. The decline of the United States government's resources in this area alters the terms of collaboration as states and firms recalculate their interests and hence, the costs of compliance with East-West export controls in high technology areas.

Recent work in micro-economic theories of contested exchange complements the modified structuralist perspective. A micro-economic model of contested exchange provides unique insights into the instruments by which a preponderant state attempts to extract compliance from states and firms for a preferred policy strategy. This is particularly helpful for understanding the strategy of preponderant states in a program that requires a coordinate policy endeavor. Samuel Bowles and Herbert Gintis have constructed a model that demonstrates the relationship between the instruments by which buyers induce proper seller behavior in the exchange of goods that are subject to contested exchange (Bowles, 1987; Bowles and Gintis, 1988). An exchange is considered contested when there is some form of conflict of interest between agents and when some aspect of the goods exchanged possesses an attribute that is valuable to the buyer and is at the same time difficult to measure or otherwise not

subject to determinate contractual specification (Bowles and Gintis, 1988:147).

Bowles and Gintis have shown that buyers ensure desired seller behavior, or determine the ex post terms of an exchange of a contested good, by offering the seller a strategic rent. This rent is a strategy of claim enforcement on the part of the buyer because it increases the cost of contract termination for the seller. Thus in the case of labor, where an employer offers a wage in exchange for which the employee offers not some fully specifiable pro quo, but only a promise to perform at an adequate level of intensity and care, the strategic rent along with contingent contract renewal acts as a discipline mechanism (Bowles and Gintis, 1988). The strategic rent in this case can take a number of forms, such as a wage higher than the competitive equilibrium. In addition to the strategic rent and the threat of contract non-renewal the agent-buyer develops surveillance systems to determine whether or not the good, in this case labor, has been delivered with the promised level of intensity and care. Bowles and Gintis set out to demonstrate that in liberal societies, where political instruments for the enforcement of the terms of an economic transaction available to economic agents are limited, an economic cost-minimizing combination of surveillance systems and contingent contract

renewal, made effective by strategic rents, serve as strategies of claim enforcement for agents such as employers and financial investors (Bowles and Gintis, 1988). Strategic rents persist in competitive equilibrium because they result from the competitive optimizing behavior of agent-buyers (Bowles and Gintis p. 147, 1988).

The fact that issues of power are bound up in economic relations is not a revelation to scholars of international political economy. Economists have begun to apply this model to international trade. Kiaran Honderich, for example, has applied this model to international trade by showing how Japan used strategic rents to reduce the possibility of United States protectionism (Honderich, 1989). What is important about Bowles and Gintis' model for this project is what it can demonstrate about the dynamics of United States-Western European collaboration on technology transfer controls.

This model can provide a framework for analyzing the relationship between the instruments that United States policy elites have used to attempt to extract compliance for preferred policy positions in the multilateral program. If we recognize that COCOM is an informal organization affording no recourse to formal measures to ensure compliance in agreements or to sanction defectors, then we can demonstrate how a combination of surveillance systems,

contingent contract renewal, and rents serves as a strategy to extract and ensure compliance on agreements and to obtain concessions on particular issues in COCOM negotiations.

Based on this theory we could tell the story of the history of this collaboration in the following way. Limiting Eastern Bloc access to Western technology required Western European collaboration. With a preponderance of resources at the outset, the United States was able to offer participation or enforcement rents to Western European states. Enforcement rents in this case could have taken a number of forms: access to relatively inexpensive advanced technological goods and know-how, Marshall Plan aid, government contracts for firms whose governments agreed to prevent the sale of technology to the East. While political consensus, on some level, has existed on the need to have a multilateral strategic export control program, there has always been a "control threshold" beyond which alliance states resisted what they considered to be excessive controls (Bertsch and Elliott, 1988). There have also been costs, forgoing trade with the East in certain areas, to following the United States lead in this program. At the outset of the multilateral program the provisions of the Mutual Defense Assistance Control Act of 1951 (the Battle Act), formalized contingent contract renewal in that it required the termination of economic assistance and other

privileges to allied states found exporting controlled technologies to the Eastern Bloc. The United States also set up the Office of Export Control in 1949 with a system of export licenses and used its intelligence networks for surveillance to gauge compliance in this instance of contested exchange. The agencies charged with oversight on export controls developed lists of known and suspected violators of these regulations. These instruments remain embedded in the United States export control administration.

The diffusion of technological production capability and know-how among industrialized states and firms has altered the international distribution of high technology goods production. This has transformed the efficiency of the initial United States governments' mix of surveillance mechanisms, enforcement rents, and "contingent contract renewal" as instruments used to ensure compliance from states and firms on export control agreements. Enforcement rents offered for compliance have become more costly and the possibility of sanctions for defection has become over time relatively less effective.[2]

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[2]Beverly Crawford and Stefanie Lenway have attempted to identify the conditions under which stable cooperation occurs by combining regime theory and organizational theory (Crawford, 1982; Crawford and Lenway, 1985). They argue that the erosion of United States preponderance and a relatively more equal distribution of power undermines compliance strategies and produces a shared compromise approach to the construction of policy collaboration in this area. Their case study is the 1982 pipeline dispute. Instruments for a

In the early 1980s compliance rents available to the United States were disappearing or were becomming more costly. In this context the Reagan Administration moved to invigorate the unilateral surveillance program with the intention of extracting compliance from the allies on a refortification of the multilateral control program. As the distribution of capability in this issue area shifted, the United States attempts to refortify its relatively eroded enforcement rent system by invigorating its surveillance program. This serves to increase the possibility of detecting defectors from agreements or firms diverting controlled items to actors subject to regulation. The enforcement rent system could have functioned effectively with a somewhat less vigilant surveillance system in the past because of United States preponderance and because Western European firms and states did not have alternative suppliers or effective replacement rents. The intensity and extent of United States vigilance on technology transfers becomes a function of the cost and effectiveness of rents and the vulnerability of states and firms to the sanction of

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compliance extraction strategy are, however, still at the disposal of the United States through the structure and statues of the unilateral export administration program. This model can help to explain the dynamics and the consequences of the use of these instruments by the United States in the 1980s.

rent withdrawal for non-compliance or defection from the agreement.

As will be discussed below the response of the United States in this situation of decline might be regarded as counter-intuitive or non-optimizing. The reconstitution of these instruments in the early 1980s, however, is a continuation of the overall compliance extraction strategy embedded in the United States unilateral export control program. Moreover the level of compliance that the United States desired from the allies in the early 1980s was determined not by optimizing calculations, but the level of desired compliance was established in terms of what we will describe as the absolutist discourse.

In the "absolutist model" set out below (figure 1) compliance (C), defined in terms of the willingness of actors to conform to the United States policy position on technology transfer controls and to expend resources and devote effort to prevent the illegal transfer of controlled technologies, is a function of the threat of contract non-renewal and a combination of enforcement rents (r) and surveillance (s). As shown in the graph below, enforcement rent effectiveness is eroded over time (t) producing a shift in the optimal combination of surveillance and rents to extract compliance. The result is a shift out on the Y axis. This means that the cost and intensity of surveillance

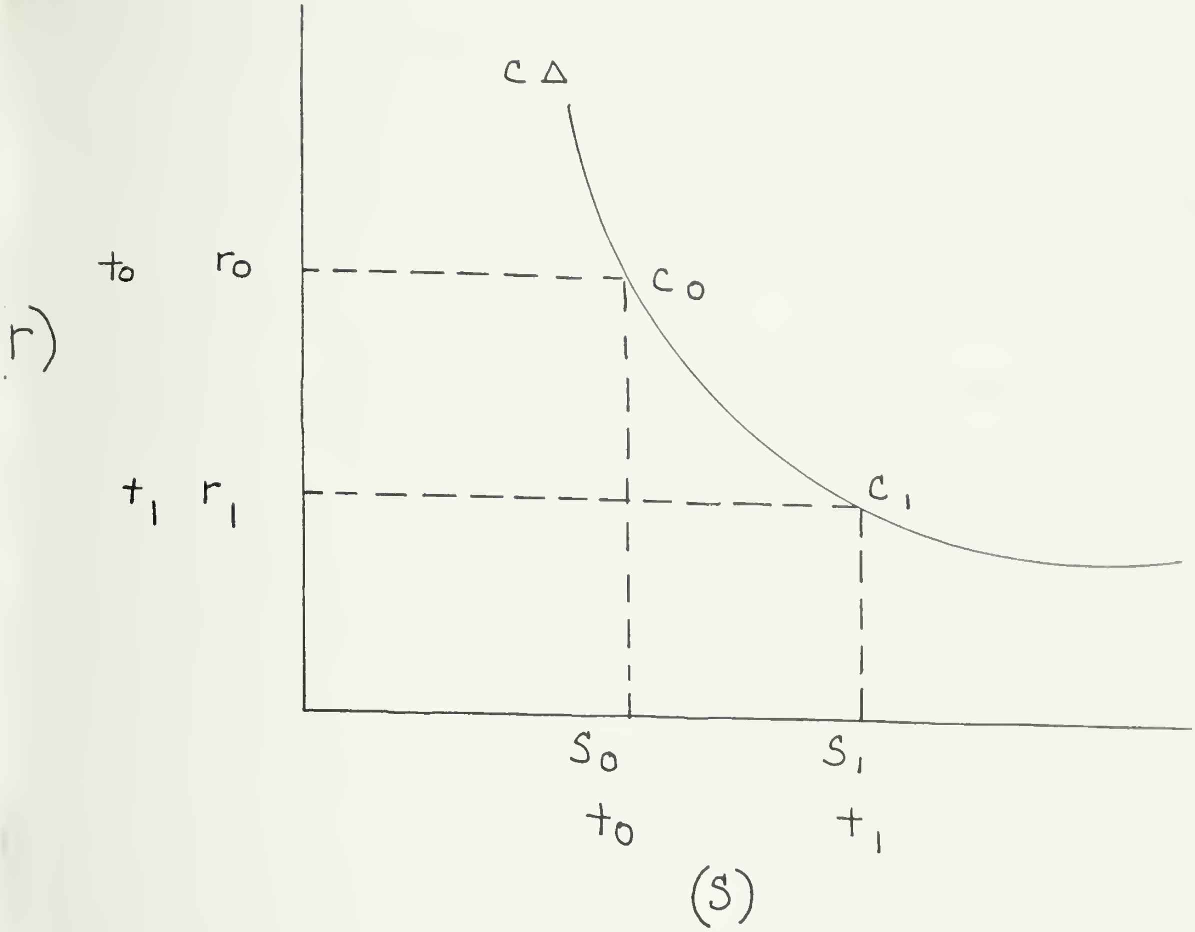

Fig. 1:1. "The Absolutist Model": Contested exchanged model and the dynamics of compliance extraction on multilateral export controls.

Note: In the model set out above compliance (c), defined in terms of the "willingness" of actors to conform to the United States policy position on particular controls, to comply with agreements on controls, and to expend resources and devote effort to prevent the diversion of controlled technologies, is a function of enforcement rents (r), the threat of their withdrawal and surveillance (s). In the graph above, enforcement rents are eroded over time (t) producing a shift in the combination of surveillance and rents to extract compliance. The result is a shift out on the axes. The United States attempts to extract compliance at a level determined in absilute terms with greater resource outlays and increased vigilance on surveillance. As discussed in the chapter this acts as an endogenous factor accelerating (↓) the erosion of enforcement rents as firms and states (rent-takers) turn to alternative suppliers and their next best alternative. Underlying problem = c (r,s); minimize B(udget) subject to $C \geq C^A$. ($B = P_s S + P_r R$). Pr = Price of imposing a rent of a given amount. P_s = Price of surveillance (r↓ => s↑).

increases in relation to the decline of the effectiveness of rents and in relation to an increase in the price of imposing a rent.

This "abolutist model" shows the consequences of using these instruments in a compliance extraction strategy. While the effectiveness of enforcement rents has been undermined exogenously, attempts to strengthen the compliance extraction system by increasing the intensity and extent of surveillance-which can make withdrawal threats more creditable-acts as an endogenous factor accelerating the erosion of available rents and increasing the cost of imposing a rent. This is the case because the costs of being exposed to the United States intensified surveillance system and the threat of enforcement rent withdrawal, for foreign firms and states, begins to outweigh the benefit of accepting rents. This becomes the case as alternative sources of supply arise and as Eastern European markets present more opportunities. Western European states in this case attempt to reassert autonomy by encouraging the development of indigenous technology, by passing laws to protect against the United States legal authority to withdraw rents and by moving to collective intra-European bargaining positions on East-West trade and export control policy. Firms attempt to reduce exposure by turning to alternative suppliers and by designing products around

United States technology (National Academy of Sciences, 1987). What this means is that where enforcement rents are being eroded exogenously, relying on this coercive system may bring about compliance from actors in the short term; in the long term it accelerates the decline of the original basis of power in multilateral negotiations on export control policy and risks serious damage to United States commercial interests.

In contrast to the "absolutist model" (Figure 1:1) the "optimizing model" (Figure 1:2) depicts a cost minimizing strategy. In this case the United States would maxamize the net benefits of these instruments by extracting compliance at a level determined by an optimal combination of available rents and surveillance. The level of desired compliance is set exogenously under the terms of the absolutist discourse.

In order to empirically verify the applicability of this model we would have to be able to identify the enforcement rents and their recipients. We would have to specify who will be hurt and how much by their withdrawal and whether or not they have an attractive next best alternative. If enforcement rents could be reduced to inter-governmental aid transfers then the equation would be rather simple. They cannot, however, because enforcement rents can take a number of forms (access to military technology, to defense department contracts, to supplies of

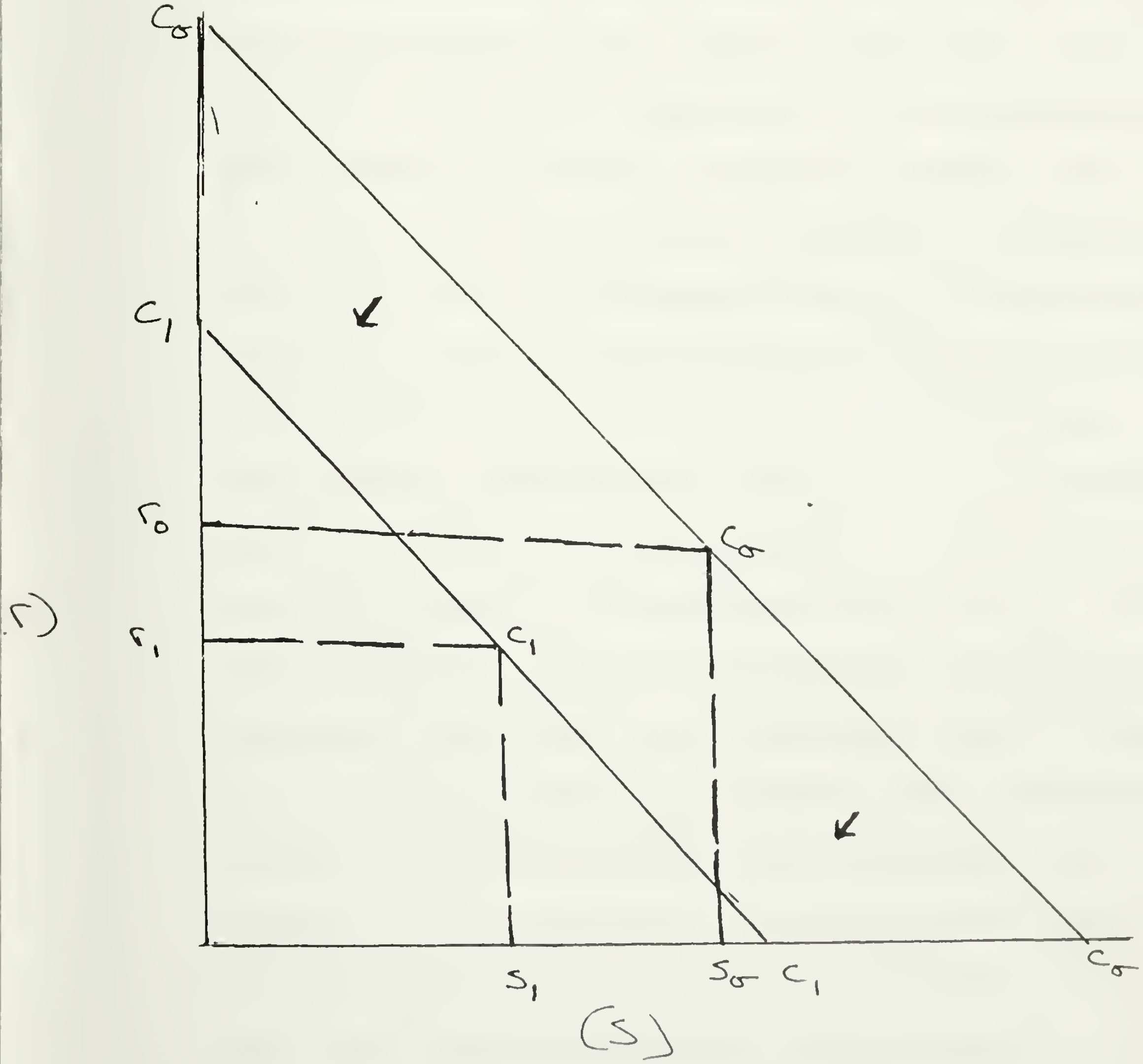

Fig. 1:2. "The Optimizing Model": In this model the level of compliance (C_0 & C_2) shifts in proportion to the optimal combination of rents (r) and surveillance (s). Reduced rents lowers the marginal effect of surveillance on compliance thereby reducting optimal surveillance from s_0 to s_1. (r = > s)

specific products and technologies) and can be directed at both firms and governments. Beyond that, acquiring this data is made difficult by the fact that the dynamics of negotiations on multilateral policy are not made public. Measuring the extent and consequences of an enforcement rent system on West-West trade is also made more difficult by the fact that Western firms, tend to avoid public discussions of its impact due to the importance of the United States market and technology (National Academy of Sciences, 1987).

There is an abundance of suggestive evidence showing that this model has explanatory power in terms of the dynamics of United States attempts to enforce its preferred position with COCOM and non-COCOM states and firms. The first Reagan Administration tried to bring allied states in line with the United States position on increasing the restrictiveness of multilateral export controls. The Administration intensified surveillance programs to gauge compliance; and there were allegations that the United States used the threat of enforcement rent withdrawal in an attempt to enforce its position with Western firms. For example, in 1982 Richard Perle indicated that United States military technology was withheld from certain allies until they agreed to strengthen their domestic export control programs (Mastanduno, 1985). In addition, several scholars as well as the 1987 study by the National Academy of

Sciences have indicated that Western European policy makers and business executives are cognizant of and resistant to the threat of enforcement rent withdrawal and the costs of being subject to the United States surveillance system (Crawford and Lenway, 1985; Jacobsen, 1985; Bertsch, 1988). According to Bertsch and Elliott, for example, during the 1982-1984 COCOM list review in which a compromise was struck on computer hardware, computer software, and telecommunications equipment, the United States had threatened to cut Britain off from supplies of United States technology unless Britain tightened its export control enforcement practices. In addition, the compromise Britain and other COCOM states made with the United States meant that a number of Western European firms were forced to scrap East-West trade deals. Bertsch and Elliott say that Britain agreed to the compromise "not only for the sake of alliance unity, but also for more pragmatic economic reasons that transcended the interests of any particular firms, no matter what their resources" (Bertsch and Elliott, 1988). There have been a number of other allegations that the compromises worked out in the 1982-1984 talks were made possible in part by United States threats to deny technology and defense contracts to COCOM states and firms who resisted the refortification of controls (Woolcock, 1983; Schaffer, 1985). Contrary to the view that these compromises

represented an alliance consensus to strengthen the program no matter what the economic costs, this model demonstrates the instruments that were available to the United States to attempt to extract concessions on particular issues. This model also demonstrates instruments that the United States has used to enforce Western firms' compliance with export controls.

This enforcement rent system can also be applied to explain the United States approach to extracting compliance on export controls from non-COCOM states and firms. As Mastanduno points out, when diversions of controlled technology to the East through Austria in the early 1980s were identified, United States officials said that Austrians would be left with only "pastries and 1950s machinery" if they did not tighten restrictions on technology transfer controls (Mastanduno, 1985). As a direct result of United States threats to withdraw enforcement rents, the Austrians, out of what they referred to as economic necessity, agreed not only to cooperate with U.S. Customs Service surveillance programs, but also passed domestic legislation that established more effective domestic controls on technology transfers to the East. The United States has also turned to this enforcement rent system to extract compliance from other non-COCOM states and firms. The United States has used this type of strategy to assure COCOM member states

that the trade their firms would forego by complying with multilateral controls would not be filled by non-COCOM suppliers (Interview, Paris, November, 1990).

A number of studies have demonstrated the costs of coercion strategies in extracting compliance on broadening the multilateral export control program (Mastanduno, 1985; Jentleson, 1986). These studies have shown how allied political resolve and domestic resistance have helped to undermine such strategies, particularly in the case of the Siberian gas pipeline dispute. The contested exchange model shows the potential detrimental long-term consequences of a compliance extraction strategy. It also demonstrates in a broader and more parsimonious way the inter-relationship of instruments that have been used in an attempt to extract and to enforce compliance with multilateral export control agreements from COCOM and non-COCOM states and firms. In addition, the model offers a conceptual framework for analyzing instruments available to the United States for attempting to extract concessions on particular issues in COCOM negotiations. This framework allows us then to make sense of the move to refortify United States surveillance programs in the early 1980s as an integral part of a broader enforcement rent system that had served to lace multilateral control collaboration together in the past.

The Market Explanation

The market perspective focuses on Western competition for Eastern European markets as the primary factor explaining the dynamics of United States-Western European conflict and cooperation on East-West export controls. This approach will be developed as essentially a group theory perspective that emphasizes domestic interest-group configurations as the decisive element in explaining the limits to cooperation and the source of conflict at the international level (Truman, 1951; Macridis, 1977; George, 1980; Hall, 1988).

The political process, according to this view, is dominated by interest group activities. This perspective downplays the role of central state actors and sees government policy as the result of bargaining and competition among interest groups. According to this view the line between domestic and international politics is blurred; foreign policy has domestic roots and consequences (Gourevitch, 1986; Hall, 1987; Putnam, 1988). The emphasis here, then, is on the constellation of domestic actors standing to benefit from either cooperation in or defection from alliance coordination of technology transfer and export control policy. This approach thus considers which groups are affected, how these groups are affected, and what they do to advance their interests in terms of these policies.

Changes in the mix of group interests converging on alliance governments from the domestic political scene are expected to bring about pressures to change policies if these new groups stand to benefit from such changes. Outcomes are thus explicated by showing how these groups entered into political coalitions, at various times, to influence officials and alter policy (Katzenstein, 1976).

Gary Bertsch argues that pluralism accounts for the politics of United States export control policy (Bertsch, 1985). Like others dealing with economic foreign policy issues he argues that in the last two decades, with the "weakening of presidential power after Vietnam and Watergate," the political process on export control policy has become increasingly pluralistic; "marked by more political actors and centers of power with access to the making and implementation of U.S. foreign economic policy" (Bertsch, 1985; Odell, 1982; Destler and Odell, 1989; Long, 1989). Scholars of comparative foreign and economic policy have pointed out that among advanced industrialized states there are significant differences in terms of the strength of the state, the porousness of state institutions and the role of societal interest groups in the policy process (Katzenstein, 1976; Krasner, 1978; Evans, Rueschemeyer, and Skocpol, 1985; Hall, 1988; Gourevitch, 1988). These differences present problems for the generalizability of

pluralist explanations of policy formation and change across states in the West. Differences in the transparency of the political processes of foreign economic policy formation in these states also complicates the empirical verification of the perspective. Nevertheless specific and identifiable groups within each of these states are affected by and have taken an active interest in export control and technology transfer policy. In the past this has included a wide array of groups from commercial interest groups to groups with particular ideological agendas. What is often more difficult than determining what groups are affected and how is assessing the steps that these groups take to shore up and protect their interests. The question is to what degree is United States-Western European cooperation and conflict a result of the convergence, or divergence, of the interest of domestic groups with the capability and will to influence government policy on East-West trade? In the past decade societal level actors have become a much more significant force in helping to determine the scope of the multilateral export control program and in constraining the ability of officials to negotiate inter-allied agreements.

Institutionalism

As the classical theorists Martin Wright and Hedly Bull and some later regime theorists have pointed out, institutions in the international society of states can

encompass more than explicit organizations. We can conceptualize institutions as taking a number of forms and existing on a number of levels. There are system-wide international institutions inherited from the Western state system, such as the balance of power or diplomacy. There are subsystem institutions of various forms and functions, such as military alliances and economic integration programs. In addition, there are intra-state institutions that interact with, affect, and are affected by the subsystemic and systemic institutions.

The term *institutionalism* as used here subsumes a variety of perspectives associated with both intra-governmental politics models and theories of inter-governmental relations. "Governments," according to one variant of this approach, consist of conglomerates of loosely allied organizations and individuals (Allison, 1971). This perspective, however, also rejects the pluralist view of the state as an epiphenomenal product of civil society, simply reflecting a conglomeration of societal characteristics or preferences (Krasner, 1978). Individuals and institutions within the state, according to this view, are able to resist societal pressures for policy change that may run counter to their interests or established understandings of the national interest. Some scholars drawing on this framework have concluded that the

executive branch has dominated the process of policy formation in export control and technology transfer issues (Long, 1988 and 1989; Elliott, 1988; McIntyre, 1988).

The institutionalist and the pluralist perspectives have been set up as two alternative explanations of the formation and change of states' domestic and foreign policy (Krasner, 1978; Odell, 1981; Gowa, 1983; Hall, 1988). In this project I employ these perspectives to interpret the dynamics of international collaboration, evaluating how these domestic level factors affect inter-allied cooperation and conflict. Bracketing out domestic level considerations has been an accepted move among some international relations scholars. This step is often justified for the sake of parsimony. We do need to limit the field of possible variables to explain an international event or the dynamics and outcome of bargaining on an issue. As Hedly Bull (1968) has pointed out, however, the demand for tidiness and intellectual cleanliness often sacrifices a consideration of the complexity and intractability of international relations. In this project I open up the domestic level black box, to a degree, recognizing that this move could open a "pandora's box" of analytical and empirical puzzles. The aim, however, is to provide a "thick description" of the conditions and pressures that lead to cooperation and discord in this area of alliance inter-action (Geertz, 1973;

Ruggie, 1982 and 1990). I agree then with John Ruggie in that I take thick description to be an essential tool of all interpretive sciences (Ruggie, 1990). In this project I provide a theoretically informed multilevel reconstruction of the dynamics of collaboration.

The first variant of the institutionalist approach sees governments as consisting of existing organizations, each with a fixed set of standard operating procedures and programs. Existing organizational routines circumscribe the effective options open to political leaders and can deflect societal pressures for policy change. Policy orders are ground through various apparatuses of government that may distort or alter initial intentions by employing old routines.

Stephen Elliott (1988) and William Long (1989) have demonstrated that in the United States the executive branch has historically dominated the policy process on export control and technology transfer policy. They also argue that most of the agencies charged with responsibility for these policies operate on principles that reflect the cold war environment in which they were constructed. According to this perspective each agency involved in the export control and technology transfer policy process attempts to push policy in the direction indicated by its own program (Janis, 1968; Allison, 1971; Halperin, 1972; Stienbruner,

1974; Art, 1974; Destler, 1980; Odell, 1981). Responsibility for export control is often spread out among several agencies. As a result, particularly in the case of the United States, policy substance can appear self-contradictory. This occurs when agencies charged with carrying out the policy have divergent or conflicting organizational routines that lead to inconsistent policy outcomes. Such a situation imposes significant limits on top policy makers' ability to effectively alter policy, or to negotiate agreements (Nau, 1988). Alliance conflict over export control policy is more likely the more policy responsibility is spread out at the domestic level among agencies with divergent organizational routines (National Academy of Sciences, 1987; Root, 1988).

The second variant of this approach sees foreign policy positions as outcomes of bargaining among players positioned hierarchically within governments (Allison, 1971). The decisions and actions of governments are analyzed as intra-national bargains resulting from compromise, coalition, competition, and confusion among groups of officials who define and perceive export control and technology transfer policy issues differently. The individual players in this game are nested within various agencies that compete with each other for resources and prestige (Neustadt, 1970). These players typically seek to

guard and promote the interests of the agency that they represent: "where they stand often depends on where they sit" (Allison, 1971 and 1975; Allison and Halperin, 1973; Odell, 1981; Hardt, 1983; Freedenburg, 1987).

East-West technology transfer control policy, according to this variant, represents the outcome of bargaining among these divided officials (Jentleson, 1986; National Academy of Science, 1987; Elliott, 1988; McIntyre, 1988; Hillenbrand, 1988). The dynamics of alliance collaboration on export controls is explained in reference to intra-governmental bargaining. For example, the State Department's ability to negotiate a community of common controls is tied to the nature of intra-agency negotiations with the Defense and the Commerce Departments (Root, 1988). The Department of Defense has consistently advocated a more restrictive approach to export controls. Intra-alliance cooperation is easier to achieve and to maintain, when the State Department or the Commerce Department, advocating a less restrictive approach, have control over the nature and scope of United States export control and technology transfer policy. John McIntyre has pointed out that for a number of reasons over the past fifteen years the bureaucratic balance of power on COCOM issues has shifted to the Department of Defense. According to this perspective, United States-Western European conflict occurs as a result

of a situation in which agencies that hold a preponderance of power in alliance states' intra-governmental politics over export control are at variance over the form and function of such controls.

The third variant of this approach focuses on transgovernmental linkages between middle and lower-level bureaucrats (Neustadt, 1970; Keohane and Nye, 1972 and 1977). According to this view, government bureaucrats and specialists in other areas working together in the same functional issue context can develop common expertise and consensual understandings in the process of addressing policy coordination and problem solving (E. Haas, 1975, 1980, 1983; P. Haas, 1989). This type of interaction in turn can lead to more flexible bargaining and more extensive cooperation. Peter Haas has demonstrated how groups of transnational specialists in the scientific community that form what he calls epistimic communities can influence or shape intra-governmental policy collaboration. Transgovernmental links can thus affect national policies as coalitions arise that turn consensual understandings back into domestic policy processes in the form of knowledge, information, and pressure (Keohane and Nye, 1977; E. Haas, Williams, and Babai, 1977; Adler, 1986; P. Haas, 1989).

Western alliance cooperation on export controls might be explained, according to this view, with reference to the

nature and evolution of such transgovernmental linkages. Therefore, the perspective raises the following questions: Does ongoing policy collaboration within COCOM result in more extensive consensual understandings and thus greater cooperation among transgovernmental bureaucrats and specialists? Have shifts in the locus of alliance states' policy negotiations on export controls (away from bureaucrats and specialists charged with responsibility for ongoing collaboration in COCOM), resulted in greater United States-Western European instability in the collaborative program (Crawford, 1988; Hardt, 1988; Root, 1988; Hillenbrand, 1988)?

Discourse Analysis

Calling discourse analysis **an** approach does not do justice to the multiplicity of its variations and styles (e.g., Foucault, 1972, 1979, 1980; Barthes, 1974; Ruggie, 1976, 1982 and 1989; Odell, 1981; Kartochwil and Ruggie, 1986; Ashley, 1986; Elshtain, 1986; Der Derian, 1987; Der Derian and Shapiro, 1989; ISQ September 1990). Because discourse analysis came late to the discipline I will provide a detailed articulation of the perspective.

Discourse analysis, in a general sense, concerns the significance of "modes of reality making" for understanding international cooperation and conflict. It is also examination of the circulation of influence between

representations, perceptions, and policy prescriptions and state practices. It also involves an examination of the production, circulation, and acceptance of representations-symbols, language, and images-that constitute meaning and frame understandings of international relations. The circulation and acceptance of "meaning constitutive representations" makes possible, legitimates, and shapes particular policies and precludes others (Shapiro, 1989). The approach focuses on the role of contrasting meaning-constitutive representations, among alliance states' policy elites. This includes representation of the nature of the Soviet threat, of strategic technology and Western security and of the relationship between East-West trade and Western security interests (Bertsch and McIntyre, 1984; Jentleson, 1986; Hillenbrand, 1988; Root, 1984 and 1988).

According to this view, meaning and value are imposed on the world: "structured not by one's immediate consciousness, or in correspondence to a reality, but by various reality-making scripts one inherits, or acquires from one's surrounding cultural, historical, and linguistic condition" (Shapiro, p. 11, 1989). Discourse analysis places an emphasis on intertextuality. A text is a field in which words, bits of codes, formulae, fragments of social languages, and representations meet (Barthes, p. 32, 1981). All texts are polysemic in that they are spaces where the

paths of several possible meanings and several discourses intersect. Any text is thus an intertext - a multi-dimensional space in which a variety of discourses blend and clash (Der Derian, 1989). International relations, international theory, and the terrain on which debates occur about export control policy, can all be read as such a space - as a text. Understandings of international relations, events, and situations are mediated through and contingent upon representational practices. The various perspectives deployed in relation to international relations, in order to explain an international situation or in order to defend a policy option do not always have a power outside of the space or time they seek to represent. They are dependent for their intelligibility, meaning, and power on the structure and circulation of past discourses that construct and mediate understandings of international relations.

The notion of discourse implies a concern with the significance of how meaning and value producing representations are bound up in language and with power. A discourse is something more than language as a code. It is a type of utterance that entails representational practices that do not merely "reflect" its object, but organize it and subject it to transformation (Todorov, 1984). Such practices - styles, grammars, rhetorics, and narrativity - entail systems of meaning and value that constitute and

legitimate particular policies and collaborative endeavors (Der Derian and Shapiro, 1989).

Discourses are reinforced and renewed by, and reinforce and renew, a whole strata of institutional supports such as pedagogy, organizational processes, and administrative systems of categorization and standardized procedures. In that sense then they function as systems of inclusion and exclusion, and empowerment and disempowerment.

The focus of this analysis is on the representational practices of discourses within which the multilateral export control program is embedded. United States-Western European collaboration on export controls is thus assessed in terms of how shared understandings, reigning ideas, and meaning-constitutive representations frame the possibilities and limits of cooperation (Habermas, 1971, 1987; Ruggie, 1975, 1982; Odell, 1981; Larson, 1985). This assessment can be done by tracing representational practices that constitute certain policies as legitimate for the protection of national and alliance security. Significant elements of United States- Western European conflict on this issue are uncovered by analyzing how the boundaries of contrasting outlooks on the appropriate nature and function of multilateral export controls relate to various representational practices found in the discourse of alliance states' policy makers.

These "modes of reality making" are bound up in scripts or inherited in pre-texts of apprehension, such as national and cultural histories, generational experiences, and forms of professional education and training. They are embedded in the various discourses of states' representatives who engage in negotiations on policy collaboration. The production, circulation, and acceptance of certain dominant meaning-constitutive representational practices establishes a common pre-text for shared notions of legitimacy. The extent to which the diversity or plurality of discourses is subordinated to a common or dominate discourse establishes the permissive environment and structures the nature and scope of a collaborative policy effort.

United States-Western European conflict on this issue is explained in reference to the boundaries of contrasting outlooks, to various representational practices, and how these relate to reality-making scripts inherited from cultural, historical, and linguistic experiences (Foucault, 1972, 1979, 1980; Der Derian, 1987; Der Derian and Shapiro, 1989; Elshtain and Der Derian, 1987). Discourse analysis in this case lays stress on the following: the influence of Western Europe's geographical propinquity with Eastern Europe; Western Europe's stronger traditional trade ties with Eastern Europe; each ally's past experiences with

practices of economic diplomacy; representational practices relating to the image of the Enemy-Other; differences in the conceptualization of the relationship between technology, security, and power; and preconceptions regarding the nature of Great Power competition. In this sense discourse analysis complements and enriches the geo-political perspective and studies of the role of perception.

The need for a discourse analysis is evident from statements made by former State Department official Martin Hillenbrand. He has argued that "American and Western European officials have tended to have basically different attitudes toward Eastern Europe" (Hillenbrand, p. 367, 1988). He speculates on the source of these differences in attitude citing Western Europe's historical heritage, cultural links, and geographical propinquity with Eastern Europe. Hillenbrand says that these "differences in outlook" lay at the heart of the United States-Western European disagreements over East-West trade and export control policy and that a "cultural lag" exists. United States attempts to pressure Western European states into conformity with its perception of Eastern Europe, he argues, have accentuated definitional and interpretation differences regarding the function and substance of technology transfer controls.

Henry Nau and William Root, both former United States government officials involved in negotiations on alliance technology transfer control collaboration, have also pointed to the significance of divergences of perceptions in the West over the nature of the Soviet threat and over the relationship between East-West economic activities and the East-West strategic conflict (Root, 1988; Nau, 1989). Nau argues that consensus and turbulence in the inter-allied and intra-national policy processes can be traced to contrasting interpretations of these issues. Though not a discourse analyst, Stanley Hoffmann has argued that apparent drifts in Western alliance interpretations of the Soviet Union and discord over policies to protect Western security, can be traced to fundamental perceptual divergences. He says, for example, that differences in historical experiences in the conduct of the "game of nations" and differences in national character and political culture are important factors in explaining the dynamics of United States-Western European collaboration on East-West economic and security policy (Hoffmann, 1981). Discourse analysis picks up where Hoffman leaves off.

Gary Bertsch and John McIntyre have also attempted to provide more well-defined criteria for evaluating the impact of the divergence of perceptions in alliance collaboration on East-West export controls. They examine the divergence

of perception over the Soviet threat and over the appropriate relationship between trade and security concerns on export control collaboration through a case study (Bertsch and McIntyre, 1984). They take the state as the unit of analysis and argue that there are national approaches to these issues that can be associated with governments conceived as unitary actors. Using Daniel Yergin's nomenclature, they argue that the contrasting perceptions can be grouped into two "ideal-types": a) Image I, that posits the Soviet Union as a monolithic world revolutionary state driven by a single-minded search for expansion and hegemony with a clear sense of objectives; and, b) Image II, that sees the Soviet Union as relentlessly opportunistic, but more in terms of a conventional great power (Daniel Yergin, 1977; Bertsch and McIntyre, 1984). Bertsch and McIntyre draw on several rounds of interviews with United States and allied governments' officials and business executives, a systematic canvassing the printed media of key countries, and an analysis of government documents (Bertsch and McIntyre, 1984). They attempt to show the relationship between the United States' policy positions on East-West trade and export control issues and the acceptance of an Image I perception. They also show the relationship between some key Western European states' positions and the acceptance of Image II perception.

The discourse analysis approach shares some concerns with these studies. However, it provides a conceptual and theoretical framework for evaluating the role of contrasting "world views" in international collaboration. Discourse analysis also moves beyond the potentially reductionistic features of the focus on the psychology of perception to a broader analysis of the relationship between social constructions, discourses, and policy. Despite the contributions that have been made to our understanding of the factors that can lead to conflict and collaboration in international relations by scholars such as Jervis and Larson, who use a psychological approach, there has been little analysis of the role of socio- cultural symbols, images, and language in the dynamics of international policy conflict and cooperation.

For the purposes of this project and for the sake of analytical clarity, I articulate a set of contrasting and contending discourses in concrete terms. While none of these have existed in a pure form, I argue that there have been four contending and at points overlapping discourses in the history of United States-Western European collaboration on export controls on East-West trade. There are important differences between and within each alliance state. I do not assume, as do Bertsch and McIntyre, that governments are unitary rational actors, but rather I contend that the

discourses outlined below operate at several levels. In addition, the history of the alliance collaboration on this issue does not represent a sequential, or teleological path of discourses, but rather these discourses have been in contention since the formation of collaboration on export controls.

The first is an absolutist discourse. The Soviet Union is represented as the embodiment of the evil Enemy-Other. In that sense it is an enchanted discourse. The world is profoundly Manichean and there are no grounds for peaceful coexistence or trust with the Soviet bloc. Within this discourse strategically significant technology holds a quasi- theological place. The original sense of the term, technology is fetishized, held up as having magical powers. Broad controls on the transfer of this high technology are constructed as necessary for the survival of the West. In this discourse the technological edge is represented as the key to the strategic advantage, to security, and to survival. Strategic advantage is not cast in a language of geo-political position or in quantitative terms, but in a language and through images of the space and speed of technological innovation and lead time gaps (Virillio, 1986; Der Derian, 1990). These significations are used in debates to argue for intense vigilance on East-West technology transfers.

In addition, trade with the Soviet bloc, in terms of this discourse, is morally suspect, and non- participation in the export control program or questioning this perspective is cast as criminal culpability in undermining the security of the Western alliance. Finally, this discourse draws on a language that advocates waging and winning superpower conflict through economic and technological means. In that sense it legitimates a policy of economic warfare: a comprehensive embargo designed to inflict maximum cost on and to disrupt the Soviet economy. The United States Department of Defense has most clearly articulated this discourse at points in the past.

The second is an instrumentalist discourse. This is a disenchanted technical and scientific discourse. The discourse draws on representations of the Soviet Union as an opportunistic great power interested in continuous aggrandizement. It also draws on the image of "enlightenment man" capable of engineering political and social relations through policy instruments made efficient by scientific techniques and methods. Thus it embodies the belief that East-West relations can be managed through trade policy instruments. The West, in other words, can use its economic and technological advantages in East-West tactical linkage strategies. Trade inducement can be a carrot, and trade denial a stick, to obtain desired policies and to

register approval or disapproval. The United States State Department and the NSC have most clearly articulated this discourse at points in the past.

The third and fourth are neo-kantian discourses (Kant, 1790; Bull, 1977), liberal and conservative perspectively. Both neo-kantian versions hold to a traditional liberal enlightenment faith in the ultimate value of commerce. The conservative neo-kantian discourse evokes images that equate economic prosperity with the possibility of political stability and moderation. Liberalizing trade with the East, including the export of advanced technology and increasing Eastern economic prosperity, according to this view has value because it can reduce Soviet insecurity and can help to stabilize East-West relations. Despite these potential political side-payments from trade, the neo-kantian discourse focuses more directly on the images of relative gains from comparative advantage in liberalized trade. In that sense then the discourse establishes a conceptual separation, in East-West trade, of political or security issues from economic issues. The conservative neo-kantian discourse does, however, represent the Soviet Union as a traditional great power in pursuit of its self interest. Conflict of interest between Great Powers can never be fully eradicated and thus the discourse legitimates a selective or narrow strategic embargo of goods that would enhance Soviet

military capability. The United States Commerce Department has most clearly articulated this discourse at points in the past.

The liberal version of the discourse holds to a more purely Kantian view in that it draws on images and symbols of a convergence of East-West political and economic interests through the "spirit of commerce." It can be an anti-state discourse that draws on images of the world economic citizen and a rhetoric that casts suspicion on any form of intervention in economic interactions.

Each of these discourses can be identified in the past debates over the nature and function of export and technology transfer controls. They have framed the parameters of the policy options on this issue. The preponderance of any one of these discourses at a particular point in time meant that more stable collaboration obtained. The breakdown of the power of shared or common discourse results in less stability in inter-allied collabcration and more policy disarray and conflict at the domestic level.

Conclusion

This chapter has defined key terms of reference for the project, reviewed the relevant literature, and set out the four approaches that will be used to analyze the history of Western alliance collaboration on multilateral export controls. Within each of the chapters on the post-1945

Western alliance export control program, the power of each approach to account for the factors and the dynamics of conflict and cooperation will be considered. The theoretical approaches drawn on in this study have been used separately in analyses of United States-Western European collaboration on East-West export controls. There has not been any attempt to draw these four approaches together in assessing the history of this issue. In addition, there has been no explicit attempt to draw upon or employ contemporary theoretical work being done on discourses in the examination of the nature of this collaborative policy area.

Finally, most studies of technology transfer controls have analyzed the case of COCOM in isolation from the history of state controls on the diffusion technology. It is clear that there are unique elements in the post-1945 export control program. Placing this case within the context of past examples, however, allows us to consider the shifts that have occurred in the relationship between the control over the diffusion of technology, state power, and understandings and the representations of the sources of state advantage and security in the international system.

Explaining the dynamics of United States-Western European collaboration in this area no doubt requires a multilevel analysis. Collaboration has been shaped and has been transformed as a result of structural, interest group,

and institutional factors. Conflicts in this area have also emerged out of divergences in the meaning constitutive representations embedded in the discourses of alliance states policy elites charged with forming and negotiating the terms of the multilateral program. The analysis of the post-1945 program is designed not only to clarify these factors, but also to refine the theoretical perspectives and to test the explanatory strength of the approaches. Before turning to the post-1945 case, however, we first must provide the historical context.

CHAPTER II

EXPORT CONTROLS IN THE WESTERN STATE SYSTEM: THE FORMS AND THE FUNCTIONS OF VIGILANCE

An Introduction to Reading Export Control Systems

Reading through the "nitty-gritty" of export control procedures and administration can have all of the appeal of a Kafka nightmare. The subtext of debates over the nature and goals of export control systems, however, can be more stimulating. The debates can be read as a clash of views over what gives a state military or economic advantage over rivals. By analyzing those subtexts, this chapter is designed, to raise questions about historical conceptualizations of power and advantage in competition between states.

The attempt to control the diffusion of material, instruments, or technology viewed as giving one state strategic or economic advantage over another is not new in the international system. This chapter begins by reviewing some past examples of attempts by states to control the export of particular items. This includes an assessment of the types of issues and difficulties raised in the formation and enforcement of these controls.

The main focus of the chapter is on nineteenth century British controls because the administrative structure that system most resembles the present one. The nineteenth century British case and the post 1945 case might appear at first to be dissimilar. The early nineteenth century British control system was based on mercantilist notions and was designed to give Britain ongoing economic advantage over its competitors. The most revealing element of these systems, however, is the symbolic value of the categories of goods that are controlled: what they represent(ed) within the context of competition between states. By looking at the past in terms of both the language used to defend the programs and the images and symbols evoked in debates over the types of items that should be subject to control, it is possible to assess con-ceptualizations of power and advantage between states at particular historical junctures.

The Historical Legacy of Export Controls: Various Forms and Functions

Many states have attempted to control the diffusion of items, instruments, and know-how that were considered to give them significant advantage in military or economic competition with rival powers. There are no examples, however, of systematic export control programs, with elaborate administrative apparatuses and enforcement programs, until the middle of the eighteenth century. The

rather rudimentary nature of the state apparatus until the late eighteenth century meant that enforcement of controls was limited. The British control system, developed in the late eighteenth and early nineteenth century, was the first attempt to construct a standardized and systematic export control and enforcement program. It is useful to bear in mind earlier examples as reminders that while states have always attempted to control the export of some items, systematic export control and enforcement programs could not exist until the modern period.

One early example is the regulations that China placed on the export of gun-making designs, guns, and cannons in the fourteenth century (Pacey, p. 73, 1990; see Alvares, 1980). The Chinese went to great lengths in efforts to prevent such items or know-how from reaching neighboring powers. In some cases, however, they were willing to export these instruments to allies. After experiencing repeated attacks by Japanese ships in 1370, for example, the Koreans asked the Ming government to make an exception to their controls (Pacey, p. 73, 1990). The Chinese refused at first, but after being attacked by the Japanese themselves, they agreed to the Korean request. The Chinese first sent guns and material to produce such weapons; then they sent technicians to Korea to help build ship-mounted guns used to fire flaming arrows at Japanese vessels. Chinese attempts

to restrict the diffusion of gun-making methods and designs seems to have been effective; they apparently devised some arrangement with Korea as no other countries are known to have been able to obtain Chinese know-how (Alvares, 1980; Gille, 1986; Pacey, p. 73, 1990).

The first export control programs in the West were founded on and enforced by papal indications (Cipolla, p. 93, 1965). These indications emerged during the Crusades and were designed to prevent items and material considered to be significant in the ongoing conflicts from being sold to the Moslem powers, particularly the "Other," the Ottoman-Turks. Those who sold "strategic materials to the Turks" or who aided them in the construction or use of implements of war were subject to excommunication (Cipolla, p. 95, 1965; see McNeill, 1982; Gille, 1986). This, of course, did not dissuade the Turks from attempting to attract or to kidnap skilled Christian workers and gun-founders who knew how to produce and use cannon. The Ottomans' initial reluctance to use artillery and their poor cannon production systems were factors that kept them from being able to overrun Constantinople for several years (McNeill, 1982). In the early fourteenth century, however, a Hungarian gun-founder named Orbanin ignored the papal export control orders and helped the Turks to build up their cannon production systems (Cipolla, p. 93, 1965; Pacey, p. 75, 1990). In a matter of

two to three years the Turks were able to produce a number of cannons of various caliber including the "Mahometta" that threw 1,000 pound stoneballs and took 140 oxen to draw. This increased capability allowed the Turks to complete their siege of Constantinople and to expand further into Europe (McNeill, 1982).

The first of the more systematic efforts to control the diffusion of items and production techniques emerged during the intra-European dynastic state conflicts of the sixteenth and seventeenth centuries. These controls focused on those instruments and production methods regarded as significant in maintaining military advantage over rival powers. For example, during the long and intense conflicts between the Spanish and the Dutch, the Spanish relied on the gun and cannon design and production of the Low Countries (McNeill, 1982). As conflicts intensified in the late sixteenth century, however, the Spanish began to import British guns and cannons and casting techniques (Hall, 1952; Schuburt, 1957). Henry VII established an iron industry in Sussex in Ashdown Forest, Sussex in the latter part of the fifteenth century. By 1567 an export industry for cannon and ordnance had emerged. Better casting techniques and the type of iron used in the foundries made British guns more reliable than those produced in the Low Countries

(Cipolla, p. 44, 1965), and thus the Spanish attempted to acquire British products.

The English Court became suspicious of this export trade, particularly the Spanish purchases in the 1570s. Sir Walter Raleigh warned Queen Elizabeth that "British technique and product in this area was a jewel of great value" and asked why should the English "place such a jewel in the hands of potential enemies?" (Cipolla, p. 44, 1965). As a result the Queen issued an order in 1574 that restricted the export of British guns and cannons, the material used in the production of such instruments, and the designs or methods of casting such items (Schuburt, p. 67, 1957; Cipolla, p. 45, 1965). The order restricted the number of cannons and guns to be cast in England to those "for only the use of the Realm" (Cipolla, p. 45, 1965). A rudimentary licensing system seems to have been developed in the latter part of the sixteenth century. The controls were waived in certain cases, on permission of the Crown, allowing founders to export ordnance to Protestant powers.

Other Protestant powers with sophisticated ordnance, the Dutch and the Swedes, also established such controls (McNeill, p. 147, 1982). In 1615 at the beginning of the Thirty Years War, Gustavus Adolphus imposed controls on the export of cannon and other material and production

techniques to prevent them from falling into the hands of his Catholic-Spanish enemies (Cipolla, p. 67, 1965).

As conflicts between the Dutch and the French emerged in the 1670s, these export controls posed problems for the French. Following the intense internal conflicts of the seventeenth century, Richelieu had been able to rebuild the administrative, military, and political structures of France (McNeill, 1982; Pacy, 1990). He had not, however, been able to develop an effective base for the production of arms or gunpowder (Cipolla, p. 56, 1965). Skilled labor had been driven from France and the export controls of the other European states prevented the French from acquiring arms openly. As a result, the Marquis de Seignelay and Colbert sent agents into Holland, England, and Sweden to acquire arms illicitly. In addition, France sent agents into Sweden to kidnap skilled workers and gun-founders (Cipolla, p. 60, 1965).

All of the export control programs that existed prior to the eighteenth century were unsystematic. Administrative agencies and enforcement programs were minimal and there was little attempt to rationalize or to standardize controls. This is of course explained by the fact that the modern bureaucratic state with its codes of efficiency and systems of standardization did not emerge full blown there until the eighteenth and nineteenth centuries. For that reason that

it is intriguing to look in more detail at the British export control system of the eighteenth and nineteenth century. The types of problems that concern us today can be found in the context of the debates that occurred over the establishment, enforcement, and continuation of that system.

The Construction of British Export Controls

James Wheeler, the historian of Manchester, wrote that the British "inventions and the developments in the woolen, textile, and the iron and steel industries excited the admiration and jealousy of all of Europe" (Wheeler, p. 170, 1836). Not only that, but they excited a British desire to have a monopoly control of these goods. Controls on the export of machines and tools and the know-how to produce such instruments developed, as we will see, over time beginning with the first decree in the seventh year of the reign of William III in 1696 (7 & 8, William III, c. 20, 1696; Great Britain, Parliamentary Papers, Commons, 1825, 504, v 115).

From 1696 to 1841 the English supplemented Elizabeth I's controls with a comprehensive set of laws and sets of administrative and enforcement systems to attempt to prevent inventions and state-of-the-art machines and tools or a knowledge of them from being transferred to military and commercial rivals. Clearly the perceived economic interest of the manufactures provided significant support for

preventing these inventions from flowing out of England. There, however, seems to have also been other factors driving the development of these laws.

In some cases, as with innovations in the iron and steel industry, the items placed under control had military as well as civilian applications. In other cases, controls were placed on items that would strengthen a competitors' economic capabilities. Of course it is difficult in the mercantilist period to find a clearly articulated conceptual separation between the reasons for restricting the export of goods that advanced a states military productive capability as opposed to economic capability (see T.S. Ashton, 1924 and W. Bowden, 1925). The more elementary issue was preventing the transmission of any machine, tool or resource to a competitor state that might increase its power capability, quite broadly understood.

In this section I lay out the details of the development of the British export control system and raise questions about what such a system did in terms of the idea of the power of a state. Tracing the establishment and development of the British export control system only to the economic interests that lay behind the programs does not go far enough (Jeremy, 1983). For that reason I identify in a suggestive, perhaps some might say interpretative, way

articulations and explanations of the rationale of the controls on the diffusion of these innovations.

This effort to control diffusions of innovations began with the 1696 statue. It sought to protect the "stocking-frame and the mechanisms used in the manufacture of silk" (7 Wm. III, c. 20, 1696). The statute made it unlawful for anyone to export these frames because this "mystery increases his Majesty's glory and his Majesty's customs because great quantities are wrought off in a little time" (7 Wm. III, c. 20, 1696). The statute also goes on to state that as a result of some of these instruments falling into the hands of competitors, "several English families had suffered impoverishment and inconveniences." By preventing these items from falling into the hands of competitors, the government stated it was protecting the interest of both the Crown and the subjects.

The next law passed in an attempt to guard the secrets of innovations and inventions was in 1750 (23 Geo. II, c. 13, 1750). This statute related to the woolen industry as well as to the manufacture of silk. The woolen industry was protected in England by having a monopoly in the home market. There was also a natural supply of material, but this statute stated that English subjects could be disadvantaged by allowing "foreigners to obtain these new instruments" and thus through such laws "His Majesty" was

preserving as much as possible to "His subjects the benefits arising from those great and valuable inventions" (23, Geo. II, c. 13, 1750). Curiously, in this same statute "His Majesty" also began "preserving the interest of the Kingdom by preventing the outmigration of English artisans and skilled craftsmen." The statute not only further extended prohibitions on the export of machinery then, but it also forbade skilled workers from leaving the country. Heavy penalties were established for skilled workers who violated the law. In addition, penalties were set out for individuals who attempted to get British skilled workers to leave the country.

The first offense for a skilled worker leaving the country carried a penalty of six months in prison and 100 pounds fine. The second offense was one year in jail and an unlimited fine. If a British artisan was discovered abroad and did not return when directed by the British government, then he ceased to be a British subject and all of his property, and in some cases his family's property, was confiscated (23 Geo. II, c. 13, 1750; Mantoux, 1961). Individuals who aided artisans or skilled workers in an attempt to emigrate were subject to five years in jail and 500 pound fines for the first offense.

In 1774 export controls were extended to the cotton and linen industries (14 Geo. III, c. 71, 1774). Like the

laws for the woolen industry and silk manufacturing these laws covered both the physical machines and the artisans (Wheeler, p. 254, 1836; Bowden, p. 130, 1925). In 1781, a law was passed that also made it illegal to export sketches, miniature models, or the specifications that would "allow foreigners to construct machines or instruments used in the woolen, silk, cotton, and linen industries" (21 Geo. III, c. 37, 1781). This statute also prohibited the transfer of information on methods of application or production processes (21 Geo. III, c. 37, 1781). This, along with the controls placed on the emigration of artisans, represented an attempt to control the outflow and exchange of the intangible know-how.

In 1785 this system was expanded to include innovations, machines, and tools used in the iron and steel industry (25 Geo. III, c. 67, 1785). In this area a large number of devices and processes had been developed that improved the quality and the strength of metal products. Many of these processes were essential to the refining of steel used in the production of cannons and guns. Export controls in this category of goods were intended to prevent these innovations from falling into the hands of foreign military rivals (see, Ashton, 1926). The 1785 statute was much more extensive than the 1774 order. The passage of this statute prohibiting the export of tools, utensils, and

machines used in iron and steel manufactures was accompanied by what may have been the first export control list (see table 2:1; 25 Geo. III, c. 67, 1785). Included on the list of items subject to control were rollers, casting molds, and lathes-all essential instruments in the manufacture of high quality weapons of the period (Ashton, p. 143, 1926; Beckman, 1846; Cunningham, 1895).

All of the above statutes were continued in force by acts passed year to year until 1795 when a general and perpetual law was passed. One of the more significant features in the expansion of this system was the fact that in 1781 the British had moved to control information on production processes. Once this move is made the system becomes that much more complex and requires that much more vigilance for enforcement. The 1795 law was designed to establish more permanent controls on the diffusion of any of the machinery or tools unique to England or new innovations that might bring productive advantages over competitors (35 Geo. III, c. 38, 1795). A magistrate from one of the new and growing industrial centers published a statement of support in a local paper stating that "the discoveries and the improvements of the age diffuse a glory over this country unattainable by conquest or dominion. And promise

TABLE 2.1

Sample British Export Control List Established by the Statue - 25th George III. Chapter 67, 1785 (Partial List)

Prohibits the Exportation of any Tool or Utensil hereafter mentioned; that is to say,
Hand Stamps
Doghead Stamps
Stamps of All Sorts
Screws for Stamps
Presses for all sorts of iron, steel, or other metal
Piercing Presses of all sorts
Iron and steel dies to be used in stamps or presses
Rollers of cast iron, wrought iron or steel, for rolling of metal or frames
Casting Moulds
Lathes of all sorts for turning, burnishing, polishing
Lathe strings
Stocks for casting buckles, buttons, and rings
Cast-iron anvils for forging iron and copper
Pins or stocks for making screws

to stamp a luster on His Majesty's reign to the latest generations" (cited in Bowden, p. 127, 1925).

Enforcement of British Controls

Perhaps secretiveness in the conduct of a craft was a posture inherited from the preindustrial apprenticeship system. With the emergence of "technologies" of an altogether different order in the eighteenth and early nineteenth century, industry in Britain was conducted in an overall atmosphere of secrecy (Musson and Robinson, p. 216, 1969; Jeremy p. 36, 1981). The export control system was only one of the means by which Englishmen attempted to guard their secrets from foreign competitors. The design of many of the factories themselves was intended to maintain the maximum amount of surveillance over workers and skilled craftsmen and to ward off intruders. These factories combined features of a medieval castle system and panopticonic design (see Crump, 1931; Foucault, 1979; Jeremy, 1981). The main shops were open to quadrangle yards with observation towers at each corner. It was impossible to see into the shops from the outside as the windows facing outward were small and high from the ground (see Tann, 1970). Gateways and halls leading to the outside were always narrow and well guarded. All workers were sworn to secrecy and visitors were not permitted into shops or into quadrangle areas. Rules were posted in many shops such as

this one from the Taylor and Co's cotton mill at Halliwell, Lancashire, in 1804: "If a stranger comes into the Factory, the Spinner who spins next to the door [is] to send for the Overlooker, but if he cannot be found, then the spinner who came last in that room [is] to order him out" (Jeremy, p. 37, 1981).

Newspapers in Manchester, Birmingham, Leeds, and London particularly after 1795, contained frequent references to foreign spies, not only French, who had come to England to acquire machines and to entice artisans abroad (see Manchester Mercury, June 14, June 24, and June 29, 1786 among others in Burney Collection Papers, British Museum, London; Bowden, 1925; Musson and Robinson, p. 217, 1969). In the latter part of the eighteenth century, England particularly in the industrializing areas, became extremely "spy-conscious." Local community members were told to be on guard for "foreigners snooping around factories and warehouses" (Mantoux, p. 258, 1964). Workers were urged on the grounds of patriotism, as well as because of the legal penalties, to refrain from taking their skills abroad and to be vigilant for fellow workers who were tempted to leave or who were involved in schemes to export controlled goods (Bowden p. 127, 1925).

In the industrial centers of Britain special committees made up of machine producers, manufacturers, and

loyal artisans were formed to police local communities. There was close collaboration between these groups and the government in the enterprise of "rooting out spies that had come into England with ill intentions" (Musson and Robinson, p. 220, 1969; Bowden, p. 128, 1925). Individuals who were suspected of spying were summoned before these committees and interrogated, warned, and threatened (Musson and Robinson, p. 222, 1969). Because of these committees most of the prosecutions under the export control laws and the controls on artisans were carried out (Bowden, p. 122, 1925). In 1785, for example, a Prussian by the name of Baden, after having been gone over by one of these committees "was tried and fined 500 pounds for having visited Manchester and (illegally) having tried to seduce cotton operatives to Germany" (Wheeler, p. 240, 1836). There were several other cases involving continental Europeans who were fined or imprisoned for violating these laws (see Wheeler, 1836 and Musson and Robinson, 1969).

Members of these committees seemed willing to go to extreme lengths to enforce prohibitions on artisan emigration and machinery exports. Various schemes were advanced. Josiah Wedgwood, supported by some of these committees, proposed developing extensive secret government surveillance programs for "opening letters of workingmen in order to secure evidence on which of the skilled workers

were planning to emigrate" or were involved in spying (Bowden, p. 129, 1925). In another case, James Kipping, an industrialist of Liverpool, suggested that every emigrant be required to produce papers signed by local authorities attesting to the fact that the holder was not a prohibited emigrant (Jeremy, p. 40, 1981). This call for a passport system was rejected. The Passenger Act of 1803, however, was in part designed to supplement the laws on the emigration of artisans by reducing outmigration and creating a more controlled and supervised system of passage (see MacDonagh, 1961). This Act would then allow inspectors to uncover more easily violators of the emigration law.

Many of the individuals involved in enforcing the export control laws viewed their activity as a patriotic duty (Bowden, p. 128, 1925; Musson and Robinson, 1969). "Since it was considered a loss to a private producer if someone knew his trade secrets, it seemed equally obvious at the time that the country should also keep her trade secrets from other nations" (Musson and Robinson, p. 265, 1969). All of this British secrecy, however, only increased the effects of foreign manufacturers and states to acquire or secure knowledge of English inventions and innovations. Continental powers offered large sums of money to induce British artisans away from England. Some of these powers formally offered to remove protectionist laws and to buy

British goods in exchange for samples of the machines and the technology used to produce those goods (Bowden, p. 128, 1925; Ashton, 1924). Continental states also offered special subsidies to local manufacturers who succeeded in securing English machines. In the early nineteenth century the Prussians set up a special school in Berlin, called the "Gewerbe Institut," to train individuals in engineering and mechanics. The Prussian government financed the illicit acquisition of British machinery and then trained and paid these students to copy the prototypes (Great Britain, Parliamentary Papers, Commons, Second Report of the Select Committee, VII, 1841). The continental states did in fact send agents to England to set up spying and acquisition networks.

The Great Power competition among the continental states perpetuated the complex networks of prohibitions on the export of machinery and on emigration or foreign travel by artisans. The possession of these industrial innovations formed one element in the perception of the balance of power. The commercial and competitive benefits they afforded provided more tangible advantages. France, Austria, Prussia, Russia, and Holland all were involved in the attempt to acquire state of the art machinery and know-how.

Between 1824 and 1841 a succession of British Parliament committees charged with inquiring "into the state of the law in the United Kingdom, and its consequences, respecting artisans leaving the Kingdom and residing abroad; also into the state of the law and its consequences, respecting the exportation of tools and machinery" (see Great Britain, Parliamentary Papers, Commons: V, 1824; VI, 1824; V, 1825; VII, 1841). In each of the reports one of the central concerns is with establishing the consequences of these laws in terms of the broader competition with the other Great Powers.

The chief offender referred to in most of the reports is France. Increases in the British perception of threat from the French during the Napoleonic period may well have increased the intensity of domestic surveillance on compliance with export control laws. That, however, is difficult to measure. The creation of surveillance committees and other enforcement measures predates the outbreak of open hostilities between France and Britain. The British control system encompassed both civilian and military items (see table 2.2). Thus security and international economic motives were mixed in the construction of the British export control system.

TABLE 2.2

Sample British Export Control List - 26th George III. Chapter, 89, 1786 (Partial List)

Rollers, either plain, grooved, or of any other form or denomination, of cast iron, wrought iron or steel, for the rolling of iron, or any sort of metals or frames.

Presses of all sorts in iron, steel or other metals, which are used with a screw, exceeding one inch and a half in diameter, or any parts of these several articles; or any model or models of any before mentioned Utensils, Implements and Machines, or any parts thereof.

Engines or Machines used in the casting or boring of cannon, or any sort of artillery, or parts thereof, or any model or models of Tools, Utensils, Engines or Machines used in casting or boring of cannon or any sort of artillery, or any parts thereof.

Source: Great Britain, Parliamentary Papers, Commons, Appendix to the Report of the Select Committee Appointed to Inquire into the State of the Law in the United Kingdom, and its Consequences Respecting the Exportation of Tools and Machinery, vol. V, p. 161, 1825.

In this list there is a clear attempt to clarify the thresholds of the type of technology that is subject to control.

British officials, however, did pay special attention to the French and often expressed dismay at their ability, both during and after the war, to acquire English innovations. The French sometimes were able to acquire state of the art cotton production machinery before it had been fully integrated into English factories. They had also been able to entice a number of British artisans to France. There was a huge copper plate factory in France, "for bottoming the ships of the French fleet - the whole of which was a British colony" (Bowden, p. 129, 1925).

Aside from the more tangible factors that drove the creation of the British prohibition statutes-economic interests, notions of patriotism, and calculations of Great Power competition-there were broader less tangible, but nonetheless powerful forces at work. Notions of progress and development were bound up in the emergence of mechanical processes. The transition from hand methods of production to mechanical processes of production had symbolic as well as material significance. Possessing and controlling these innovations was valued not only for the tangible advantage they might bestow, but for an idea: that having them and introducing these new devices was tantamount to being "ahead" on a continuum of human progress. The possession of them seems to have been at work in the distinction between the more civilized and the less civilized in the Western

state system (see Musson and Robinson, p. 216-230, 1969; Mantoux, 1961). In that sense, then, the attempt to maintain a monopoly possession of the innovations by the state was bound up in a conceptualization of status and a perception of power that such status accrued.

The prohibitions were by and large fairly ineffective and economically irrational for a number of reasons, particularly given competitors' ability to acquire English inventions. The bulk of the eighteenth century statutes, however, remained in place for almost a century. In addition, several English firms apparently kept to strict rules of secrecy and "stealthiest" practices even after the items that they possessed were in wide circulation. When former leading firms became "anxious about their increasingly hollow reputations," they often maintained their former practices to conceal their decline. In 1824 Alexander Galloway, a London engineer, stated that the "uncommon degree of mystery" practiced by Boulton & Watt's, formerly one of the leading firms in all of Britain, was a result of the fact that they "have nothing to show beyond what is well known in other places; they continue from pride that exclusion which before was dictated by interest" (Jeremy, p. 37, 1981). This "Wizard of OZ" feigning might also have been driven by a belief that one could retain a

position of advantage by creating the perception that one possesses mysteriously powerful instruments.

Not everyone was enamored by or shared this perception of the symbolic value of the mechanical instrument or process. The fairly widespread riots of machine busting displaced laborers in England is well documented (see Ashton, 1924 and Mantoux, 1961). After the Lancashire riots of 1779, however, a cotton-spinning machine producer articulated in clear terms the sentiment shared by most industrialists and some skilled workers of the day. Regarding the power and status bestowed by the mechanical device, he wrote:

> Read the history of mankind. Consider the gradual steps of civilization from barbarism to refinement, and you will not fail to discover that the progress of society from its lowest and worst to its highest and most perfect state has been uniformly accomplished and chiefly promoted by the happy exertions of man in the character of a mechanic or engineer. Let all machines be lost or destroyed and we are reduced in a moment to the condition of savages; and in that state men may indeed exist a long time without the aid of curious and complex machines, though without them they can never rise above it. (T., 1779; cited in Bowden, p. 130, 1925).

Later in the nineteenth century social and political thinkers would challenge this notion of progress and the idea that liberation from the human condition of enslavement to nature would come through the machine. Critiques and lamentations over the cages of rationalization, organization, and standardization that accompanied the

introduction of machines and mechanical processes would also give rise to counter conceptions of power and alternative forms of economic organization. To argue that British export controls and prohibitions arose only out of a simple formula of economic interest giving rise to policy is then to miss one of the more intriguing questions posed by the emergence of these statutes: How were these controls and their development bound up with broader conceptualizations of status and power?

The Question of the Enforceability and the Consequences of British Controls

A number of factors led to the dismantling of the British system of controls on the emigration of artisans and the export of machinery in the 1840s. Several of the issues raised in debates over the effectiveness and consequences of these controls, and many of the difficulties encountered in enforcement have been present in the post-1945 United States unilateral and the COCOM multilateral programs. The first part of this section examines the problems encountered in the nineteenth century British attempt to enforce controls. The second part of the section will review some of the issues raised in the debates over the prohibitions that occurred in parliament between 1824 and 1841.

Administration of the prohibitions was the responsibility of the Privy Council from the beginning of

the war in 1795 until around 1820. The Board of Trade in the Treasury thereafter became responsible for oversight on the prohibitions (Brown, p. 161, 1958). Officers with the title, Controlling Searchers, were responsible for policing ports and the coastline to enforce controls on both artisan emigration and the export of machinery (Great Britain, Parliamentary Papers, Commons, V, 1824). By 1830 these officers had at their disposal some 70 ships and 6,138 sailors to police the 7,000 mile coastline of England, Scotland, and Ireland. There were additional personnel at every port (Jeremy, p. 43, 1981).

Despite the requirement after 1795 that before departure every vessel submit to Customs lists of all passengers' names, ages, occupations, and nationalities, enforcement was extremely difficult. The first problem with enforcing this requirement was defining legally the term <u>artisan</u> or <u>skilled laborer</u>. Customs officers were often uncertain as to which workers in what industry with what specialties should be considered skilled workers or artisans. David Jeremy, who has done extensive work analyzing the minutes of the Privy Council and the Board of Trade on this issue, claims that there never really was an agreed upon definition (Jeremy, p. 41, 1981). The technology was shifting rather quickly and thus specializations and skills were being displaced at a pace

that often outstripped a fixed definition of which individuals had knowledge that should be subject to controls. Consequently, discretion in the enforcement of this prohibition was often left in the hands of Customs officials. Aside from the definition question the sheer logistical issue of identifying skilled workers and artisans at ports posed major problems. Customs officials seemed to be inclined to try to root out violators by random searches in hopes of discovering papers, letters, or tools that would establish a passenger's occupation (Ashton, 1926; Mantoux, 1961; MacDonagh, 1961). Despite the enthusiasm of these Customs agents, artisans were able to slip through fairly easily.

The most formidable threat seems to have been the loss of nationality and property for not returning once discovered abroad. This, however, was often negated by inducements that competing powers offered to artisans who would leave England to practice their trade. By the early nineteenth century the magnitude of the difficulty of enforcing the prohibition on the emigration of artisans became apparent (Jeremy p. 40, 1981). The British government tried various schemes to attract artisans back to England. First, they offered to pay the return travel of violators, but this was less than appealing given the fact that they were still subject to penalties at home. By 1802

rewards and amnesty were proposed as an inducement to artisans and skilled workers who would return, but this too had little effect. Even the invasion of the United States by the British did not frighten immigrant artisans back to England. In the end the problem of enforcement, and perhaps the idea that this prohibition violated the right of free born Englishmen, resulted in the 1824 revocation of the law on the emigration of artisans. In addition, the development of standardization in training and discipline in the use of machines and the operation of mechanical processes reduced to a degree the indispensability of any particular artisan (Great Britain, Parliamentary Papers, Commons, V, 1824).

The British also faced a number of problems similar to those faced in the post-1945 Western alliance and United States' export control program. The first complication that Customs faced was the fact that after 1812 the government set up a license system to allow for the export of preindustrial tools, obsolete machinery, and some types of finishing machines that were found to be widely available among competitor states (Great Britain, Parliamentary Papers, Commons, V, p. 130, 1824; Jeremy, 1981; see table 2.3, 2.4 and 2.5). Loopholes in this system were extensive as the nature of the machinery to be exported was easily misrepresented on export license application forms. Smugglers also developed other techniques to confound

Customs officials. Prohibited machines were broken down and shipped with machines or tools that were not under controls. Often these illicit machines were shipped from several different ports over the course of an extended period of time (Great Britain, Parliamentary Papers, Commons, V, p. 111, 1824). In addition the "parts of such prohibited machinery not to mention the plans or models of such machinery were small and concealed in ways that made detection impossible" (Great Britain, Parliamentary Papers, Commons, V, p. 110, 1824).

Further, Customs officials' often had difficulty identifying prohibited machines. One Controlling Searcher of The Customs stated: "There are a vast number of packages which we open, where there are parts of Machinery packed with other iron and steel articles from Birmingham, purposely packed for deception; and it is almost an impossibility for an officer to know whether they are or are not prohibited, being only parts of Machinery . . . It is a very rare occurrence indeed to meet with prohibited Machinery which appears so" (Great Britain, Parliamentary Papers, Commons, V, p. 110, 1824). As one Customs officer put it, in order to be effective or "to decide the real character of a Machine on search requires the knowledge of a lawyer and the skill of an engineer" (Great Britain, Parliamentary Papers, Commons, VII, p. 270,

TABLE 2.3

Sample British Export License, 1841

FORM of License granted by the Treasury for the Exportation of Machinery Prohibited by Law

Gentlemen,

TREASURY CHAMBERS,

The Lords of the Committee of the Privy Council for Trade, having signified their opinion that M.________________ may be allowed to export the following articles of machinery____________________________________, I am commanded by the Lords Commissioners of Her Majesty's Treasury, to desire that you will give directions for permitting the exportation of the machinery in question; viz.

To the Commissioners of Customs

I am, Gentlemen,
Your Obedient Servant

Whitehall Treasury Chambers
19 May 1841

All applications for permission to export machinery were required to be submitted for the opinion of the Board of Trade.

Source: Great Britain, Parliamentary Papers, Commons. Appendix to the Report of the Select Committee Appointed to Inquire into the State of the Law in the United Kingdom and its Consequences Respecting the Exportation of Tools and Machinery, vol. VII, p.295, 1841.

TABLE 2.4

Sample Customs Report of Detentions and Seizures of Controlled Machinery (Partial)

A RETURN of the number of Detentions and Seizures of Machinery attempted to be exported which have been made by the Offices of Her Majesty's Customs in the Port of London, since the 1st day of January 1824, distinguishing the number of Seizures from the number of Detentions, and stating whether the Machinery has been confiscated and sold or restored to shippers or owners; and if restored under what Penalties: - Similar Return for other Ports in the United Kingdom.

Port	No. of Detentions	No. of Seizures	No. Sold	No. Returned	Penalty Paid; Pounds
London	84	93	76	101	198
Beaumaris	-	1	1	-	
Bristol	-	2	-	2	
Cardiff	-	1	-	1	500
Deal	-	3	3	-	
Dover	-	35	27	8	300
Goole	7	5	5	7	12
Hull	13	76	38	51	47
Liverpoll	9	70	50	29	424
Port Glasgow	-	2	-	2	2
Belfast	-	3	2	1	

Customs House, London
15 May 1840

Source: Great Britain, Parliamentary Papers, Commons. Appendix to the Report of the Select Committee Appointed to Inquire into the State of the Law in the United Kingdom and its Consequences Respecting the Exportation of Tools and Machinery, vol. VII, p.295, 1841.

TABLE 2.5

Applications Made to the Board of Trade for Machinery Export Licenses and Proportion of Refusals, 1825-1843

Year	Total Applications	Applications Refused	
		No.	%
1825	10	1	10
1826	24	2	8.3
1827	37	13	35.1
1828	52	10	20
1829	48	13	27
1830	67	14	21
1831	52	10	19
1832	69	8	11
1833	85	11	12
1834	124	26	21
1835	124	15	12
1836	124	14	11
1837	135	9	6.6
1838	204	19	9.5
1839	178	10	5
1840	186	11	6
1841	200	7	3
1842	244	17	14
1843	135	4	2.96
total	2,098	218	10.4

Source: Daivd Jeremy. Transatlantic Industrial Revolution. Cambridge, Mass., MIT Press, 1981. p. 44

1841). Even if a Customs officer was able to receive instruction in what type of machines were subject to prohibitions, it was extremely difficult for him to keep up with the new innovations and inventions (Great Britain, Parliamentary Papers, Commons, V, p. 112, 1824). Customs officers also complained that they were understaffed and that there was inadequate coordination between port officials. Some customs officers who testified before the House of Commons in 1824 stated that they doubted enforcement could be effective while "any Tool or Machine whatsoever was allowed to be exported" (Great Britain, Parliamentary Papers, Commons, V, p. 109, 1824).

The numerous smuggling routes and techniques of illicit transfers made customs officers almost powerless, particularly when it came to uncovering the transmission of drawings and designs. Nevertheless, Customs officials did make a number of machinery seizures and detentions. From 1824-1841 the number of such actions at major ports was 298 and between 1830-1839 an additional 289 seizures occurred as a result of coastal searches (see table 2:5; Great Britain, Parliamentary Papers, Commons, VII, p. 295, 1841). These actions were, however, often fairly random in nature as Customs officials seized what looked suspicious. Twenty percent of the seizures made at Liverpool from 1830-1839 were of unidentified machine parts (Jeremy, p. 43, 1981).

In one case prohibited machinery was confiscated, taken to a Port Customs House and sold in auction back to the individual from whom it had been confiscated (Great Britain, Parliamentary Papers, Commons, V, 1824).

These prohibitions were also undermined by the expansion of the publication of technical journals and exchanges among the growing scientific community. In the late eighteenth and early nineteenth century certain international figures and inventors, such as Benjamin Franklin and Matthew Boulton, were members of "almost every scientific society in Europe" (Musson and Robinson, p. 223, 1969). To make the prohibition on the outflow of English innovations and inventions effective would have no doubt required the policing of the interactions of members of the scientific community. This was something the British were unwilling or perhaps unable to do.

There was, however, control and suppression of the publication of technical information as a part of the attempt to enforce the prohibitions on the transfer of English technique (Great Britain, Parliamentary Papers, Commons, V, p. 112, 1824; Ashton, 1926; Jeremy, 1981). Some authors engaged in self-policing as James Ogden admitted in 1783 when he said that he left technical information out of his publications for fear the French would benefit (Ogden, 1783; Jeremy, p. 39, 1981). Other authors, however, were

prevented from publishing technical data because as was stated "a knowledge may be acquired out of this country" (Duncan, 1807 cited in Jeremy p. 39, 1981). The first major publication to outline in detail the technical features of British mechanical inventions and innovations was *The Universal Dictionary of Arts, Science, and Literature*, edited by Abraham Rees. This was a twenty-nine volume set published between 1802 and 1820 (Rees, 1802; Ashton, 1926; Jeremy, 1981). However, regulations on the publication of technical information on British technological innovations continued well into the mid-1800s.

The series of patent and trade journals that emerged in the late eighteenth and early nineteenth century made it even more difficult to prevent the transmission of knowledge about English inventions. This included the *Repertory of Arts, Maufactures, and Agriculture* which began in England in 1794. This journal published, in a rather random fashion, patents for woolen cloth and textile manufacturing inventions (Jeremy, p. 47, 1981). The French had their own version of this journal called the *French Repertory of Arts*, that reproduced apparently all of the material published in the British publication. A British engineer named Henry Maudslay told the Commons in 1825 that the type of exchange that went on between the technical community in England and Europe made the enforcement of British export controls

clearly impossible. According to Maudslay: "On the first of every month, books are packed off to Hamburgh, and sent through Holland to all parts of the Continent, and a friend of mine has written to me within a week of their publication, saying I understand you have obtained a patent for so and so, and I hope it will turn out to your advantage, and so on" (Great Britain, Parliamentary Papers, Commons, V, p. 131, 1825). What this meant, as Joseph Hume questioning Mr. Maudslay put it, was that foreign competitors "came into the possession of drawings, plans, and information on every British invention or patent as soon as they are published in England" (Great Britain, Parliamentary Papers, Commons, V, p. 131, 1825). A century and a quarter before the United States and the Western alliance confronted the tension between the free exchange of ideas and the maintenance of an effective export control system, the British were at a loss as to how to police information exchanges between technical communities that were by today's standards slow and rudimentary.

Clashing Conceptions of the Source of British Power: Arguments for Revocation of Export Controls

There were other factors that undermined and eventually helped to end support for prohibitions on the export of machinery and mechanical processes as a means of maintaining British advantage over foreign powers. There

were endless debates in the Commons from 1824 to 1841 over the theoretical justifications and potential consequences of these policies. These debates were, of course, bound up in the broader issues and discussions about the benefits of free trade versus the protectionist and mercantilist system. It is no coincidence that James Deacon Hume, Secretary of the Board of Trade and staunch free-trader, was called before the Commons to testify as to the theoretical and practical unworkability of export controls on machinery and mechanical processes and know-how (Great Britain, Parliamentary Papers, Commons, V, 1824; V, 1825; Badham, 1859). There is a large well-studied literature on the exchanges between Manchester manufacturers and the Board of Trade on this issue. Leaving off the finer details of the debates to the more knowledgeable, we focus here on some of the points that seemed to recur throughout the Parliamentary Reports. First, several of the witnesses stated that "preventing the exportation of machinery to foreign powers (France) has a tendency to force them to become machine-makers themselves, and to rival us in a branch of industry, into which, if they could get machines from England, they would have no motive to come into competition" (Great Britain, Parliamentary Papers, Commons, V, p. 126, 1824). The issue, which the Commons Report said deserved the most serious consideration, was that the export control system

seemed to be self defeating over the long term because it inspired foreign powers to develop their own indigenous technological capability. This was seen, as stated above, not only to create a source of commercial rivalry, but also to reduce potential British influence on these rival powers (Great Britain, Parliamentary Papers, Commons, V, 1824). This conflict, as we will see, parallels debates in the post-1945 era as to whether or not Western controls lead to Soviet bloc attempts to develop technological self-sufficiency.

The second intriguing point made in the Commons Reports was that the extensiveness of the British export control laws inhibited and drove away inventors at the expense of Britain (Great Britain, Parliamentary Papers, Commons, VII, p. 276, 1841). In some cases inventors and machine designers left England for countries where fewer controls existed and where there were thus potentially greater opportunities to profit. British controls led foreign powers to attempt to attract these individuals. The point again was that by setting up control systems in an attempt to maintain a lead time or monopoly possession of particular types of knowledge or particular inventions, one ran the risk of distorting the environment that encouraged the development of such knowledge or the creation of such inventions in the first place. This was particularly the

case when other states were not playing by the same set of prohibitory rules or at least were willing to waive them for economic gain.

The final points raised in these debates involve more complex economic arguments for the removal of controls on the export of machines and mechanical processes. These arguments run throughout the Parliamentary Reports from 1824 to 1841, and they are usually prefixed by references to "the justly-celebrated work of the late Mr. Ricardo on the Principles of Political Economy" (e.g., Great Britain, Parliamentary Papers, Commons, V, p. 127, 1824). Amidst long discussions of price-wage theory, there are three arguments set out in these Reports that we will consider. The first two are fairly straightforward. The third, however, is more complicated because it involves the articulation of a conceptualization of power that is meant to counter the conceptualization on which the export control laws were said to have been based.

First, members of the Special Committees argue that liberalization of controls would result in the exportation of machinery that had already been surpassed by new inventions (Great Britain, Parliamentary Papers, Commons, V, p. 129, 1824; Great Britain, Parliamentary Papers, Commons, VII, 1841). By exporting this older machinery, that would be integrated into the production systems of rival powers'

industry, Britain would retain the technological lead time. Secondly, with liberalization of controls, according to some of the witnesses, "the ingenuity and skill of our workmen would have greater scope, and that, important as the improvements in Machinery have lately been, they might, under such circumstances, be fairly expected to increase to a degree beyond all precedent" (Great Britain, Parliamentary Papers, Commons, V, p. 130, 1825). Increased foreign demand and trade opportunities would, some argued, produce more dynamism that would lead to even greater creativity and increase Britains' lead in the long term.

Finally, some participants articulated a counter discourse about the sources of Britain's advantage over its rivals in the early nineteenth century. These debates over export control policy can be read, then, at a broader level as clashes between two divergent understandings of the sources of British advantage. The members of the Special Committee opposed to prohibitions argue first that the export control laws are founded on old and "very erroneous notions in regard to commerce." They then say that the enactment of these laws was founded not on reasoned principles, "but they were dictated by a mistaken jealousy of permitting other nations to benefit from our improvements" (Great Britain, Parliamentary Papers, Commons, V, p. 120, 1825). In addition, the Reports state that such

prohibitions "cause jealousy . . . of other nations toward us" and that "the members of every enlightened government must necessarily wish to see such laws removed, and which the Legislature appears to have had in view in the late various important alterations in the commercial relations of this Country (laws relating to artisans)" (Great Britain, Parliamentary Papers, Commons, V, p. 124, 1825). The prohibitions to export tools and machinery the Reports state are "calculated to perpetuate these jealousies."

These Special Committee members criticize the export controls as being based on emotion not on reasoned argument. The laws are construed as part of an unenlightened age that did not understand, as Kant sought to explain and whose ideas are reflected in the position of some Committee members, the potential of free commerce to reduce jealousies between nations (see I. Kant, "Perpetual Peace").

The Reports state at one point that "it is the opinion of many of those who object to the exportation of Machinery that Great Britain owes her present superiority [in manufactures] solely to the excellence of her Machinery" (Great Britain, Parliamentary Paper, Commons, V, p. 129, 1825). Three arguments are advanced to counter this understanding of the source of British advantage. The first is attributed to "the late Mr. Ricardo" and it is that this power or position "is a result of the natural advantages

England possesses." Among the particular factors listed as natural advantages are: raw materials for producing machinery and for manufacturing, better communications and transportation systems throughout the country, a better division of labor, and the advantage of trained workmen habituated to all industrious employments (Great Britain, Parliamentary Papers, Commons, V, p. 129, 1825; VII, p. 268, 1841). Some of these are, of course, only arguably "natural advantages," but the overall articulation of the sources of British advantage is broadened in two ways. First, in response to the question of whether "the French would pose a challenge to us if they were supplied with British machinery or mechanical processes," one witness responds: "They will be behind us until their general habits approximate ours" (Great Britain, Parliamentary Papers, Commons, V, p. 129 and 153, 1825). This traditional or cultural source of advantage then compliments the natural. The second way the conceptualization of advantage is broadened is in terms of the mode of knowledge or experience acquired. When asked why a particular Continental power "would remain behind us" a witness said: ". . . A cotton manufacturer who left Manchester seven years ago would be driven out of the market by the men who are now living in it, provided his knowledge had not kept pace with those who have been during that time constantly profiting by the progressive improvements that

have taken place in that period; this progressive knowledge and experience is our great power and advantage" (emphasis added: Great Britain, Parliamentary Papers, Commons, V, p. 129, 1825). This is an articulation of the understanding of the source of British power and advantage as the result of an ongoing interactive process between natural endowment, culture, experience, and knowledge.

The emphasis in these debates is always on the progressive and the dynamic as characteristics necessary for maintaining advantage over competitor nations and powers. This articulation, with the images of pace and movement that are evoked, is meant to counter the conceptualization of advantage or power as a static or fixed condition. It is also meant to counter the belief that advantage can be retained by retreating behind the secrecy and the walls of a medieval-castle-style factory or by attempting to retain one's advantage by maintaining possession of any particular machine, mechanical process, or technology. In this sense we can say then that these particular debates brought together two counter conceptions of power, and that perhaps these reflected broader issues of self-understanding and questions of the sources of state power that were present in the societies of Western state systems.

We cannot leave a discussion of the factors that undermined the nineteenth century British export control

system without acknowledging the domestic economic interests that clashed over the issue. The interests are fairly clear cut in this case (Brown, 1958). The manufacturers for the most part continued to support export controls on machinery and mechanical processes. In some branches of the textile industry there was vertical integration of the industry and thus there was little conflict. Machine producers did not actively oppose the prohibitions until the economy slowed during the 1830s. Their views were well received by the Board of Trade where the overall system of protectionism, particularly in agriculture, had come under attack. There is an extensive literature on the politics of the Board of Trade (Ashton, 1924 and 1933; Cheyney, 1921; Henderson, 1958). The power of these interest groups in their endeavors to see the export control system dismantled can not be understated. The sorts of critiques of the presuppositions on which the export control system was based articulated in the Commons Reports, however, pre-dates the rise of a united and strong opposition by machine producers to the laws. This is explained by the emergence and growing acceptance of the ideas of economic liberalism at the turn of the century. Members of this rising industrial class that had the most to gain from free trade were no doubt the more serious readers of Ricardo and Smith. Their growing

power in government eventually held sway and the early export control laws were largely dismantled by 1843.

Conclusions

The nineteenth century British government faced an ultimately insurmountable set of logistical and theoretical puzzles in its attempt to establish and maintain an export control system. Thus one can imagine the difficulties that the United States and the Western powers have faced in their attempt to construct, maintain, and enforce a much more complex multilateral export control system over the past fifty years. Defining the rationale for an export control program acceptable among a number of states or among a number of groups at the domestic level has posed problems in the past. This has particularly been the case when there were divergences in perceptions of economic interests between states or groups or when there was a perception that some states or groups were less vigilant in abiding by control arrangements.

The issue of what items to control is in part decided by the resolution of the issue of the rationale adopted for the program, but questions of the form of the item that should be controlled remain. Post-1945 export control officials have faced the same question that eighteenth century British officials faced. Can an effective export control system be maintained by simply prohibiting the

transfer of devices or tangible goods? Or is information or know-how the key factor in technology transfer? (See chapter 5 on the Bucy Report.) As British officials discovered more than one hundred years ago, once the exchange of models, designs, information, and know-how become subject to prohibitions one confronts not only more complicated enforcement problems, but also a much more significant set of theoretical issues. These issues include questions about the role of the free exchange of information in liberal societies. Finally, in the contemporary period the methods and avenues available to acquire illicitly or to sell illicitly controlled items are infinitely more sophisticated than in the nineteenth century. The construction of a bureaucracy with surveillance and intelligence capabilities extensive enough to enforce a broad embargo again raises a series of problems. These include not only questions of governmental and economic cost, but also more fundamental questions about civil liberties.

The way in which the goal of guarding "high technology secrets" has been represented in the press and by political leaders, however, often seems to silence discussions of these broader social and political issues. High technology and strategically significant technology, slippery terms to begin with, were discussed in the first Reagan

Administration, for example, as having hyper-real power. Maintaining the "technology gap" with the East was perceived by some Department of Defense officials as offering such obvious and instant advantages that there seemed to be a temptation to provide any policy that was appropriate to the activity (MacDonald, 1990). These officials argued that more authority needed to be ceded to conduct surveillance and to enforce regulations in hopes of maintaining this "technology gap." This, however, is an issue quite independent of the ability to enforce and control the diffusion of technology. Nonetheless, a fetishized vision of the benefits of holding the lead-time advantage in militarily significant technology has been used by some officials in Washington to aggrandize the role and power of their particular agencies. One scholar has said that if "strategically significant technologies" could be neatly defined, labelled, and clearly differentiated from other items, the concept would lose its political significance (MacDonald, 1990). The concept can thus be read as a sign that has use value. Its use value is increased by the fact that the specifics of the lists of "strategically significant technologies" are often classified.

This sign's signification politically, culturally, and socially has been bound up in or fixed to images of power and advantage over rivals (see Barthes on semiotic

interpretation). In that sense then, insofar as some of the dynamics of the formation of 18th century export prohibitions can be explained by a fetishization of the notion of the "machine," "strategically significant technology" has had a similar use value or in propelling the formation of post 1945 export control policies and in legitimating arguments for constructing and ceding authority to enforcement bureaucracies.

It is clear that the Soviet Union and Eastern bloc states have maintained extensive technology acquisition networks in the United States and Western Europe. It would also clearly be irresponsible for any country to "sell to its adversary the rope on which it might be hung." The case of the war against Iraq demonstrates the potential danger of an ineffective strategic export control system. The goal of this project is thus not to raise questions about the legitimacy or illegitimacy of any strategic export control program. Rather it is concerned, however, in part, with questions about the role of the notion of "strategically significant technology;" how it has been used and how its signification is bound up in particular conceptualizations of power and advantage. It is at this level that the debates of the early 1980s were similar to the debates of the early nineteenth century. In the Congressional debates of the 1980s over the renewal of the Export Administration

Act, the abuse of this notion by some hard-line officials in the Department of Defense to justify broadened enforcement authority for particular agencies was attacked from a number of camps. As in the debates in the House of Commons, critics of the use of this concept sought to articulate counter conceptualizations of the source of United States advantage and power and to warn of the long term commercial, economic, and political consequences of the expansion of the United States export control program (NAS, 1987; see chapter 5).

This chapter has demonstrated that the state practice of controlling the diffusion of technologies or items considered strategically or economically significant has a history in the international system. By assessing past examples of this practice, this chapter provides a historical context for an analysis of the post 1945 case. Secondly, it is clear from this assessment of the past that the logistical problems and political issues raised in the construction of post 1945 export controls are not altogether new. The particulars of the British case are striking in this regard. Finally, by looking at the way in which the items that were controlled were represented, we have sought to raise questions about conceptualizations of power and advantage and about how those representations worked to propel the formation and maintenance of controls.

CHAPTER III

CONSTRUCTING THE POST-1945 EXPORT CONTROL SYSTEM: UNITED STATES POWER, ENFORCEMENT RENTS, AND CLASHING DISCOURSES

Turning Away from the "One World" Vision

In the final months of the war against the Axis the nature of post-war United States-Soviet economic relations was not preordained. Conflicts over the shape of the post-war order were, however, already beginning to emerge. In this context of uncertainty a variety of perspectives on the appropriate relationship between East-West trade and Western security interests were articulated. President Roosevelt, for example, envisioned "One World" in which the failures of the interwar period could be overcome through economic interdependence and international organizations. According to this view, ideological differences between powers would take a back seat or even evaporate in the face of the common interests of economic recovery, industrial expansion, and welfare enhancement (Yergin, 1977; Gaddis, 1984). Roosevelt's perspective was predicated on a particular image of the Soviet Union and on a liberal notion of the role of trade. The Soviet Union was perceived to be a traditional Great Power that could be brought under control by appeals to common interests. Commerce in turn

would be the great civilizer. As Roosevelt's aide Harry Hopkins put it, articulating a lesson from the failures of the interwar period, "destroying monsters grow out of poverty" (Jentleson, p. 73, 1986).

After Roosevelt's death and in the face of mounting tensions over the war settlement, alternative perspectives on United States-Soviet economic relations gained greater credence in Washington. These views were buttressed by past experiences with the Soviet Union and by telegrams from American diplomats in Moscow. Ambassador Averell Harriman, for example, drew on an instrumentalist discourse, saying that economic carrots and sticks could be used on the Soviets. He said that "any expansion of economic relations or reconstruction aid should be tied to Soviet behavior in international matters" (Yergin, p. 309, 1977; Jentleson, 1986). In a longer telegram that would have a more enduring impact, George Kennan, the charge d'affaires in Moscow, articulated an image of the Soviet Union that would come to guide American Cold War economic policy. He said that the Soviets were "impervious to the dictates of reason." Thus carrots and sticks would not work. The best that the United States could do would be to reduce economic interaction as far as possible in hopes of isolating and containing what Kennan called the "malignant parasite that would feed on

diseased tissue" [Foreign Relations of the United States (hereafter FRUS), vol. VI, pp. 696-709, at 709, 1946].

From 1945 until early 1947 the United States pursued a somewhat confused policy on economic relations with the Soviet Union and its emerging satellites. President Truman cut off lend-lease assistance on V-E day only to free up $200 million worth of industrial machinery and "non-lethal" lend-lease supplies in October 1945 (Yergin, p. 151, 1977; Jentleson, p. 50, 1986). The Truman Administration also embargoed a number of items of direct military significance, but allowed United States-Soviet trade to expand in other areas with only minimal government intervention. In 1946 American exports to the Soviet Union totaled $352 million (Jentleson, p. 53, 1986). This situation was short lived. Strains of the emerging Cold War in Iran, Eastern Europe, Greece, and Turkey helped to alter radically the United States position on East-West trade.

By March 1948 the United States instituted a broad program of export control on transfers of goods with direct and indirect military significance to the Soviet Union and Eastern Europe. This control program included an elaborate export licensing administration as well as surveillance mechanisms to maintain vigilance on Soviet bloc economic relations with the non-Communist world. Along with the Truman Doctrine and the Marshall Plan, economic warfare

became an essential part of a triad of United States Cold War foreign policy.

This chapter reviews the formation of the United States export control program and economic warfare strategy. The chapter begins by describing how the policy was developed and then analyzes the construction of the administrative instruments that were used to carry out the program. This includes an analysis of domestic level divergences of opinion on the appropriate approach to East-West trade. In addition, this chapter assesses the degree to which the preponderance of an absolutist discourse legitimated a policy of economic warfare against the Soviet bloc. The image of the nature of the threat posed by the Soviet Union also helped to justify statutes that granted the executive unprecedented authority to interfere in commercial transactions in the interest of national security.

The chapter also assesses diplomatic initiatives to induce Western European states to conform to the United States position on East-West trade controls and examines the dynamics of the negotiations that resulted in the construction of COCOM. Despite divergent positions on the appropriate Western alliance strategy for East-West trade and divergent economic interests, Western Europe followed the United States lead in the COCOM program from its

inception in 1949 until 1954. The reasons why are complex. There was a level of shared perception of mutual security interest. This was particularly the case following the outbreak of the Korean war. American political prestige was also a factor that added to the United States' ability to convince reluctant allied states of the necessity of a broad embargo and of minimizing economic transactions with the Soviet bloc. More significantly, however, the United States' national export licensing program and Marshall Plan aid provided leverage for extracting compliance from the allied states. The United States could hold up transfers of goods by delaying or denying export license applications and could cut off aid if allied states were found to be in violation of export control regulations. There were intergovernmental conflicts over the advisability or utility of using these instruments to coerce reluctant Western European states to agree to an extensive embargo. Despite the inter- governmental disagreements, these instruments played a central role in getting allied states to comply with the United States position. This chapter draws on the contested exchange model to show the relationship between the instruments that were at the disposal of American officials and evaluates the effectiveness of the instruments in this case of contested political exchange.

Finally, the chapter analyzes the liberalizations in the COCOM multilateral export control program that took place after 1954. The United States continued to maintain stringent unilateral controls as well as an extensive export and reexport licensing program. The chapter explains why the United States acquiesced in Western European governments' demands for relaxations of the COCOM program in 1954. The theoretical perspectives outlined in chapter one will be drawn on to provide a fuller description of the complex factors in United States-Western European collaboration on export controls and the instruments used by the United States to impose its position on Western firms.

The Emergence of Economic Warfare

In the months leading up to the end of the war, American officials encouraged the Soviets to join in the Bretton Woods agreements and considered proposals from Foreign Minister Molotov for post-war loans (Yergin, 1977). Truman, Harriman, and Acheson among others came to believe that the Soviet Union was a "world bully" and that "economic pressure could be used to control, discipline, and punish it" (cited in Yergin, p. 93, 1977). By late 1945 Secretary of State Acheson said that "the first instrument of United States foreign policy (diplomacy and negotiation) had failed to control the Soviets or to build trust." Therefore, Acheson said, "we must use our second instrument of foreign

policy, namely, economic power, to control the Soviets" (Yergin, p. 308, 1977).

The persuasive power of such a view was contingent on an acceptance of the presupposition that the Soviet leadership would react rationally and predictably to economic rewards and punishments. Several executive officials and United States Congressmen did not believe, however, that the Soviet leadership was guided by "rational" calculations of interest. The instrumental conceptualization articulated by Harriman ran counter to the construction of the Soviet Union as the embodiment of the Enemy-Other. As inter-national events spiraled out of control and as the understanding of Soviet actions became increasingly determined by more radical constructions of the nature of the threat, the faith in the instrumental value of United States economic levers to control the Soviets faded. United States policy makers moved to reconsider their East-West economic policy strategy.

George Kennan in his long telegram articulated succinctly the presuppositions that were to guide United States East-West economic policy strategy throughout the 1950s. Kennan cast the Soviet leadership as being driven by a type of "neurosis" and "internal logic" that was alien to the West. He said that there "can never be on Moscow's side any sincere assumption of a community of aims between the

Soviet Union and the powers which are regarded as capitalist" (FRUS, vol VI, 1946). "Everything possible will be done to set the major Western Powers against each other," Kennan contended, and the Soviet leadership, he said, was "committed fanatically to the belief that with the United States there can be no modus vivendi" (FRUS, vol. VI, p. 698, 1946).

Kennan set up the contrast between the Soviet Union and the West as a juxtaposition of a rational enlightenment individual to the uncivilized or the insane. He said that the United States in formulating policy must "study it with the same courage, detachment, objectivity, and same determination not to be emotionally provoked or unseated by it, with which a doctor studies an unruly and unreasonable individual" (FRUS, vol. VI, p. 709, 1946). What strikes Kennan as peculiar to the Soviet Union is "the fact that it is seemingly inaccessible to considerations of reality in its basic reactions. For it, the vast fund of objective fact about human society is not, as with us, the measure against which outlook is constantly being tested and re-formed, but a grab bag from which individual items are selected arbitrarily and tendentiously to bolster an outlook already preconceived" (FRUS, vol. VI, p. 708, 1946). In addition, "the Russians," according to Kennan, "have learned to seek security only in patient, but deadly struggles for

the total destruction of rival powers, never in compacts and compromises" (FRUS, vol. VI, p. 698, 1946). The Soviet leadership, he argued, believes it "necessary to destroy our traditional way of life" and will "spare no effort to discredit and to combat all efforts which threaten to lead to any sort of unity or cohesion among other powers." Kennan concludes his analysis by saying that "this problem is within our power to solve," but that "there is nothing as dangerous or as terrifying as the unknown" (FRUS, vol. VI, p. 709, 1946).

Kennan's telegram can be read on a number of levels. His images and the construction of the source of Soviet conduct meant that appeals to common interests or the use of economic inducements in any form were useless. The Soviets could not be disciplined or reformed through means that would work on those for whom there was still hope for salvation. The Soviets, like the untameable Eastern hordes of old, had to be walled up or marginalized. To combat this threat that had an ability to penetrate our body politik required "every courageous and incisive measure to solve the internal problems of our society, to improve self-confidence, discipline, morale, and the community spirit of our people" (FRUS, vol. VI, p. 708, 1946). Within the confines of this discourse the sanity of the West or of the United States became constituted and confirmed through the

image of the Soviet Union. "Reality" while separate from us, was something we were closer to because we constantly tested our positions and our ideas in relation to that which was external. We were empirical, non-ideological and closer to the truth. The Soviet leadership was alien and unenlightened.

This construction of the Soviet threat would come to require, in terms of economic policy, "constant surveillance (of economic interactions) through a comprehensive export licensing system" (FRUS, vol. I, p. 1030, 1951). The policy strategy this set of representations legitimated was one of economic warfare. The reasoning behind the program was that by debilitating the Enemy's military and industrial development, the West could undermine the Soviet "war making potential." The other central rationale for this program was that by attempting to maintain monopolies or at least lead times on technological advances, the West or the United States could maintain economic and military superiority (FRUS, vol. I, p. 1032, 1951; on the rationale for economic embargoes see Hirshman, 1945; Gordon and Dangerfield, 1947; Medlicott, 1959; Snyder, 1966; Knorr, 1975; Baldwin, 1985).

The Domestic Effort

In the summer of 1947 the Truman Doctrine was proclaimed. In that same year the Soviet Union consolidated power in Hungary and in 1948 it did the same in

Czechoslovakia. In the economic sphere, Congress approved $17 billion in aid for the Marshall Plan. Like the other parts of the national security apparatus created in 1947, such as the National Security Council and the Central Intelligence Agency, the system to control East-West trade did not emerge suddenly and full-blown. The system was institutionalized gradually through a series of statutes and organizational innovations. The legal foundation for the United States control system came first, through extensions of the export control authority granted to the executive in World War II and then in 1949 through the Export Control Act.

In 1947 the newly formed National Security Council and the newly created Policy Planning Staff in the State Department (headed by George Kennan) began to develop long-range policy strategies for the United States position on East-West trade. In a November 1947 report submitted by Kennan's staff, contrasting views were articulated on the particulars of the appropriate United States policy on trade with the Soviet Union and Eastern Europe. The Commerce Department had submitted a proposal to the NSC recommending that all exports to Europe and dependent territories be placed under control. The report recommended that all transfers be subject to an individually validated license requirement. Shipments of any goods, the proposal

maintained, should only be permitted to go forth when: 1) the receiving country furnished adequate justification of need; 2) European recovery and world peace would be thereby served; and, 3) the position of the United States would not be adversely affected (FRUS, vol. IV, p. 490, 1948).

The reasoning behind this proposal apparently was threefold. First, many United States officials concluded that the Soviet Union was doing everything in its power to "sabotage the European Recovery Program." This included the attempts to acquire and stockpile foreign resources at the expense of other European states. United States officials argued that this situation necessitated "an immediate termination of shipments from the U.S. to the U.S.S.R. and its satellites of all commodities critically short in the U.S. and in Europe or which would contribute to the Soviet military potential." Secondly, United States officials believed that establishing a control system with a mandatory individual license program for all commercial shipments to Europe would allow for a more effective administration of the European Recovery Program. The United States could then gauge and control the distribution of goods transfers. The third reason articulated in the proposal stated that "during the period of operation of the recovery program, we will wish to be able to exercise some pressure on countries receiving our aid. A blanket control program would give us

the means for exercising this influence" (FRUS, vol. IV, pp. 489-496, 1948).

The ensuing discussions reflected schisms that would characterize United States domestic policy debates over East-West trade controls into the 1980s. A part of this schism involved what has been called the conflict between the unilateralists and the multilateralists. Some members of the State Department, for example, expressed concern over how such an action would appear given the United States position on free trade in the ITO Havana negotiations. These officials pointed out that taking this action without regard to the traditional role of Eastern European raw material exports in Western European economies could have a potentially negative impact on U.S.-allied negotiations in other areas. Some of these officials expressed a concern over the possibility that such a move would be interpreted as a hostile act by Stalin and that he might retaliate by cutting off Western European states access to Eastern European raw materials and energy supplies (FRUS, vol. V, p. 120, 1949).

After some discussion in order to address these concerns the NSC on December 17, 1948 agreed to order blanket controls for all of Europe and its territories including the Soviet Union ("the R procedure for export controls"). Instituting blanket controls was designed to

avoid the "overt act of discrimination against the Soviet Union and its satellites" (FRUS, vol. IV, p. 512, 1948). This was justified as a tactical move to avoid retaliation. By March 1, 1948 according to the NSC order, all commercial shipments to the "R" group would be subject to review through the individual export license program. This allowed the United States to deny transfers of goods to the Soviet Union and the Eastern European states.

By March 1948 an overall strategy was taking shape. Secretary of State George Marshall, Secretary of Defense James Forrestal, and Secretary of Commerce Averill Harriman ordered an inter-departmental sub-committee to "recommend procedures for establishing a peace-time economic warfare organization." According to this committee's recently declassified report "the objective of the United States was to inflict the greatest economic injury on the U.S.S.R and its satellites and at the same time to minimize the damage to the U.S. and the Western Powers resulting from; a) probable Soviet retaliation; and, b) the inability of the East to continue exports of certain supplies to the West" (FRUS, vol. IV, p. 525, 1948).

These contrasting goals conflicted at points and produced inter-agency divergences of opinions as well as clashes between the Executive and the Congress. Within the State Department there seems to have been a consensus that

ensuring certain levels of Eastern European raw material exports was important for the overall goal of Western European economic recovery. In contrast, many members of Congress advocated a complete embargo on trade with Eastern Europe and the Soviet Union. In addition, Congress advocated strongly the use of economic coercion to get allied states to comply with the United States economic warfare strategy.

The Commerce Department was supportive of the idea of an extensive embargo on trade with the Soviet bloc. Commerce officials argued that granting licenses for the transfer of any type of goods to the Soviet bloc should be based on a strictly specific quid pro quos (FRUS, vol. IV, p. 538, 1948). In addition, the Commerce Department pointed out that in order for the United States program to be effective "it would be necessary, through the ERA and diplomatic channels, to arrange that Western European countries pursue export policies which were more or less consistent with those of the U.S." (FRUS, vol. IV, p. 542, 1948).

Commerce Department officials were concerned that the United States program would be undermined by Western European re-exports or transshipments of controlled goods. The licensing program, according to the Commerce Department, should be used as an instrument of surveillance to detect

unusual requests on the part of Western European states that "might indicate re-exporting or other activities that should be discouraged" (FRUS, vol. IV, p. 541, 1948). Charles Sawyer, who replaced Harriman as Secretary of Commerce expressed the view on several occasions that pressure should be brought to bear on states receiving aid to bring them in line with the United States' preferred position (FRUS, vol. IV, 1948; FRUS, vol. IV, 1950).

This stand brought the Commerce Department into direct clashes with the State Department's Division of Commercial Policy, Division of Investment and Economic Development, and Office of International Trade Policy (FRUS, vol. IV, p. 545, 1948). In May 1948, for example, to their consternation Sawyer refused to approve export licenses for sales of equipment essential to raw materials production to Eastern bloc states, such as coal-mining and transportation equipment to Poland. The Secretary of State intervened and tried to convince Sawyer to approve the export licenses by arguing that such denials would be detrimental to Western European recovery because it would impair Eastern European states' ability to deliver raw materials. This particular issue was characteristic of the inter-agency conflicts that occurred from 1948-1953. It represented the conflict between the goal of inflicting the maximum amount of economic harm on the Soviet bloc and of making sure that

such controls did not result in greater harm to the United States or the Western alliance economies.

One way of dealing with the problem of balancing these goals was by establishing criteria to categorize goods in terms of their strategic significance. The class of items that were considered to have the highest strategic value were categorized as 1A. This included:

a. Materials or equipment which are designated or used principally for the production and/or development of arms, ammunition, and implements of war.

b. Materials or equipment which could contribute significantly to the war potential of the Soviet bloc where the items incorporate advanced technology or unique technological know-how. It applies only to goods sufficiently important to the war potential that the absence of an embargo would permit a significant advance in Soviet bloc technology over its present level of development.

c. Materials or equipment which would contribute significantly to the war potential of the Soviet bloc in that the items, if embargoed, would maintain or create a critical deficiency in the war potential of the Soviet bloc.

The 1A list originally contained 167 items including specialized precision machine tools, petroleum equipment, chemical equipment, precision scientific and electronic equipment, and certain nonferrous metals (FRUS, vol. IV, p. 87, 1950). The 1A list also included a separate Munitions List. The criteria for inclusion in the list meant that it contained items with direct and indirect military significance. That is, it included unique technologies and items that would help the Soviet bloc states break bottlenecks in their economies.

The second list, 1B, consisted of "materials and equipment which, if shipped in substantial quantities, may contribute to the war potential of the Soviet bloc to so great an extent that only reasonably small quantities of such material or equipment should be permitted to move to the Soviet bloc" (FRUS, vol. IV, p. 89, 1950). This list included more than 300 items whose main contribution would have been to Soviet bloc states' general industrial development. The list included some primary commodities such as copper, lead and zinc, and relatively common industrial equipment and transportation equipment such as trucks and freight cars (FRUS, vol. IV, p. 89, 1950; Mastanduno, p. 98, 1985).

A more inclusive 1C list was also established in 1951 and contained an additional 200 items. The Commerce

Department in consultation with an inter-departmental advisory panel was given discretionary power to approve or deny export license applications for 1C items (FRUS, vol. IV, p. 1049, 1951). The United States had an unconditional embargo on the 1A list items. For all practical purposes the 1B and 1C lists were also subject to embargo. In 1949, for example, $22 million of class 1B license applications were submitted to the Commerce Department, but only $770,000 worth were approved (FRUS, vol. IV, p. 80, 1950; cited in Mastanduno, 1985).

In 1948 the United States moved to attempt to get the allied states to adopt similarly broad embargo policies. The nature of the initial Western European resistance reflected not only a divergence in economic interests, but also a deeper divergence of perception. The United States and most of the Western European States did not share the same view of the appropriate relationship between East-West trade, export controls, and Western security interests.

The United States became convinced that economic warfare was the best strategy for Western security. This conviction was a result of a number of factors. First, United States officials believed that there was really no difference between the Soviet military and industrial sectors. Any trade that would benefit Soviet industrial productive capability or development to any degree

whatsoever was thus seen as strategic. Secondly, United States officials believed that an embargo program would allow the United States to maintain military and economic superiority over the Soviet bloc. The United States preponderance in these areas was based in part on its superior technology. The experience of World War II had etched into the minds of the American public the image of what it meant to have the scientific or technological edge (Medlicott, 1959). United States officials were convinced that the Soviet Union was attempting to acquire, as quickly as possible, material and advanced technologies that would allow it to make significant advances in industrial development and military production and preparedness. Thus they believed that the embargo net should be cast as widely as possible, and that particular attention should be focused on Western scientific and technological innovations (FRUS, vol. I, p. 1032, 1951). Thirdly, a number of officials in the NSC came to adhere to the construction of the nature of the Soviet threat articulated in Kennan's telegram. What Stanley Hoffmann calls the "containment crusade" was waged and legitimated largely in the terms of what I have called the absolutist discourse (Hoffmann, 1976; also see Larson, 1985, on attitude change and the influence of Kennan's image of the Soviet Union).

What is also revealing about the construction of this policy is the fact that analyses conducted by both the CIA and the State Department's Office of Intelligence Research concluded that the Soviet economy was relatively self-sufficient in terms of resources (this may have not been true for rapid technology development: see FRUS, vol. I, pp. 1035-1041, 1951). This meant that there was some recognition that the economic warfare program would only have a limited impact on Soviet bloc economic power. Thus we can conclude that the policy was driven to large measure by the idea, widely accepted in Congress, that any trade that would benefit the "dictators of enslaved peoples was morally unacceptable" (Mastanduno, 1985; Jentleson, p. 58, 1986). The rationale was then on one level expressive of the perceived moral outrage at the Soviet "Other." It was also driven by the idea that the "unruly individual had to be isolated" or contained so as to minimize its potential corrupting influence on the "reasonable" Western Powers. The image of the Soviet Union that was articulated by Kennan thus helped to legitimate the United States' economic warfare strategy.

Western European Positions

Immediately following the war most Western European leaders believed that a limited embargo of narrowly defined strategic goods was in the interest of Western security. Most of these leaders were opposed, however, to the proposals for a broad ranging embargo. They were averse, in particular, to following a strategy of economic warfare against the Soviet bloc. There were a number of reasons, economic, political, and perceptual, for the contrast between the United States and the Western European positions. As Adler-Karlson put it (1968, p. 40), the motives for these contrasting views, "over the formation of the export control policy, were based on different beliefs about reality."

In December 1947 while the United States was beginning to organize for economic warfare, the British were in the process of negotiating an Anglo-Soviet trade and financing agreement with Stalin. In the same month that the NSC decided to place all exports to the "R" group under licensing control, the British had agreed to sell railway equipment, generators, and heavy machinery to the Soviets in the hope that they could ensure raw material and fuel exports from the Eastern bloc. At the end of the war virtually all of the states of Western Europe believed, that

a significant portion of their raw material and energy needs could be filled by Eastern bloc exports.

The first source of resistance to the United States proposal to engage in economic warfare with the Eastern bloc was economic interest. Prior to the war, trade between Eastern Europe and Western Europe had been complementary; finished goods flowed East and raw materials, fuels, and food flowed West (Jentleson, 1986; see table 3:1). Most American officials in 1946 did not understand the gravity of the devastation of Europe; a devastation "symbolized by the urban rubble, which, like graveyards, dotted the Continent" (Yergin, 1977). There was a food and an energy crisis at the end of 1945. More than 125 million Europeans were living on an individual average of less than 2000 calories per day. This is in contrast to the 3300 calories per day, individual average in the United States (Yergin, 1977). In this environment, Western European leaders were not very receptive to the idea of engaging in economic warfare with anyone. They desired instead the resumption of complementary trade arrangements with the East.

The second reason that European leaders opposed the comprehensive embargo was because they believed it impossible to implement in an effective manner. Third, even

TABLE 3.1

Value of Total Trade, United States and Western Europe with the Soviet Union and Eastern Europe, 1938 (Millions of Dollars)

	Western Europe(a)	USA
Exports to:		
USSR	153.9	75.3
Eastern Europe (b)	422.0	65.5
Imports from:		
USSR	292.2	26.9
Eastern Europe	543.2	31.3
	1,411.3	199.0

(a) Western Europe includes all of those states that were later members of COCOM: Belgium, Denmark, France, Germany, Greece, Italy, Luxembourg, Netherlands, Norway, Turkey, and the U.K..

(b) Eastern Europe includes Albania, Bulgaria, Czechoslovakia, Hungary, Poland, Rumania, and the USSR

Sources: Bruce W. Jentleson Pipeline Politics (Ithaca NY: Cornell University Press, 1986) p. 64 and Gunnar Adler-Karlson (Stockholm: Almquist & Wiksell, 1968) p. 317.

if it could be, they were skeptical of the prospects of the strategy doing more harm to the East than to the West. In the event that Eastern bloc exports were cut off in response to the economic warfare program, Western European states would be forced to find alternative sources of supply for food, energy, and raw materials. The United States seemed willing or incapable of providing full compensation for this potential loss of trade. Western European leaders were also skeptical of the success for such a broad program given the practical difficulties and the administrative costs. The leaders were concerned that their exporters would be disadvantaged by such a control program because of the possibility that some states would choose to go it alone or to defect from the program. The creation of the multilateral COCOM program was designed to satisfy some of these concerns because it provided for the exchange of information between participant states.

Western European officials were also opposed to such a strategy because they did not believe that war with the Soviet Union was inevitable. The trade wars of the inter-war period and the consequences of isolating Germany economically led some Western European officials to believe that engaging in economic warfare with the Soviet Union was a slippery slope to war. They also believed that such a strategy might feed into Stalin's hands by giving him

bargaining power in intra-Eastern European trade relations and an excuse to consolidate communist rule to an even greater degree in Central Europe. Western European leaders hoped that they could encourage "Titoist" tendencies through some level of economic interdependence with the Eastern European states (Adler-Karlson, 1968).

There were two final issues that lay at the heart of the United States-Western European conflict over the issue of export controls with the Eastern bloc. First, in devising a system of export controls that would enhance Western security, Western European officials believed that it was legitimate to separate Soviet economic or industrial potential from its military or war potential (see Mastanduno). These officials argued that Western security would be best served by controlling only items of direct military applicability. Western European officials thus advocated a much narrower definition of "strategic." Secondly, there was simply a different understanding of the legitimacy of engaging in trade with the Soviet Union. Western European leaders and members of parliament were suspicious of Stalin. When it came to the economic sphere, however, moral indignation usually stopped short of casting the Soviet Union as a evil adversary with whom there was no hope of any ground for common interest. Western European businessmen's willingness to "sell themselves Red" was not

held up to the same type of scrutiny focused on their U.S. counterparts. In the 1950s, for example, Senator Joseph McCarthy on more than one occasion brought American businessmen before his committee to accuse them of "traitor trade" (Jentleson, p. 63, 1986; Adler-Karlson, p. 33, 1968).

Gaining Western European Collaboration In Economic Warfare

In 1948 the United States began diplomatic initiatives to get the Western alliance states to agree to collaborate in a coordinated export control program and met resistance. By January 1951, however, Western alliance states agreed not only to participate in a multilateral system to coordinate a strategic embargo, but also to accept the United States preferred strategy of economic warfare and the U.S. understanding of what types of goods should be regarded as strategic. The United States 1A and 1B lists were accepted by the allied states. This meant, that despite deep reservations, Western European officials agreed to follow the United States lead. There is some disagreement among scholars when it comes to explaining the dynamics of Western European collaboration with the United States on export controls from 1949-1954.

The more widely accepted explanation is that the Western alliance states were coerced into going along with the United States preferred approach. This explanation,

advanced first by Adler-Karlson, rests on the fact that United States Marshall Plan aid was tied directly to compliance with the U.S. export control program. Congress was intent on making sure that states receiving United States aid did not trade with Soviet bloc. As Adler-Karlson puts it: "Despite all the West European reluctance its governments did cooperate in the embargo policy. Thus we must also ask why the West European nations did cooperate as much as they did. The answer is clearly to be found in the American threats to cut off aid in cases of non-compliance" (Adler-Karlson, p. 45, 1968; see tables 3:2 and 3:3).

This interpretation has been challenged recently by Michael Mastanduno. He contends that the United States was able to persuade Western European officials that a broad embargo was in their interest. Mastanduno argues that the United States was able to get COCOM states to agree to embargo both the 1A and 1B lists because the invasion of South Korea and Soviet actions in Eastern Europe had increased Western European statesmen's concern over the potential for East-West conflict.

Mastanduno concludes that the Executive was convinced that attempting to force compliance with the United States position on export controls would be detrimental to United States security interests. According to Mastanduno, the

TABLE 3.2

United States Foreign Assistance to Western Europe 1950-1952 (in Millions of Dollars)

	1950	1951	1952
Austria	168.5	118.3	117.8
Belgium	229.7	59.6	15.8
Denmark	83.0	48.8	14.0
France	700.6	435.0	262.5
Germany	733.1	392.4	107.3
Iceland	7.1	8.3	5.5
Ireland	45.1	15.5	x
Italy	401.6	262.0	170.5
Netherlands	268.8	107.3	100.0
Norway	95.2	41.3	16.9
Portugal	31.4	19.0	x
Spain	x	17.2	35.5
Sweden	51.6	21.6	x
United Kingdom	995.2	265.6	350.3

Source: Obligations and Loan Authorizations, July 1, 1945-June 30, 1961, Agency for International Development Statistics and Reports.

TABLE 3.3

United States Aid to Western Europe Compared to East-West Trade 1949-1955 (in Millions of Dollars)

	1949	1950	1951	1952	1955
Western Europe					
Total Economic Aid	6276.0	3619.2	2267.8	1349.1	466.4
Grants	4910.9	3516.2	2211.5	1149.2	375.0
Loans	1365.1	303.0	56.3	199.9	91.4
Total Military Aid	xxxx	37.1	604.6	1013.9	1541.2
Total Exports to Eastern Europe	832.4	653.3	745.9	742.9	1100.1
Total Imports from Eastern Europe	1011.7	812.9	1009.8	995.4	1357.9

Source: Adler-Karlson. Western Economic Warfare, 1968.

Executive believed that imposing an unconditional and broad embargo would undermine the goal of aiding in the immediate recovery of Western Europe and could produce conflicts that would harm alliance stability. For these reasons the Executive, says Mastanduno, worked to mitigate the potential damage of coercive legislation by proposing an exceptions mechanism. This allowed states to export controlled goods when to do so was necessary to obtain critical supplies or when prior commitments existed. It was under this condition that Western European states became more willing to accept the United States proposals for a broad ranged embargo.

Mastanduno supports his argument through an analysis of some State Department officials' expression of the Department's position on the issue and reports on intra-allied negotiations from 1948-1951. For example, during this period Secretary of State Dean Acheson stated:

> There is no intention of using the threat of withholding ECA aid to force the acquiescence of European governments in U.S. policies on export controls, for U.S. policy in the long run will be infinitely more effective if based on the spirit and principle of cooperation and a common recognition of the danger in developing the military potential of the Soviet Union and its satellites" (FRUS, vol. V, p. 81-82, 1949).

Mastanduno's argument is persuasive in that there does appear to have been a greater congruency in the State Department's and Western European officials' perceptions of the nature of the Soviet threat after the invasion of South

Korea. In addition, as pointed out above, the State Department was opposed to the use of economic leverage to get allied states to comply with the United States position. This argument fails to fully consider, however, the nature of the instruments that were available to the United States to bring leverage to bear on allied and Western governments as well as firms. The contested exchange model, outlined in chapter one, can demonstrate how the United States enforced a more restrictive position on export controls throughout the 1950s by offering compliance rents to firms and states.

There were indeed deep and intense divisions within the Executive over the appropriate tactics to use in the negotiations with the allied states. Allied officials were aware of the fact that the Commerce and Defense Departments and the Congress favored the use of leverage to bring them in line with the United States policy position. Despite the fact that the State Department expressed its opposition to the use of aid as a leverage, allied officials realized that the Congress had imposed an obligation on the president to cut off aid in instances of non-compliance or to defend not cutting off such aid before Congress. There was no guarantee that the State Department could keep Congress at bay. Western European officials were also no doubt aware of the speed at which the United States Executive's position on several issues had been undermined by the Congress following

World War I. In addition, the United States had threatened to slow down and in some cases deny licenses for the export of its goods when a clear compliance with U.S. export controls was not guaranteed. This mechanism became an effective instrument to get some states to agree to abide by the United States wishes regarding controls on particular items. Thus some of the governments that agreed to abide by the economic warfare policy and to comply with controls on specific items did so as a result of the threat of the withdrawal of access to United States goods. This was also no doubt true for many Western European firms.

Congressional Actions

In the opening discussions of the Marshall Plan aid program in March 1948, several amendments were introduced that tied aid to the issue of East-West trade. These amendments were incorporated into the Foreign Assistance Act in section 117 (d). This section directed the Administrator of Marshall aid to monitor the transactions of aid receiving states and to refuse delivery of United States commodities "which go into the production of any commodity for delivery to any non-participating European country for which such a commodity would be refused export licenses by the United States in the interest of national security" (cited in Adler-Karlson, p. 23, 1968). During the period in which the Commerce Department was in the process of establishing

criteria to designate which classes of goods should be subject to what type of controls, this provision was inefficiently enforced.

As a result, in late 1948 the Senate Committee on Expenditures in the Executive Departments conducted a series of studies that analyzed the effectiveness of the United States export control program. In this review the Senate attacked the Office of International Trade in the Department of Commerce for its inefficiency in terms of ensuring compliance and enforcing the program. The criticisms contained in the Senate report were many and focused not only on the fact that some United States exporters engaged in flagrant violations, but also on the "complete ineffectiveness in terms of destination controls" (The Administration of Export Controls, Dec. 1948; Senate report no. 1775, 80th Cong., 2nd sess.). The Senate report called for a reorganization and reinvigoration of the export control and licensing program. The proposed changes included an expansion of the compliance and enforcement staff; the collection of extensive lists and data on individuals and firms that were engaged in exporting and receiving United States goods; and the establishment of mechanisms to monitor and prevent "unauthorized diversions, transshipments, or end use of export commodities once such commodities have left our ports."

The recommendations of this Senate report were incorporated into the Export Control Act in February 1949. This Act formally institutionalized and standardized the export control and licensing program. The stated purpose of the new act was "to exercise the necessary vigilance over exports from the standpoint of their significance to the national security" (Export Control Act of 1949, Public Law 89-63, 89th Cong.). The Act also declared that it was the policy of the United States "to apply such controls to the maximum extent possible . . . in dealings with the Communist-dominated nations" (PL ,89-63, 1949). The regulatory procedures of this legislation were exempt from the Administrative Procedure Act because of their sensitive nature. Individuals and firms found in violation of the export control regulations were subject, however, to severe administrative sanctions. This could include the loss of all export privileges and criminal penalties of fines up to "five times the value of the exports involved or $20,000, whichever is greater, and/or five years imprisonment" (cited in Adler-Karlson, p. 218, 1968; PL 89-63, 1949). The extensiveness of this program, the vigilance it established on Western individuals and firms engaged in trade, is striking given the fact that the United States Executive is lauded historically as the beacon of free trade in the post-1945 world.

Throughout 1949 and 1950 Congress continued to be dissatisfied with what was seen as the inability of the Executive to gain satisfactory collaboration from the Western European allies on imposing broad controls on trade with the Eastern bloc. It was probably the case that many members of Congress were unaware of the diplomatic initiatives and headway to gain Western European compliance in the export control program that the State Department had made from 1948 to 1950 (Adler-Karlson, 1968). This was because Western European officials requested that any cooperative arrangements on export controls be kept confidential. Many members of Congress were also unaware of the role that Eastern European trade played historically in the development of Western European economies. Thus by 1950 the issue of the level of Western European cooperation in the export control program had become highly controversial in the Congress. Resentment emerged in the Congress over the prospect that aid-receiving European states might be willing to engage in trade for economic gain with the Soviet bloc at the expense of Western security. This became an issue not only because of the perception that United States firms who complied were disadvantaged, but more significantly because it was cast as immoral to sell to the enemy. In the 1950 Annual Report of the House Committee on Un-American Activities, Western European aid receiving

states were viciously attacked for their lax attitude on the issue of export controls (Jentleson, p. 55, 1986).

After the outbreak of the Korean war the Congress became even more vociferous and adamant in its desire to see unqualified Western European support for the United States position on export controls. In September 1950, a rider was attached to the Supplemental Appropriations Act of 1951. This rider, which became known as the Cannon Amendment, stated: "During any period in which the Armed Forces of the United States are actively engaged in hostilities while carrying out any decision of the Security Council of the United Nations, no economic or financial assistance shall be provided out of any funds appropriated to carry out the purposes of the Economic Cooperation Act of 1948, as amended, or any other act to provide economic or financial assistance (other than military assistance) to foreign countries, to any country whose trade with the USSR, or any of its satellite countries (including Communist China and Korea) is found by the NSC to be contrary to the security interest of the United States" (Chuthasmit, p. 40, 1962).

Many members of Congress were opposed to the provision of Executive discretion embodied in this rider. The original version, proposed by Senator Wherry, was designed to allow the president no leeway on this issue (Chuthasmit, p. 36, 1962). Senator Lodge, however, siding with some

members of the State Department, expended enormous amounts of energy to get the discretionary provision included (Chuthasmit, p. 46 1962).

In early 1951 there was open conflict in the Congress and between the president and Congress over the enforcement of the Cannon Amendment. In this context Senator Kem was able to get a new rider attached to the Third Supplemental Appropriations Bill of 1951. This amendment was much more restrictive than the Cannon Amendment. It required the Executive to cut off all assistance to any aid-receiving state that engaged in trade of any item embargoed by the United States. It required states that engaged in trade in any form with the Soviet bloc to demonstrate in detail why such trade should be exempt from the provisions of the amendment. The Kem Amendment allowed for exceptions, but required that the NSC report all such exceptions, with supporting arguments, to all House and Senate committees involved in oversight on East-West trade (Chuthasmit, p. 47, 1962; Mastanduno, 1985). The requirements of the amendment were to be carried out in an extremely short amount of time (approx. 2 weeks). Truman was furious with this move and stated that the rider was "an attempt to achieve by coercion (U.S. of the Western Europeans) what must be achieved by cooperation" (Adler-Karlson, p. 27, 1968). He reacted by

granting blanket exceptions until aid-receiving states could comply.

State Department officials attempted to get the Kem Amendment replaced with a less restrictive piece of legislation. The result was a compromise in the form of the Mutual Defense Assistance Control Act (Battle Act) that was passed on October 26, 1951. The Battle Act was a significant change in that it was a more permanent piece of legislation. It was effective in times of peace as well as when the U.S. was engaged in hostilities; and it linked economic and military assistance to compliance with U.S. export controls (Mastanduno, 1985). It required the president to terminate, unconditionally, all assistance to any nation that exported arms, implements of war, or atomic energy materials to the Soviet bloc (Chuthasmit, p. 53, 1962). It also required the termination of assistance if a state was exporting primary strategic materials or "other materials" to the Soviet bloc that were subject to embargo by the United States (Adler-Karlson, pp. 28-30, 1968). It gave the president discretion, however, to provide exceptions when the national interest would be served. The president was required to justify any exceptions before Congress in the annual Battle Act Reports. The Battle Act also established one of the key instruments for bringing United States leverage to bear on Western European states

and firms. The Act required the Executive to develop a system to monitor permanently the compliance of foreign nations, firms, and individuals with the United States export control system.

The Executive never terminated economic or military assistance under the Battle Act. Yet the actions taken by Congress had significant and lasting repercussions on Western European officials' perceptions. It also established and institutionalized a variety of instruments that could be used by the United States to extract compliance. The Battle Act, and the legislation that proceeded it, created a perception that various segments of the United States government were willing and able to use economic leverage to attempt to get the allied states to comply with an economic warfare strategy. In addition, the Export Control Act built conflict into the institutional structures of the United States government by vesting the responsibility to administer controls jointly in the Department of Commerce and the Defense Department. This brought these two Departments into direct conflict with the State Department, which was responsible not only for negotiating compliance with the United States export control program, but also for establishing agreements with the Western European allies in a number of other areas. State Department officials were often more reluctant to risk

disrupting progress made in other areas by taking a hard-line on the controversial export control issue.

The contested exchange model shows how instruments established through the ECA and the Battle Act worked together to provide leverage in getting allied states to comply with the United States strategy. The United States had "rents" to offer; namely, access to its high technology, goods, and economic and military assistance. It could threaten to withdraw them in two ways. First, Commerce Department officials could use export license delays or denials to deny firms and governments access to United States goods and technology. Secondly, and perhaps less appealing because of political cost, the United States could threaten to terminate economic or military aid. The surveillance mechanisms established through the ECA and the Battle Act allowed the United States to gauge compliance by individuals, firms, and governments. In the context of a global economy where the United States controlled a greatly disproportionate share of almost all high technology and capital goods, it was not in allied states' or Western firms' interests to defy the United States.

The Dynamics Of Negotiations

By early 1948, unknown to Congress at the time, the State Department had embarked on a series of intense bilateral initiatives to gain Western European collaboration

on a coordinated export control program. The goal of these initiatives was to gain compliance as far as possible with the United States 1A list and then to move on to the 1B and 1C lists (FRUS, vol. IV, p. 585, 1948). The United States, as was stated above, encountered resistance to its proposals for an extensive embargo strategy. The bilateral talks moved rather slowly and the Commerce Department began to demand that the State Department exert more pressure to bring aid-receiving states in line with the United States policy (FRUS, vol. IV, p. 469, 1948). The Secretary of Commerce complained bitterly to Secretary of State that non-compliance and undesirable transshipments by Western European states was undermining the United States program. Secretary of Commerce Sawyer began to use "special screening procedures" of export licenses for countries where bilateral negotiations were moving slowly (FRUS, vol. IV, pp.523-545, 1948).

The European responses to the United States diplomatic initiatives varied. The British and the French were the most receptive to the initial United States proposals. They expressed agreement in principle to the necessity of establishing some type of program that would curtail exports that could increase the Soviet bloc war potential, but were reluctant to go beyond the United States 1A list. Italy, the Scandinavian countries, and the other smaller Western

European states were more reluctant to go along although they did state a general agreement in principle (FRUS, vol. IV, p.586-587, 1948). While agreeing on principle none of these states were willing to take concrete actions to implement any program that United States officials proposed.

All of these governments shared similar concerns. First, they were skeptical of United States assurances of compliance by other alliance member states. They did not want their firms to be disadvantaged. Secondly, they were concerned about the effects of trade and reexportation through third party non-alliance states such as Switzerland, Sweden, and Austria. Thirdly, they were reluctant to enter into such a program because they were wary of violating their obligations under trade agreements with Soviet bloc states. Finally, they were reluctant to enter into a formal or public agreement with the United States on this issue because of the possible reaction in their respective parliaments (FRUS, vol. IV, p. 69, 1949).

In late 1949 the Western European states agreed to participate in multilateral discussions to coordinate a list of common controls. The informal multilateral mechanism that resulted from these talks was a compromise. The United States and the Western allies agreed to set up two permanent bodies in an organization to coordinate export controls: the Consultative Group (CG) and the Coordinating Committee

(COCOM). The membership of the organization was the United Kingdom, the United States, Canada, Belgium, Japan, the Netherlands, Luxembourg, France, Italy, Denmark, Portugal, West Germany, Norway, Greece, and Turkey.

The CG was to meet four times a year as a policy and guideline making body made up of high level representatives from participating states. COCOM was to meet on a regular basis to coordinate and implement agreed upon controls. The terms and even the existence of the organization were to be kept confidential. COCOM was meant to solve the issue of uncertainty by providing information on the nature and level of alliance member state participation in the export control program. In addition, Western European states, particularly the smaller ones, believed that this organization could help mitigate against intense United States diplomatic pressure. Compliance with CG-COCOM recommendations were considered voluntary, but required if the organization was to last (Mastanduno, 1985).

The states that agreed to join COCOM decided, based on the United States proposal, to set up a series of three international lists of items that would be subject to control. The international list I included items that the member states agreed should be embargoed unconditionally. The second list, international list II, was made up of classes of goods that were to be subject to quantitative

restrictions. The last list was made up of goods that were under consideration as candidates for control and that were monitored. This list was known as the surveillance list. Negotiating the content of the lists was volatile and protracted. The State Department sent officials from capital to capital to generate support for the United States position while the multilateral CG-COCOM talks proceeded in Paris. The American, French, and British officials also met in New York and London in tripartite talks to work out particular details and to develop specific proposals to be submitted to the multilateral forum (FRUS, vol. IV, pp. 187-194, and 234-241).

Initially the Western European states agreed to embargo unconditionally 144 of the 177 items that were on the United States 1A list. Six of the items on the United States 1A list were placed on international list II while 27 were retained on list III (FRUS, vol. IV, pp. 87-93, 1950). Western European officials refused to embargo a variety of items on the United States 1A list such as tankers, diesel engines, ball-bearings, and certain oil exploration and transportation equipment (FRUS, vol. IV, pp. 87-93, 1950; cited in Mastanduno, 1985). Once the organization was in place, the United States began to pressure the Western European states not only to accept all of its 1A list for unconditional embargo, but also to agree to bring

international list II into line with the United States 1B list. This would mean that the United States export control guidelines would become the COCOM guidelines. By early 1952 the United States had succeeded.

Immediately following the formation of the CG-COCOM in 1949 the United States was faced with three challenges. If its economic warfare strategy was to be effective the United States had to: first, persuade the Western European allies to adopt controls of the US 1B list; second, convince the neutral European states to adopt or honor US and alliance export control regulations and last; develop alliance cooperative mechanisms to uncover diversions and to prevent transshipments. The United States used diplomatic persuasion rather effectively to achieve these goals. The appeal in negotiations was to the common security interests. Where diplomatic initiatives bogged down, however, the export control licensing system and the threat of "throwing the allies to Congress" provided a means to apply leverage.

The United States used data collected on trade flows, and on firms and individuals to develop blacklists identifying violators of international and the United States export control regulations (FRUS, vol. IV, pp. 255-257, 1950; FRUS, vol. I, pp. 1032 and 1059-1067, 1951). The United States was able to use this information to delay or to deny export licenses bound for individuals, firms, or

nations that were reluctant to comply with the United States position on controls. This was a much more differentiated system of instruments to bring pressure to bear on the Western European states than the "sledgehammer" approach Congress had established in requiring the termination of all economic and military assistance to states that were found in violation of export controls. United States technology and capital inputs were required to quickly rebuild Western European industrial plant. In addition, United States exports were important input supplies for Western European finished goods. This gave American officials with the power of export license reviews leverage. It was widely known at the time, particularly by British and French officials, that the State Department and the Commerce Department radically disagreed over the appropriate tactics to be used in negotiations (FRUS, vol. I, p. 1153, 1951). While the State Department controlled the negotiation process, the Commerce Department and Secretary Sawyer - who favored the use of leverage sooner rather than later - controlled the export licensing program.

Throughout 1950 the United States attempted to get the Western European states to adopt the 1B list in full. Secretary of Commerce Sawyer and Secretary of State Acheson had numerous exchanges over the issue of tactics. By 1952 the Western European states had accepted the 1B list so that

there was virtually no difference between the COCOM Lists and the United States lists. In the context of the heated negotiations, recently declassified documents show that the United States "held up licenses applications for the export of ball bearing manufacturing equipment to Italy and the United Kingdom and of a steal strip mill to Sweden" (FRUS, vol I, p. 154, 1950). These license applications were being held up so that United States officials could "express concern" over the inconsistency between member state control criteria and the United States' criteria. In addition, American officials in London were instructed "to point out that if shipments of strategic items to the Soviet bloc resulted from the licensing, public opinion in the United States might force the government to adopt a more restrictive policy toward licensing to the United Kingdom" (FRUS, vol. I, p. 154, 1950). This was significant because the United States was using the British as a mouthpiece for the American position in negotiations with other Western European states.

In another case the United States delayed licenses for the Danish Ford and General Motors subsidiaries to export automotive parts. These items were not on the international lists and the Danish government had been bartering the parts for desperately needed coal from Poland (FRUS, vol. I, pp. 1173, 1950). Within the context of the COCOM discussions

the Danes had been rather outspoken in their opposition to a broad embargo strategy. The license applications for shipments of these parts were held up in the Commerce Department despite the fact that the Danes made several appeals regarding the grave necessity of obtaining Polish coal. The State Department, playing "good cop" made several appeals to the Commerce Department regarding the licenses. It took an intervention by the President to resolve the issue. He ordered to Commerce Department grant the licenses (FRUS, vol. I, pp. 1161-1176, at 1176, 1950). During the process of resolving this issue, however, the Danes moved to support the expansion of the COCOM embargo.

Leverage was applied much more directly in persuading neutral states to adopt controls parallel to COCOM. On numerous occasions the United States made it clear to Sweden and Switzerland that the United States would have to review "with much greater scrutiny" applications for export licenses to these states if no assurances were forthcoming. State Department officials were told to "use this point at the appropriate point in the negotiations" (FRUS, vol. V, p. 65, 1949). While the State Department would have preferred to bring these neutral states along with persuasion, the Department "recognized that withholding license applications has had an affect on the Swiss willingness to cooperate" (FRUS, vol. I, p. 1154, 1951). In the case of the Swiss,

Acheson instructed his negotiator to "express disappointment that the Swiss have not agreed to the embargo and simply indicate that the US will have to continue to review licenses for these items in light of all the facts . . . and depart" (FRUS, vol. I, p. 1157, 1950).

Alliance Divergence and the Relaxation of COCOM Controls

By 1951 the Western Alliance was following a policy of economic warfare against the Soviet bloc. This program, as we have seen, was organized and led by the United States. By 1953 a variety of factors came together to result in a movement away from the broad embargo policy in COCOM. The United States continued, however, to unilaterally pursue a policy of economic warfare. United States officials used the validated license program and developed an import certification and delivery verification system to maintain its instruments of leverage on Western firms. The United States also maintained its surveillance, intelligence, and blacklist system for firms and individuals that did not comply with its more restrictive control system. In order to avoid a diplomatic conflict, however, the United States was willing to acquiesce to Western European governments' demands that large numbers of items be removed from the COCOM Lists.

In 1953 Joseph Stalin died. The Soviet leadership began pushing a peaceful coexistence line that included courting Western commercial interests (Jentleson, 1986). The Korean war had also ended. In addition changes began to occur in West-West relations. In 1952-1953 there was a global recession. Western European growth rates declined and unemployment was "27 percent above the 1950 rate in France, 25 percent higher in Great Britain and 15 percent higher in Italy" (Jentleson, p. 80, 1986). Marshall Plan aid outlays were also quickly fading and this meant some of the resources that the United States could draw on for leverage were decreasing (Adler-Karlson, p. 91, 1968; Jentleson, 1985).

In this context the Western European governments became highly critical of the extensiveness of the COCOM embargo program. While McCarthyism raged in the United States, Western European officials began to eye Eastern bloc markets. There was a public outcry in Western Europe against the United States pressure to continue tight controls despite the changes in East-West relations. Protest was registered openly in the British and German Parliaments (Adler-Karlson, 1968). Various Western European newspapers also published criticisms of the United States embargo policy. In the summer of 1953 Le Monde and Il Sole demanded revisions of the United States policy and recession

of the Battle Act (Adler-Karlson, 1968). Several Western European states, particularly the British and the French, sent trade delegations to Moscow in the summer of 1953 (Labbe, 1988; Bertsch and Elliot, 1988). Most notably, Winston Churchill in a speech before Parliament advanced a neo-Kantian argument for expanding East-West commercial relations. He said that trade was a peace-promoting agent and that "the more trade there is through the Iron Curtain . . . the better still will be the chances of our living together in increasing comfort" (Adler-Karlson, 1968). This speech had been prepared by British Board of Trade officials whose Department had always opposed extensive controls.

By 1954 negotiations were underway between the United States, France, and Great Britain to institute a relaxation of the COCOM control system. The major revisions of the COCOM Lists took place in three stages in 1954, 1955, and 1958.[1] When they ended in 1958 the United States was

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[1]This chapter does not deal directly with the nature of allied negotiations over the formation of a multilateral economic warfare policy against China. It should be pointed out, however, that a so-called "Chincom" was formed in 1952 as a part of the CG, to administer and coordinate controls directed at China. In addition, following the Korean War and at the 1954 revisions, the COCOM states agreed not to liberalize controls on China. This resulted in a situation where, at the United States insistence, there was a disparity in the controls applied to the Soviet Union and Eastern Europe and those applied to China. This was known as "the China differential."

Clearly, this policy was self defeating in that items controlled for China could be transshipped through the Soviet Union or Eastern Europe. By 1956 Chincom and the differential

pursuing an economic warfare program unilaterally (Adler-Karlson, 1968; Jentleson, 1986; Mastanduno, 1985). The United States maintained its position that export controls with the Soviet bloc should encompass all "industrial fields which serve to support the basic economy of a country and which therefore support either a peace-time or a wartime economy" (Jentleson, p. 78, 1986). The COCOM program, however, was scaled back to a more narrow strategic embargo (Mastanduno, 1985). In addition, while the United States goal of a coordinated alliance economic warfare program was rejected, the goal of denying Soviet bloc access to items where there was a Western technological monopoly was retained.

In the initial negotiations the COCOM List I was cut from 320 items to 226 items. The quantity control and "surveillance" lists were cut from 92 to 26 and 102 to 63 items respectively (Jentleson, 1986; see table 3:4). The most significant decontrols occurred in general industrial equipment and chemical products while the decontrols in electronics and precision instruments and metalworking machinery were much lower (see table 3:5). The total classes of items under any kind of controls decreased from 514 to 315. The 1958 revisions established a policy that

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in controls applied to the Soviet Union and China were disbanded. See Mastanduno (1985) for a closer analysis of this case.

the international lists should be revised yearly. In addition, in 1958 the COCOM List I and II were combined into one list called the "watch list" (Adler-Karlson, 1968). Items that were taken off of the international lists included: "some types of civilian aircraft, electrical generating equipment, some classes of ships, pumps and oil drilling equipment and refining equipment, electric motors, turbines, small steel rolling mills, industrial diamonds, industrial ball bearings, aluminum and copper and tires" (Adler-Karlson, 1968).

These revisions represented a concession by the United States. The United States was willing to go along with these revisions for a number of reasons. First, and at a general level, the United States was concerned with maintaining intra-alliance harmony. President Eisenhower stated that it was in "the interest of the United States to facilitate accord with the allies by going along with liberalizing multilateral controls" (Jentleson, 1986). Secondly, there was a quid pro quo. The United States agreed to the relaxations, but continued to maintain strict unilateral controls. In exchange, the Western Europeans agreed to develop legislation and administrative systems to provide for much more extensive and effective enforcement mechanisms and transshipment controls (Adler-Karlson, 1968).

TABLE 3.4

Number of Items on COCOM Lists Before and After Revisions of August 15, 1954

	List I	List II	List III	All Lists
Before revision	320	92	102	514
After revision	226	26	63	315

Source: Task Force on Economic Defense Policy to the Chairman, Council on Foreign Policy, "Draft Guidance Paper on East-West Trade," October 5, 1955, Annex 4, Attachment A, Box 1, Folder: CFEP-East-West Trade, Records of Clarence Francis, 1954-1961, Dwight D. Eisenhower Presidential Library, Abilene, Kans., cited in Bruce W. Jentleson Pipeline Politics (Ithaca, NY: Cornell University Press, 1986) p. 76.

The United States wanted to ensure that its control program would not be frustrated by the inconsistency between its lists and the items subject to control in other Western European states. Since 1948 the United States Commerce Department granted licenses for exports of controlled goods only when the government of the receiving agent was willing to guarantee that "such goods, the products of such goods, or similar goods would not be re-exported to a controlled destination or to provide information as to why such reassurance was impossible" (Mastanduno, 1985). To increase the effectiveness of this policy, the United States in 1954 set up an Import Certification/Delivery Verification (IC/DV) program and required all states receiving U.S. controlled exports to adopt the system. This meant that all importers of United States goods and "users" of United States' technology were required to obtain a certificate from their home governments stating that the U.S. control policy would be honored and that re-export would not occur. Importers were required to present this document to the United States government as part of the export license package (Battle Act Report no. V, May 17, 1954; Mastanduno, 1985). The United States could also request a delivery verification from the importing country. The United States also reserved the right to impose sanctions, such as the penalties proscribed in the ECA, and to deny access to the United States market,

on firms and individuals found in violation of its export control regulations and the IC/DV system (Battle Act Report, no. V, May, 17, 1954). This meant that the United States imposed its export controls extraterritorially. This ensured that the United States could maintain leverage instruments that could be applied to Western firms.

The COCOM revisions explicitly required the Western European states to strengthen enforcement of this system. The revisions also called for the establishment of a similar system, Transit Authorization Certificate, to monitor the movement of goods through free ports. In addition, a "financial transaction surveillance system" was agreed upon to prevent allied firms from financing sales of controlled goods through third countries (Battle Act Report, no. 9, June 28, p. 21, 1957; cited in Mastanduno, 1985).

Thus, despite the COCOM relaxations the United States retained significant control over the goods that could flow East. This control was possible because of the strict unilateral program, the IC/DV system, and the fact that the United States held the commanding heights in leading edge and advanced technology. In addition, in the first two decades following the war the United States government accounted for the vast majority of R & D spending in all high technology areas such as space and nuclear technology (Mastanduno, 1985). This fact gave the U.S. government

significant control over access to advanced technology developments.

The revisions did not prevent the United States from keeping its export control administration and COCOM intact as organizations designed to help the West maintain technological monopolies and lead times over the East. Following the revisions of the 1950s, debates in COCOM were no longer preoccupations over the effectiveness of a coordinated alliance economic warfare strategy. The conflicts and debates were over whether or not particular items should be added to or removed from the lists on the basis of their strategic significance.

Conclusion

The dynamics of U.S.-Western European collaboration during this period are explained most readily in terms of the structural distribution of power and discourse analysis. However, the institutional and market explanations also help to account for aspects of the collaboration. In this conclusion I will consider how some of these intepretating contribute to our understanding of the dynamics of collaboration. In addition, I will summarize how factors at each level of analysis interacted to bring about collaboration.

The form of post-war East-West trading relations was uncertain in 1945. As misunderstandings and conflicts

between the superpowers multiplied, an absolutist discourse came to determine United States interpretations of Soviet actions. This discourse legitimated a policy of economic warfare. The Soviet Union was seen as the embodiment of the Enemy-Other intent on disrupting international harmony and on destroying "Western civilization." In order to isolate this threat, the United States adopted rules and established institutional structures to carry out a broad export control program. This program was set up to guard Western security and was designed to inflict damage on Soviet bloc economic development and war-making potential. In addition, a central goal of the program was to maintain Western technological lead times and monopolies. The United States policy was legitimated by the terms of an absolutist discourse that had been accepted within the NSC.

Western European powers had had traditional trading ties with the Eastern bloc states. While suspicious of Stalin, most Western European leaders did not share the image of the Soviet Union articulated by George Kennan. While they supported the idea of a limited strategic embargo, many Western European officials believed that trade could have an instrumental value in manipulating the Soviet Union and dividing the Soviet bloc. In addition, many believed that trade held mutual economic benefits. Some Western European officials argued that trade and economic

issues should be decoupled from political considerations. Most groups within Western Europe wanted to reestablish traditional trade ties for economic reasons. Despite this strong preference, these states followed the United States lead. They participated in the formation of COCOM and agreed to impose an embargo on East-West trade in items of direct as well as indirect military significance.

Western European officials agreed to adopt the United States approach to export controls from 1951-1953 for a number of reasons. First, the outbreak of the Korean war led Western European officials to be wary of following an economic policy that would increase Stalin's war-making potential. Western Europen officials also became more willing to accept the terms of the absolutist discourse. Secondly, Western European government and business officials were reluctant to incite a Congress that had passed legislation requiring the Executive to cut off all economic and military assistance to states that violated the United States policy. Marshall Plan aid, at this point, was much more important to Western European economies than Eastern European market. Thirdly, the United States State Department helped to develop an exceptions mechanism in COCOM through which trade in essential Eastern bloc goods, raw material and energy supplies, could be maintained and standing contracts honored. Unlike the Commerce and Defense

Department, State Department officials appeared more inclined to attempt to find compromises with Western European States reluctant to forgo trade with the East. The fourth reason that Western European officials followed the United States lead is explained by the micro-economic contested exchange model. The United States could use access to relatively scarce goods it controlled as well as the threat of denying export licenses for these goods, to extract compliance with its position in negotiations with governments and to extract compliance from Western firms. The surveillance programs on transactions and trade flows established through the Battle Act and the ECA allowed the United States to gauge compliance and to establish blacklists of violators. This practice allowed the United States to apply leverage instruments effectively.

By 1953 the nature of Western-Soviet bloc relations had begun to change. In addition, Marshall Plan aid had begun to dry up and Western Europe was coping with the effects of a global recession. In this context, Eastern bloc markets became more appealing while United States economic leverage was in part eroded. The United States believed it was in its interest to concede to Western European demands for a relaxation of multilateral controls. The United States did not abandon its economic warfare strategy, but fell back on the IC/DV system and its export

control licensing program to deny the Soviet bloc access to its goods. After 1954, allied states were willing to continue cooperation in COCOM as a coordinated effort to prevent flows of strategic items and advanced technological goods to the Soviet bloc. Conflict continued over which items should be controlled on these grounds. The United States continued to pursue a unilateral strict control policy for over a decade. In the 1960s economic and political forces came together to transform the United States position on East-West trade. As we will see in the next chapter, the rise of détente and the reemergence of an instrumentalist and a neo-Kantian discourse legitimated a much more flexible and relaxed United States export control system.

TABLE 3.5

Number of Items on COCOM Lists Before and After Revisions of August 15, 1954, and Percentage of Items Decontrolled by Product Category

Product Category	Before Revisions	After Revisions	Percentage of items decontrolled
General industrial equipment	41	14	65.8%
Chemical products	98	45	54.7
Chemical and petroleum equipment	49	25	49.0
Electronics and precision instruments	74	50	32.4
Metalworking machinery	78	53	32.0
Munitions and atomic energy	54	51	5.5

Source: Task Force on Economic Defense Policy to the Chairman, Council on Foreign Economic Policy, "Draft Guidance Paper on East-West Trade, " October 5, 1955, Annex 4, Attachment A, Box 1, Folder: CFEP-East-West Trade, Records of Clarence Francis, 1954-1961, Dwight D. Eisenhower Presidential Library, Abilene, Kans., cited in Bruce W. Jentleson <u>Pipeline Politics</u> (Ithaca, NY; Cornell University Press, 1986) p. 77.

CHAPTER IV

EAST-WEST TRADE POLICY IN THE CONTEXT OF GLOBAL ECONOMIC COMPETITION: THE CLASH OF THE INSTRUMENTALIST AND NEO-KANTIAN DISCOURSES

The Purpose Behind the Shift in East-West Trade Policy

This chapter is an analysis of the changes that occurred in United States policy on East-West trade and COCOM in the 1960s and the 1970s. In this examination of how the alteration of United States policy affected the COCOM program, I address the two following questions: 1) To what degree was the state of multilateral export controls during this period determined by intensified West-West economic competition; and 2) Was the linkage approach to East-West trade liberalization that emerged made possible and legitimated by an instrumentalist discourse?

After the 1958 COCOM revisions the United States maintained a more restrictive unilateral East-West export control program. This more comprehensive program was designed to "guard United States technology that was not available anywhere else in the world" (McKitterick, p. 22, 1966). As described in chapter three, surveillance programs, the IC/DV system, reexport control authority, and compliance rents were all designed to provide leverage for the regulation of trade in categories of items or technology

where the United States: a) held a monopoly; and, b) wanted to prevent the diffusion of that technology. During the late 1950s and early 1960s Eastern bloc demand for Western European capital goods and high technology items increased. There was a movement away from the economic isolationism envisioned by Stalin. In addition Western European officials became more willing to allow firms to fill this demand. This resulted from both a growth in inter-Western economic competition and the fact that Western European officials' perception of the appropriate relationship between East-West trade and Western security shifted away from a policy of economic denial to one of inducement. This represented a shift away from an absolutist discourse toward an instrumentalist discourse.

These changes caused American officials in various executive departments to reassess the broader and more restrictive United States approach to East-West trade controls. By the early 1960s the economic warfare strategy that had been legitimated by the absolutist discourse came to be seen as misguided by many executive branch officials. This was due only in part to the expansion of Western European-East bloc trade and a greater diffusion of technological development and productive capability. The reassessment was also due to the fact that even in the face of economic warfare, Soviet bloc states made tremendous

strides forward in economic growth and in industrial and technological development. By 1960, having launched the Sputnik and produced sophisticated missile delivery systems, the Soviet Union demonstrated an ability to develop and to maintain advanced military technology despite United States restrictive controls on technology transfers.

In this context American executive branch officials faced a choice over how to reform the United States approach to export control policy. As Mastanduno argues, there appeared to be three options: pursue a unilateral economic warfare program; attempt to coerce allied states and firms into compliance with a coordinated broader restrictive program; or reduce United States controls to the level of other alliance states (Mastanduno, 1985). The unilateral option made some sense in that the United States could have used various instruments to attempt to bring Western firms into compliance and to ensure that the embargo was not made ineffective by Western European-East bloc trade. The potential cost of resorting to attempts at coercion with increasingly sensitive allies was seen by United States officials as politically unacceptable. However, simply liberalizing United States-Eastern bloc trade was problematic given domestic constraints. There was strong domestic opposition to East-West trade liberalization particularly in the Congress where trade was still regarded

as more of a privilege than a right and trading with Communists states was a moral issue. Ultimately the executive branch advocated liberalization of controls tied to political concessions from the Soviet bloc.

The image of the Soviet Union on which the eventual United States policy shift was based, as well as, the language used to defend the policy, represented a move away from the Cold War absolutist discourse. By the mid-1960s an instrumentalist discourse that legitimated a tactical linkage strategy became the guidepost for the executive branch position on East-West export control policy. This discourse broke with the images, symbols, and representations that had been articulated by George Kennan in 1946. United States executive branch officials began to draw more directly on an image of the Soviet Union as a traditional great power with interests in status quo supporting relations. Officials in the Kennedy, Johnson, Nixon, and Carter Administrations all spoke of trade as a "tool to be used" on the Soviet Union and the Soviet bloc (McKitterick, p. 26, 1966; Hardt and Holliday, 1973). This type of language could have authority or persuasive power only with an image of the Soviet Union and the Soviet bloc different from that of the Cold War period. This "new" discourse was based on the supposition that the Soviet leadership, out of "rational calculations of interest,"

would react in a predictable fashion to appropriately designed instruments of foreign policy discipline. The rise of this discourse corresponded with the incorporation of behaviorist methodologies in foreign policy formation. This included, for example, attempts to rationalize United States' nuclear strategic policy and the Kennedy Administrations' reorganization of the Pentagon (see Gaddis, 1982). This instrumentalist discourse clashed, however, with counter discourses, both absolutist and neo-Kantian, in Congress.

Changes in the nature of West-West economic competition, the expansion of Western European-Eastern bloc trade, and the breakdown of the images that held together the Cold War consensus produced a shift in United States policy on East-West trade. That shift was most clearly articulated in 1969 when Congress replaced the Export Control Act with the Export Administration Act. However, the theoretical framework for the policy shift and the initiatives for implementation came from the executive branch in the Nixon-Kissinger and Carter-Huntington versions of trade linkage.

This chapter is divided into four sections. The first section reviews the state of inter-allied relations over COCOM in the late 1950s and early 1960s. I assess executive branch proposals to alter United States policy on East-West

trade during the Kennedy and the Johnson Administrations. In addition, I analyze the position of the Congress and sectors of the business community.

The second section of the chapter is an analysis of the dynamics of executive branch and Congressional relations during the movement from the Export Control Act to the Export Administration Act in 1969. There were significant intra-governmental divergences of opinion during this process. The executive branch supported East-West trade liberalization, but attempted to retain discretionary authority over export controls for foreign policy purposes. Key members of Congress attempted to move to a unilateral East-West trade liberalization without any connection to superpower politics. The outcome of this struggle and its relationship to Western European states' policies, such as Brandt's Ostpolitik, will be the focus of the final part of this section. The key issue in this section is explaining the change in the United States' position. Was it driven by transformations at the international level? Which branch of government led the way in altering United States policy? Was the policy shift a result of interest group pressure in the face of growing West-West commercial competition? Finally, to what degree was the United States' policy shift bound up in the move to an instrumentalist discourse?

The third section evaluates the differences between the Nixon and the Carter Administrations approaches to establishing links between concessions on export controls and changes in Soviet domestic or foreign policy. This will include an analysis of the types of domestic constrains and international difficulties these administrations faced as a result of the peculiarities of their approach.

The final section of the chapter focuses more directly on how the transformations of the United States position played out in the context of COCOM. COCOM regulations were ignored or by-passed by the United States and by Western European states during this period. What explains the disregard of COCOM by the United States and the Western allies during the 1970s? In 1980 when the Reagan Administration moved to invigorate the multilateral export control program, many cases of COCOM and United States approved transfers of security sensitive technologies were made public. Reagan Administration officials pointed to these cases, claimed that detente was a foreign policy failure, and said that it had done significant harm to Western and United States security interests.

Mastanduno argues that COCOM became an ineffective organization during the 1970s because the United States did not provide leadership for maintaining the integrity of the program (Mastanduno, 1985). This, however, does not tell us

much. This chapter will show that on a broader level the fate of COCOM during this period was shaped by intensified West-West economic competition, changes in allied officials' images of the nature of the Soviet threat, and changes in allied officials' perception of the appropriate relationship between East-West trade and Western security. United States capability to ensure the integrity of controls on these technologies where it maintained a global lead remained relatively intact. This included areas such as equipment for the exploration and production of oil and gas, computers, robotics, and microprocessors. United States policy, however, might have become guided by a sentiment best expressed by Secretary of Commerce Pete Peterson who said: "There comes a point at which we must face the fact that business is business, and if it's going to go on in any event we might as well have a piece of the action" (Peterson Report, 1973).

COCOM After 1958

Following the revisions of 1958, reviews of items in categories on the COCOM control list were held annually. Adler-Karlson, who conducted interviews in the 1960s with Western European representatives to COCOM reported that the reviews of the late 1950s and early 1960s were largely technical exercises. Items were removed from the lists when intelligence information showed that Soviet bloc states had

mastered the production process for such goods. Items were also removed when they had grown militarily obsolete. Predictably, however, conflict arose in COCOM over the question of what should be added to the COCOM control lists. The United States was interested in controlling the transfer of leading edge and state of the art technology. Whether or not other COCOM states agreed, the United States continued to maintain a more extensive unilateral export control program. The unilateral control program over high end technology was eroded little by Eisenhower's 1959 decision to liberalize trade in some consumer-goods sectors such as textiles and agricultural machinery. United States exports of consumer-goods to the Soviet Union increased from $3.4 million in 1958 to $60 million in 1960 (Jentleson, p. 95, 1986). The Soviet Union during this period became much more interested in acquiring Western commodities and consumer goods.

The United States, however, continued its broader definition of what types of technological innovations and items had military significance. Part of the reason for this was that in the 1950s and early 1960s military applications of newly developed technology usually perceded civilian applications. United States government funds dominated R and D spending in the defense, space and high-technology manufacturing industries (Nau, p. 68, 1976).

In 1959 59% of the dollar value of all R and D preformed in the industrial sector in the United States was provided by the federal government (Nau, p. 65, 1976). The government's share of R and D funding in 1963 was 65% in the electrical equipment and communications sector, 90% in the aircraft sector, and 57% in the manufacturing sector (Nau, p. 68, 1976). In addition the government and particularly the DOD served as the first market for many newly developed technologies. In 1963, for example, the DOD was the sole consumer of all integrated circuit production in the United States (Mastanduno, p. 298, 1985). The high percentage of governmental input meant that federal agencies, particularly the DOD knew of the military value of technology before it was released into private markets. This gave United States officials an advantage in setting out the criteria that should guide the regulation of the transfer of newly developed technology. The fact that these officials considered the military application of these technologies first strengthened their arguments for its regulation. As we will see, higher percentages of private R and D funding and the development of Western European technological productive capability in the mid 1960s reduced United States government officials' proprietary knowledge and hindered United States leverage over the transfer of dual use technologies to the East bloc.

The United States' unilaterally more restrictive export control system was based on the view that qualitative military and industrial superiority provided the strategic edge over the Soviet bloc numerical and conventional superiority. The United States believed that it could maintain qualitative superiority with advances in technological capabilities that provided a lead time over Soviet military developments.

In addition to this substantive basis for the United States more restrictive program, by 1960, as Henry Nau points out, "U.S. technology began to acquire a broader foreign policy significance, being valued as a symbol of American leadership and prestige, as well as a substantive contributor to military systems" (Nau, p. 56, 1976). Thus, as we will see, some members of the United States Executive came to believe that there was a way of preserving Western military technological advantage through focused controls, while at the same time using access to some items and technology in an instrumental fashion. Based on this view, the Kennedy Administration began to articulate a vision of how technology could be used to win friends and influence potential and long time adversaries.

In the early 1960s, however, the United States' more restrictive position still rested on the view that the export control program was designed to retard, as far as

possible, Soviet bloc economic development. In 1963 Labour party leader Harold Wilson stated that his party (soon to be government) did not share the United States understanding of the goals of the COCOM program. He said that the "American view is still based on a hope of containing Soviet economic growth by refusing to trade, especially in plant and equipment that incorporates Western know-how" (Adler-Karlson, p. 99, 1968).

The State Department was willing to tolerate growingly significant disparities between the U.S. control criteria and those of COCOM and other COCOM states. Recall from chapter three that many members of the State Department disagreed with Congress and other agencies over how to best bring European states and firms in line with economic warfare. Other agencies within the American federal government had been, and remained, highly critical of this state of affairs. Nevertheless, inter-allied conflicts in COCOM in the late 1950s appear to have been minimal. This was due to the fact that the COCOM control criteria had been made more narrow and were based on an explicit definitional requirement of military as opposed to economic significance (Mastanduno, 1985). The United States' had compromised in the context of the multinational forum, but the United States maintained its unilateral program. In addition, by 1960 a COCOM procedure called the "administrative exception"

had been instituted. This procedure was an addition to the general exception request procedure that required that all exceptions for trade in controlled items be subject to multilateral approval in the COCOM forum. The administrative exception, however, permitted governments to allow the export of controlled items unilaterally when its officials were "satisfied that no security interests were being endangered" (Adler-Karlson p. 99, 1968). States that provided exceptions under this procedure were required to report all cases to COCOM.

One of the inter-allied conflicts that occurred in 1960 resulted from a difference in understanding over the administrative exception procedure. The ambiguity of the criteria ("satisfied that no security interest is being endangered") led to conflict between the French and other COCOM members. De Gaulle seemed to be rather easily "satisfied" on this issue. In March 1960 he used the procedure to unilaterally extend trade with Eastern bloc states in a number of categories of goods that were subject to COCOM control. Included in these agreements was communications equipment valued at $1 million (Battle Act Report, no. 14, December 20, 1960). The United States and other COCOM states protested the deal.

In the United States this issue sparked more general intra-governmental conflict as the DOD and Commerce

Department once again came into conflict with the State Department over the issue of the United States acceptance of the Western European more liberal position on export controls. According to McKitterick, "most of the domestic departments of the Federal government fought a rearguard action against the State Department" over the issue of control criteria (McKitterick, p. 21, 1966). The Commerce Department in 1959 attempted to persuade other alliance states that COCOM as an organization should adopt an international blacklist and a greylist of individuals and firms that were known to have or were suspected of trading controlled items with the Soviet bloc (McKitterick, p. 21, 1966). The United States developed these lists, but the proposals were rejected.

The Articulation of a New Vision of East-West Trade in the Kennedy Administration

According to his secretary of commerce Luther Hodges, John F. Kennedy came to office with a vision of expanding trade between the Soviet Union and the United States (Jentleson, 1986). In addition, in his State of the Union address in January 1961, Kennedy stated that the United States should use "economic tools to establish historic ties of friendship between the United States and the peoples of Eastern Europe" (McKitterick, p. 26, 1966). This echoed a speech Kennedy made in 1957 on the floor of the Senate where

he said that "we must arm ourselves with more economic tools. We must be willing to recognize divisions in the Communist Camp and be willing to encourage those divisions" (Adler-Karlson, p. 105, 1968). He went on to state that the President should be allowed to use United States economic strength to "wean captive nations away from their Kremlin masters." Kennedy's references in 1957 were to Poland and Yugoslavia. The United States had provided aid and trade concessions to Yugoslavia after Tito's break with Stalin in 1948 and to Poland after Gomulka came to power in 1956.

Kennedy's vision was to use United States economic and technological power in a broader more systematic way as rewards or inducements. This was evident in several of the Administration's ambitious programs such as the Alliance for Progress. In terms of Soviet-United States trade, Kennedy advisors such as George Ball had recommended "scrapping the existing embargo" and opening trade talks with the Soviets (Jentleson, p. 96, 1986). Kennedy went to the Vienna summit in June 1961 with proposals for liberalization of trade controls. He presented this idea to Khrushchev under the condition that progress would be made in finding solutions to unresolved problems. The Vienna summit was a failure. Khrushchev rejected the linked liberalization proposal. In addition, immediately after the summit tensions erupted over Berlin and Kennedy's vision of the potential political

benefits of East-West trade fell victim to domestic reaction and constraints.

Congress took two steps in 1962 to curtail executive branch ability to expand East-West trade for foreign policy purposes. The Trade Expansion Act of 1962 required denial of most-favored-nation tariff status to Yugoslavia and Poland (Mckitterick, p. 28, 1966). The Executive was able to work around this provision. More significantly, however, Congress reinforced the export control system as an economic warfare embargo through an amendment to the Export Control Act of 1949. Based on the recommendation of a House Select Committee set up to review the United States export control system, Congress reduced Executive discretion by stating that export licenses must be denied if the goods concerned contributed to the "economic potential" (new language) or the "military potential" (old language) of Eastern bloc states (McKitterick, p. 26, 1966; Adler-Karlson, 1968; Mastanduno, 1985; Jentleson, 1986). While economic potential had been the implicit criteria of the United States' more restrictive export control program since its creation, the Kennedy Administration had hoped to use loopholes in the 1949 ECA to move away from the total economic warfare program.

Paul Kitchin (D.-N.C.) who chaired the committee said that "the free world would sink deeper into the quicksands

of a world dominated by international communism" if trade was not curtailed (Jentleson, p. 98, 1986). The new law also required the executive to seek allied compliance with more restrictive controls and recommended the use of leverage once again through the extraterritorial applications of United States law. Here once again the Congress displayed its willingness to impose sanctions on states that violated the United States position on controls. This new policy did not enjoy support within elements of the executive, however, in this case State and Commerce opposed the restrictive policy. Nevertheless, the bill passed in the House by 339 and in the Senate by 57 (Jentleson, p. 99, 1986).

The Kennedy Administration encountered pressure on the East-West trade issue not only from Congress, but from right-wing political organizations and conservative consumer groups such as the "Committees to Warn of the Arrival of Communist Merchandise on the Local Business Scene" (Adler-Karlson p. 107, 1968). These groups led attacks on local businesses that sold items imported from the Eastern bloc states and exposed firms that entertained the possibility of entering into joint ventures to attempt to gain access to the Eastern market. In the context of the domestic reaction to increased East-West tension, the Kennedy Administration used United States leverage to impose

an embargo to stop the Soviet-Western European Friendship Pipeline and to force allied states to violate existing contracts to supply wide-diameter pipe (40 inches) to the Soviet Union.

The Soviets had planned to use the wide-diameter pipe, which they could not produce, to build the so called Friendship Pipeline to transport oil from the Baku fields through Eastern Europe to the West. In COCOM the United States argued that if Western firms enabled the Soviets to break this production bottleneck, the oil would be used to supply Soviet armies in Eastern Europe and the foreign exchange earnings would be put into increased military production. Due to the unanimity principle in COCOM the United States moved the issue into the NATO forum. In November 1962 NATO voted to embargo all exports of pipe over 19 inches in diameter to the Soviet Union (Jentleson, 1986).

This move caused a major confrontation at the inter-allied level and at the intra-governmental level in Western European states. The response of the Western European leaders varied. Germany and Italy, the states with the highest stakes in the deal, finally complied with the United States position. Several German firms were forced to violate contracts that they had signed with the Soviets in October 1962. The Adenauer CDU government infuriated the domestic business community by giving in to the United

States. This case demonstrated the United States' ability to use leverage effectively on a specific issue in East-West trade (Mastanduno, 1985).

The 1962 Friendship Pipeline case was politically costly for alliance unity. One consequence was that it created the perception that the United States was willing to use leverage on export controls and COCOM to attain commercial benefits for United States firms. United States oil interests stood to lose a great deal from the pipeline and they lobbied in opposition to the trade agreements. Western European firms viewed this as a clear case of the United States policy on controls being driven by commercial interests. In addition, shortly after the NATO resolution the United States signed an agreement to sell surplus wheat to the Soviet Union. As intra-Western economic competition increased in the late 1960s and early 1970s, Western European states, perhaps recalling the United States actions in this case, became increasingly more suspicious of American motivation in COCOM.

United States intra-governmental conflict during this period demonstrated the continued strength of the absolutist discourse in the Congress and in the public at large. Despite the fact that members of the executive were convinced that technological trade with the Soviets and the bloc could be used as an effective tool of foreign policy

the majority of the Congress viewed East-West trade as a symbolic and a moral issue. The image of the Soviet Union and the Soviet bloc was one of a "monolithic evil" that would not respond rationally or predictably to policy instruments designed to reward or induce good behavior (McKitterick, p. 26, 1966). It was not until 1969 that the absolutist discourse became unravelled to some extent in the midst of the breakdown of the foreign policy consensus over Vietnam. After this point the Kennedy vision of the potential value of economic and technological tools entered into Congressional debate and was implemented through the detente program. This is not to say that the absolutist discourse disappeared.

Shifting United States Policy: The 1969 Export Administration Act

Micheal Mastanduno argues that the adjustment of United States East-West trade policy was prompted by the growing East-West trade of the allies and the recognition by United States officials that the unilateral economic warfare program had become a futile exercise. As stated above, in addition to these factors the transition away from economic warfare to the trade linkage strategy was made possible by a transformation in the understanding of the appropriate relationship between alliance security and East-West trade among United States executive branch officials and in

Congress. If an absolutist discourse had continued to be the ground for United States foreign policy consensus on export controls in the late 1960s, then the expansion of alliance state East-West trade might have been irrelevant. United States officials who remained tied to this discourse would have argued for the continuation of an economic warfare policy for symbolic or moral purposes. As we will see, the American public did continue to be divided on moral grounds on the legitimacy of the détente program. This divisiveness and Congressional actions such as the 1974 Jackson-Vanik Amendment eventually constrained executive branch flexibility in the use of trade as a link for leverage in other foreign policy areas (Gaddis, 1982).

Because of the expansion of Western European-Eastern bloc trade, United States business interests had become growingly concerned with the economic and competitive consequences of the more restrictive American export control program. In 1964, business leaders expressed their support for an expansion of East-West trade before a Senate Foreign Relations Committee hearing entitled: East-West Trade: A Compilation of Views of Businessmen, Bankers, and Academic Experts. The title of this document is significant because of the way it organized and presented the support for expanded trade. In these hearings over more than hundred business executives argued that trade restrictions should be

liberalized and that the United States should make differentiations in the export control program between the East bloc states. The Eastern bloc market during the late 1960s was expanding rapidly. East-West trade grew at 12% compared to overall international trade at 8% (Mastanduno, p. 173, 1985; see table 4:1).

In the late 1950s and 1960s United States firms witnessed a significant expansion of allied East-West trade. Most of this expansion was a consequence of massive bilateral, long-term trade agreements concluded by Western European and Soviet bloc governments. Under De Gaulle the French in 1964 signed a five year trade agreement with the Soviet Union. De Gaulle hoped to use French-Soviet trade to counterbalance United States influence, and he expressed a vision of "detente, understanding, and cooperation" in a Europe that stretched from the "Atlantic to the Urals" (Labbe, p. 186, 1988). In addition, the "Grand Commission" was formed as an organization designed to promote French-Soviet scientific, technical, and economic cooperation.

In 1959 the British had become the first Western nation to sign a long-term trade agreement with the Soviet Union. This was followed up by similar agreements in 1964 and 1969. These agreements put Western European firms in a strong position in relation to American competitors because

TABLE 4.1

Western Trade with the Soviet Union

EXPORTS ($ million)

	1958	1960	1962	1963	1964	1966	1967	1968	1969
UK	145.5	148.9	161	178.8	111.3	141.1	178.8	249.5	233.2
FR	75.9	115.6	138.1	64.2	64.1	75.6	155.3	256.5	265.1
FRG	72.2	185.3	206.8	153.5	193.6	135.3	197.9	273	406
IT	31.1	78.6	102.3	113.6	90.7	90.1	132	179	268.3
US	3.4	38.4	19.7	22.6	146.4	41.7	60.2	57.7	105.5

TOTAL TRADE

UK	312.0	358.7	396.5	433.5	382.8	492.9	515.8	628.9	706.4
FR	170.8	210.2	248.8	205.3	205.3	247.2	342.4	439.3	478.3
FRG	164.4	345.4	421.8	362.3	430.9	423.5	472.7	567.1	740.8
IT	71.5	204.4	268.6	289.5	237.9	280.1	409.7	463.5	531.3
US	20.8	61.3	35.6	43.7	167.1	91.2	101.2	116.2	157.0

Source: IMF, Direction of Trade Yearbook, 1958-1970; Micheal Mastanduno p. 174, 1985.

the agreements established a framework out of which allied state firms could develop Eastern bloc markets. The British, the French, and other COCOM member states also provided further incentives to expand East-West trade by lifting quantitative import restrictions for many Eastern bloc states. In addition the British, in 1964, extended a fifteen year credit of $300 million to the Soviet Union (Bertsch and Elliott, 1988). Several other COCOM states followed the British example. A large proportion of these trade agreements involved incentives for Western European firms to build "turnkey plants" in Eastern Europe and the Soviet Union (Bertsch and Elliott, 1988). These plants are exported as complete facilities and are installed and equipped on site by Western technical specialists. This type of technology transfer became an issue during the Reagan Administration because it is a transaction that necessarily involves the transfer of Western know-how particularly in the area of manufacturing design and production processes. In addition it is an ongoing and active transfer of technology because of the training etc., supplied to staff the facilities.

While the business community in the United States expressed an interest in expanding East-West trade, there appeared to be little public support for such an opening. In addition, most members of Congress continued to cast such

an expansion as a morally questionable move. The Johnson Administration attempted to highlight the potential benefits of East-West trade, and to sway Congress by commissioning a Special Committee on U.S. Trade Relations with Eastern Europe and the Soviet Union. The Committee was chaired by J. Irwin Miller, a businessman from the mid-west. The committee of twelve included representatives from academia, business, and banking. The Miller Report, released in 1965, concluded that:

> The time is ripe to make more active use of trade arrangements as political instruments in relations with Communist countries. Trade should be brought into the policy area. It should be offered or withheld, purposefully and systematically, as opportunities and circumstances warrant. This requires that the President be in a position to remove trade restrictions on a selective and discretionary basis or reimpose them, as justified by our relations with individual Communist countries.

Two elements of this Report are noteworthy. First, the report called for "differentiation" between Communist states in the export control program. The President was to be given discretionary power to impose or remove controls based on calculations of United States interest. This view, which had been articulated by the Kennedy Administration, diverged from the view underlying the earlier economic warfare program. Export controls were not to be imposed on states simply by virtue of the fact that they were Communist, but were to be imposed discriminatingly on states that posed identifiable threats to United States interests.

In other words, this new image diverged from the image of a "monolithic communism" that McKitterick says dominated "the mind of Congress and the public" during the 1950s (Mckitterick, p. 29, 1966). The second noteworthy element of the the Miller Report is the fact that it justified liberalization of controls on instrumental grounds. Growing intra-Western economic competition may have led the business community to raise criticisms of the United States' more restrictive program, but the justification of the reconsideration of export controls was cast in instrumentalist terms. Mastanduno says that this was because it was impossible to justify the expansion of East-West trade on the grounds of commercial interests alone. He says it was also evidence that the issue of United States trade with the Eastern bloc is an inherently political issue. Many of the Western European states had been more receptive of the "peaceful coexistence" overtures from the U.S.S.R.. Many of these states had expanded trade with the East and had justified their position simply by claiming that mutual economic benefits should be separate from East-West political or strategic considerations.

The Miller Report also expressed elements of what I have called a neo-Kantian discourse by concluding:

> The intimate engagement of trade, over a considerable period of time, when taken with the process of change

> already under way, can influence the internal development and the external policies of European Communist societies along paths favorable to our purpose and to world peace. Trade is one of the few channels available to us for constructive contacts with nations with whom we find frequent hostility. In the long run, selected trade, intelligently negotiated and wisely administered, may turn out to have been one of our most powerful tools of national policy (Department of State Bulletin, May 30, 1966, p. 855; quoted in Hardt and Holliday, p. 7, 1973).

The first part of this paragraph, insofar as trade is seen as leading to greater harmony between nations, is expressive of a neo-kantian discourse. The last sentence of the paragraph, however, is more directly expressive of an instrumentalist discourse. The paragraph articulates questions that would be posed in the Congressional debates that would occur throughout the detente period. First, to what degree should political detente precede economic detente? Secondly, should trade concessions be tied overtly and tightly to specific political concessions? Thirdly, to what degree should detente, trade-linkage policies, and relaxations on export controls be tied to Eastern bloc internal political affairs as opposed to foreign policy issues? The Nixon and the Carter Administrations answered these questions differently. This resulted in domestic, Western alliance, and Soviet responses peculiar to each Administration's brand of detente.

After the Miller Report was released, the Johnson Administration moved to attempt to push legislation through

Congress to liberalize East-West trade regulations and to give the President discretion over the imposition or relaxation of export controls. In the summer of 1965 the Johnson Administration, arguing that the United States needed to build bridges between the Eastern bloc and the Western Alliance, began to formulate the East-West Trade Relations Bill of 1966. This legislation would have provided a framework for the expansion of trade by lifting import controls and by providing credits in some cases. Events in Southeast Asia and the "Great Society" program, however, overshadowed the Johnson East-West trade liberalization vision and the bill died. Not until a strong coalition emerged in Congress to support liberalization did United States policy actually shift.

The major push for the reform of the Export Control Act of 1949 came from the Senate Committee on Banking and Currency. Senators Walter Mondale (D-Minn) and Harrison Williams (D-N.J.) were instrumental in the political maneuvering that lead to the passage of the new Export Administration Act in 1969. According to William Long (p. 31, 1989), Congress passed this legislation in response to new and more vociferous business demands for access to Eastern bloc markets. Support for the bill was not overwhelming, but it did represent a significant shift in the position of Congress on the issue of East-West trade.

This change reflected in part the relative erosion of the United States in the international economic hierarchy. Business leaders, from the high technology sectors in particular, argued at Senate hearings in 1969 that United States firms "could no long afford to ignore the rapidly growing Eastern European markets" (Long, p. 32, 1989). Several business officials in Senate hearings pointed out that the content and procedures of United States export control program adversely affected their firms' ability to compete with the Japanese and Western Europe. In 1968 the "United States controlled 2,029 commodity categories for export to Bulgaria, Czechoslovakia, Hungary, and the Soviet Union, and 1,753 categories for Poland and Rumania, while in that same year COCOM had designated only 552 categories for control" (Long, p. 31, 1989).

Senator Gale McGee expressed the sentiment of the supporters of liberalization saying:

> I think instead of being anti-Communist quite so vociferously, we ought to start thinking procapitalist or probusiness . . . I think our creeping capitalism ought to be unleashed (quoted in Mastanduno, p. 196, 1985).

By 1969 the United States balance of trade and balance of payments surplus had been eroded. While an expansion of trade with the Eastern bloc stood to increase the trade surplus only marginally, any constraints on exports were seen as symbolically significant. The final bill

established that controls should only be imposed if a product presented "a significant contribution to the military potential of any other nation or nations which would prove detrimental to the national security of the United States" (Jacobsen, p. 214, 1985). The legislation also stipulated that controls should be imposed only in cases where no comparable product could be obtained from a foreign supplier. Export restrictions were defined as acceptable in six cases: a) Where the United States economy would be protected from drains of scarce materials; b) Where the United States would be protected from the inflationary impact of foreign demand; c) Where necessary to further United States foreign policy; d) Where necessary to fulfill international obligations; e) Where controls would ensure national security (Long, p. 34, 1989). These exceptions were intended to signal a recognition by Congress that the United States had to maintain some level of controls in the interest of national security.

In fact the exceptions to the law provided the Executive leeway in carrying out the Congressional demands for trade liberalization. The bill did reflect a desire on the part of a majority in Congress to move away from the economic warfare and restrictive embargo of the past and towards a liberalization program. The rationale for the change that was laid out in the 1969 bill included a variety

of arguments already articulated by the Executive branch in the early 1960s (Jacobsen, p. 214, 1985). It was, however, the economic rationale that ultimately turned Congress away from the more restrictive position on export controls and the embargo program. In the earlier period of the Cold War economic warfare program, business interest groups resistance to controls had been minimal. This was because first, Eastern markets were insignificant in relation to the growing Western European markets and secondly, because of the strong Cold War anti-communist consensus. As the economic state of affairs and the image of the Sino-Soviet bloc changed (as the discourse shifted) so, too did the place and possibility of interest group input in policy formation on this issue.

Nixon-Kissinger's Linkage-Detente Strategy and COCOM Controls

In 1969 the executive branch agreed with the reasoning that led members of Congress and business officials to support passage of the EAA, but disagreed with the conclusion that the United States should thus move to relaxations of controls without using such a move as part of a tactical maneuver in a broader strategy of managing superpower relations.

The Nixon Administration believed that political concessions should precede trade concessions. Henry

Kissinger argued that the Executive opposed unilateral trade liberalization because the Kremlin "would (first) have to show restraint on its international conduct and arrange for progress on key foreign policy issues." "Only after the Soviet Union cooperated with us in the political field," Kissinger argued, would it be prudent to extend economic concessions (quoted in Jentleson, p. 133, 1986). As a consequence of these views, the Nixon Administration used discretionary power given to the Executive in the 1969 EAA to move rather gradually on liberalization of export controls. Not until 1972 did the Nixon Administration establish the framework for trade expansion in the U.S.-Soviet Trade agreement (Bertsch, 1983; Jocbson, 1985). The Nixon Administration viewed trade as a political instrument, and did not move on the issue until it was satisfied that it would receive quid pro quos that would fulfill political objectives. The primary objectives of the Administration concerned Vietnam, arms control, Berlin, and the Middle East. All of these areas involved strictly foreign policy issues. The Nixon Administration, unlike Congress in the 1970s, was much more interested in using trade concessions for compliance on issues in the arena of foreign policy and was much less interested in establishing specific quid pro quos on what it considered to be Soviet domestic political issues.

The logic and assumptions of the Administration position and its relation to the United States' stand on export controls and COCOM are complex issues. According to Kissinger, the challenge of American foreign policy was to take advantage of Soviet needs and desires to establish "a web of constructive relationships" (Bertsch and McIntyre, 1983). The Nixon Administration argued that the United States had opportunities for leverage as a result of the fact that since the early 1960s the Soviet Union "had sought to expand trade with the West as a shortcut to modern technology and capital development" (Bertsch and McIntyre, 1983). The fact that Western European states with comparable technology were willing to sell such items to the Soviets at no political cost, however, seemed to undermine any perceived American leverage. But the fact that American producers still held a significant technological lead in some areas, such as oil and gas exploration and production equipment, and the apparently poorer performance of the Soviet economy in the late 1960s seemed to offer a new window of opportunity. The Nixon-Kissinger detente linkage logic was based on the idea that the Soviet leadership wanted a normalization of trade relations for both symbolic reasons (Mastanduno, 1985) and to improve civilian sector production. Kissinger seemed to believe that by normalizing trade relations the United States could confer great power

legitimacy on the Soviet Union (Mastanduno, 1985). Whatever the Soviet motivation or incentive, the Nixon-Kissinger position represented the assumption that the Soviet Union could be brought to accept "the constraints and responsibilities of a stable world order through a sophisticated combination of pressures and inducements" (Gaddis, p. 310, 1982). Gaddis says that critics of the Nixon-Kissinger view said that it resembled a B.F. Skinner approach to pigeons where "there would be incentives for good behavior, rewards if such behavior occurred, and punishments if not" (Gaddis, p. 310, 1982). Perhaps behavioralist notions and the conceptualization of the state as a unitary rational actor did influence the pre-suppositions of the more optimistic versions of detente, but calling Kissinger a behavioralist goes too far. Kissinger more than likely had Castlereagh and Metternich in mind rather than B.F. Skinner.

The Soviet leader stated repeatedly that they would not accept any linkage of trade to political issues. The trade inducement strategy, however, seemed to result in some concrete responses by the Soviets in the early 1970s. In May 1971, the Soviets offered concessions in the SALT talks by dropping their demand that an ABM treaty precede any agreement on a limitation of offensive strategic missiles (Jentleson, 1986). Similarly the Soviet Union agreed to

allow the unimpeded flow of goods between West and East Berlin. In addition, in response to the United States bombing and mining operations in North Vietnam in 1972, the Soviet Union did not walk out of the Soviet-American summit as had been predicted. Brezhnev in fact promised the United States that he would pressure the North Vietnamese to make a serious effort to negotiate a settlement within a specified period of time. Marshall Goldman said that "in the Soviet scheme of things, the toleration of the escalation of U.S. violence in Vietnam was an unfortunate part of the price the Soviet Union was prepared to pay to obtain the American imports it needed" (Goldman, 1982; Jentleson, p. 134, 1986). While it is difficult to establish whether or not these Soviet concessions were related to their desire to increase trade, the Nixon Administration responded by offering trade concessions. In response to Soviet signs of collaboration, the Nixon Administration pushed ahead the approval of a number of export licenses for items that were subject to COCOM and United States controls. This included a license, denied on three separate occasions, to export sophisticated gear- cutting machinery for the Kama River truck plant (Mastanduno, p. 211, 1985).

By late 1972 these signs of Soviet willingness to moderate their position for the sake of maintaining stability in the broader relationship seemed to satisfy the

Nixon Administration. During that year the Nixon Administration began to move from selective relaxations and concessions to a more general program on liberalization. A Joint Soviet-United States Commercial Commission was set up to negotiate an overall trade treatment including a reciprocal most favored nation agreement, a program for government credits, provisions for the establishment of business facilities to promote trade, and establishment of a mechanism for settling commercial disputes (Hardt and Holliday, 1973). Secretary of Commerce Peter G. Peterson's report on these negotiations offered a mix of political and economic arguments for establishing a more comprehensive economic cooperation program. After setting out the familiar linkage position, Peterson stated:

> With the industrial and technological development of the other major economies, the U.S. no longer has the monopoly it once enjoyed in the production of certain goods. Our overall trade balance is a melancholy reminder of these changed circumstances. The increased availability of high technology products elsewhere rendered some of our original curbs on exports to the Soviet Union increasingly anachronistic. The real loser from these particular restraints would have increasingly been the U.S. producer and worker, not the Soviet consumer or the Soviet economy. There comes a point at which we must face the fact that business is business, and, if it is going to go on in any event, we might as well have a piece of the action (Peterson, p. 10, 1973).

The effectiveness of the expansion of U.S.-East bloc trade depended on Export-Import Bank financing of exports and MFN treatment for Soviet goods. These concessions

required Congressional approval. The U.S.-Soviet trade agreement and more particularly the MFN issue got caught up in Congressional reassertiveness to counter the "imperial presidency" and the erosion of foreign policy consensus over Vietnam. The issue of Soviet Jews' freedom to emigrate became the focal point as Senator Henry Jackson (D-Wash.) led the move to block the new economic relationship. The Joint Commission and other Administration negotiations on this issue had excluded any Congressional input. The opposition to this argument that arose in Congress reflected resentment over this fact and the convergence of a number of forces and ideas.

The passage of the Jackson-Vanik amendment reflected an opposition to the realpolitik and instrumentalist quality of the Kissinger-Nixon detente trade linkage strategy (Stern, 1979). The Amendment also reflected opposition to what Samuel P. Huntington called "laissez faire detente" which he says was based on an exaggerated sense of compatibility (Huntington, 1978). Through Jackson-Vanik the old Cold War contingent and a faction that Holsti and Rosenau have called the post-Cold War liberal internationalists expressed their disagreement with what they saw as an amoral foreign policy strategy. By linking MFN status to the issue of Jewish emigration, Henry Jackson was able to bring together a wide range of interest groups,

ethnic, ideological, and economic, that had been traditionally in opposition on a number of issues. These groups successfully countered the preferred foreign policy tactic of the Executive. In addition, Senate opponents were able to pass legislation that limited Eximbank financing for the Soviet Union to $300 million and gave the Congress veto authority over all single credits over $50 million.

Kissinger stated that the Senate Committee had to understand that "the domestic practices of the Soviet Union are not necessarily related to detente which we primarily relate to foreign policy." This position, he said, was not a disregard for moral issues, but a recognition "of our ability to produce internal change in foreign countries" (Kissinger, p. 145, 1974; quoted in Jentleson, p. 142, 1986). The Senate was not persuaded. When the Jackson-Vanik amendment was finally passed in 1974, the Soviet Union renounced the 1972 bilateral trade agreement. The passage of this bill reflected the fact that powerful elements of the American public, long accustomed to viewing Soviet-U.S. conflicts as a broader struggle of good vs. evil, was unwilling to accept openly a full trade liberalization program without seeing a radical transformation in Soviet society.

Despite Jackson-Vanik, the Nixon Administration's approach had resulted in greatly expanded U.S.-Eastern bloc

trade. Exports to the Soviet Union alone reached $2 billion between 1972 and 1974; that represented 70% more than had been exported in the previous twenty-five years combined (Jentleson, p. 146, 1986). In addition the United States list of embargoed items dropped from 550 categories to 73 categories by 1973 (Mastanduno, p. 212, 1985).

The Jackson-Vanik Amendment demonstrated the limits of the effectiveness of the trade instrument. The number of exit visas for Jewish emigration issued by the Soviet Union decreased as a result of the Jackson-Vanik amendment from 35,000 in 1973 to 13,221 in 1975 (Stern, p. 121 and 149, 1979; Jentleson, 1986). The overt tactical linkage to Soviet domestic political issues was well beyond the threshold of diminishing returns for the detente strategy.

The Nixon-Kissinger approach to detente was dashed on the rocky shores of domestic constraints. The effectiveness of Kissinger's vision of trade links was contingent on executive control and discretion over offering or withdrawing concessions. Despite Kissinger's success in centralizing control in the NSC staff on a number of issues he was unable to retain such control on the question of East-West trade and export regulations. The overall breakdown in the domestic foreign policy consensus resulted in disarray on the rationale for the policy on East-West trade controls in the United States. Because authority over

export controls was spread among several agencies there were highly divergent opinions as to the rationale of the United States domestic export control program. By the mid 1970s United States policy appeared to be confused. At the inter-allied level the United States wavered on its position in COCOM and began to help undermine the integrity of the multilateral control program by giving procedures.

Western European states in the late 1960s and early 1970s also began to follow a program of economic détente. The conceptualization of détente by most of the Western European leadership, however, differed from that of the United States. There was much less of a concern with seeing political concessions proceed economic liberalizations (Jacobsen and Notzold, 1986). Western European officials, such as West German Chancellor Brandt, were willing to encourage trade with the hope that in the long run economic interaction would create incentives to reduce political conflict. During the 1970s Germany increased its trade with Eastern bloc states tenfold and became the Soviet Union's largest Western trading partner. Most Western European governments were willing to offer a variety of programs to encourage large scale ventures by firms into the Eastern European market.

The political motivation for opening to the East was perhaps secondary to the economic pull. The oil crisis of

1973 and the recession that followed until 1975 provided strong motivation for Western European states to seek ways of expanding exports and to find non-OPEC oil sources. The Western European states thus entered into the Eastern bloc market in a big way. The percentage of trade in aggregate terms appears rather insignificant accounting, for example, for around 6% and 4% of total exports in the 1970s for West Germany and France respectively (see table 4:2). However, in dollar terms, in terms of the size of the joint ventures and projects, and in terms of the percentage of exports for particular sectors in these states' economies, the figures are quite significant. The Soviet Union sought to use Western technology to modernize its industrial sectors. As a result, the Soviet Union's demand focused on items such as capital goods and machine tools. In addition, many Western European firms in the steel, aluminum, and chemical sectors signed major contracts for turnkey plants. France's Rhone-Poulenc and Technip landed contracts that totaled $1.7 billion to build chemical plants in the Soviet Union. Italy's ENI and Montedison also landed contracts totaling $1.8 billion to build eleven chemical plants. Britain's John Brown and Davy Powergas and West Germany's Salzgitter and Klocker signed similar contracts (Mastanduno, p. 243, 1985; Zaleski and Wienert, p. 223, 1980). French and German consortia also landed contracts for deals to build some of

TABLE 4.2

Western Trade with the Soviet Union ($ millions)

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
UK	248	222	225	237	264	510	540	508	978	1236
FRG	356	484	689	1037	1838	2700	2627	2366	2880	3483
FR	319	313	423	610	718	1110	1224	1226	1426	1826
IT	313	291	284	413	714	1093	933	1072	1256	1316
US	115	144	557	1390	747	2027	2657	1711	2340	3793

TOTAL TRADE

UK	713	672	673	971	1116	1329	1634	1809	2232	2905
FRG	604	776	1010	1691	3002	3984	4176	4026	5072	6868
FR	459	529	657	980	1244	1797	2551	2339	2655	4003
IT	524	550	559	843	1504	1977	2352	2553	2884	3288
US	179	204	649	1577	981	2217	2921	2080	2714	4328

Source: International Monetary Fund, Direction of Trade Yearbook, 1970-1980 and Micheal Mastanduno p. 230, 1985

the largest steel and aluminum plants in the world. These contracts with the Germans and the French alone totaled over $2 billion. Western European firms also took advantage of the United States more restrictive controls to pick up contracts that U.S. firms had been forced to scrap for several computer and telecommunications projects. Finally, Western European firms such as Mannesmann and Cruesot-Loire aided the Soviet's in oil and gas production by building plants and selling large diameter pipe. Between 1970 and 1974 alone Mannesmann exported over $1.5 billion worth of steel pipe to the Soviet Union.

All of these states except West Germany were willing to provide heavily subsidized export credits to the Soviet Union for these types of projects. This was despite the fact that the O.E.C.D. countries had agreed in 1976 to raise the official rate for large-scale export credits to the Soviet Union (Pearce, 1980; Mastanduno, p. 247, 1985; Crawford, 1988). The large contracts for turnkey plants and the provision of credits for such projects had the effect of creating long-term interests in maintaining relatively normal trade relations between Eastern and Western Europe. Large and influential Western European firms developed significant economic interests in the Eastern European market. Western European political leaders who pursued bilateral detente programs argued that the political

benefits for East-West relations would become noticeable over the long term. Western European economic interests, however, had seen rather immediate returns; and these groups were no doubt willing to apply pressure on their governments to recognize the potential domestic political costs of changing their stand on East-West trade for foreign policy reasons. Before we turn to assess the implications of these developments on the multilateral export control program in detail, a brief analysis of Carters' version of detente is in order because of its contrast with the Nixon-Kissinger strategy.

Jimmy Carter and East-West Trade

Many analysis believe that the Carter administration had a more comprehensive approach to economic diplomacy than the Nixon-Kissinger trade linkage strategy (Bertsch, 1982; Mastanduno, 1985; Jentleson, 1988). Jentleson and Bertsch state that Carter's economic diplomacy expanded the agenda of political issues linked to trade concessions to include human rights and intervention in the Third World. Mastanduno acknowledges this change, but is more concerned to point out that Carter's program was based on different presuppositions about the potential for the effectiveness of United States economic leverage. The Kissinger-Nixon approach was based on the idea that the United States had leverage potential in symbolic terms because of the ability

to bestow superpower prestige on the Soviets by granting them equal trade status. The Carter Administration, however, attempted to identify and to manipulate what they believed to be actual United States economic and technological advantages. In order for the Carter approach to be effective, the United States had to have a monopoly on items or technologies essential to the Soviet Union, or it had to have the ability to convince allied states with similar technologies to participate in a coordinated tactical linkage strategy to obtain common interest political goals. Carter was not able to convince the allies to follow in such a program. Unfortunately for many United States high technology firms, however, the Carter Administration believed that Western European states would follow if the United States showed leadership by accepting disproportionate costs by denying its technology to the Soviets. The actual result was that many Western European firms picked up contracts for projects that United States firms were forced to scrap. From 1977 to 1978 total United States nonagricultural trade with the Soviets dropped 32% from $819 million in 1977 to $562 million in 1978. In industrial machinery and transportation equipment the total decline in only two years was some 33% (Brougher, p. 421 and 445, 1980; Jentleson, 151, 1986).

The Carter approach to United States-Soviet relations was set out in Presidential Directive No. 18. of August 1977. The economic diplomacy component was more fully articulated by ranking NSC official Samuel Huntington in a 1978 article entitled: "Trade, Technology and Leverage: Economic Diplomacy" (Huntington, 1978). Huntington contended that it was time to take advantage of United States economic strength and technological superiority to encourage Soviet cooperation in resolving regional conflicts and reducing tensions. In short, he says, "economic capabilities must serve the basic foreign policy objectives of the United States" such as "containing Soviet expansionism and promoting American values" (Huntington, p. 65, 1978). Huntington also says that the United States must use "conditioned flexibility." He maintained that the Soviet economy was in its worst crisis since the Revolution. Rather than reform, however, the Soviets, he argued, would continue to turn to Western technology on which they had become increasingly dependent.

In more straightforward terms the Carter Administration approach differed from the Nixon approach in three ways. First, it differed in terms of the type and the detail _quid pro quos_ that would be demanded from the Soviet Union in exchange for relaxations on export controls. According to Huntington the time had come to demand

immediate Soviet responses on a wide array of issues because "economic detente and military adventurism could not go hand in hand for long." The Administration believed that "validated licenses should be required for all items of machinery and technology for which the Soviets have a critical need, and for which they are largely dependent on United States supply" (Huntington, p. 76, 1978). This would allow the Administration to control these technologies on foreign policy grounds; "regardless of the extent to which they are likely to be used for military purposes." The Administration believed that this would include, in particular, oil and gas technology and equipment and computer technology.

Secondly, the Carter Administration wanted to formalize the centralization of export regulations and East-West trade policy in the NSC by forming a special section in the Council to deal with East-West export control issues. This was necessary, argued NSC officials, in order to give the Executive flexibility in using carrots or sticks on the Soviets. In other words, Carter Administration officials, particularly in the NSC wanted to, acknowledge formally and to use the fact that East-West trade policy was a hostage to politics. Huntington and Brzezinski, were not only suspicious of the ability of Congress to formulate an effective approach; they also viewed the Commerce Department

as being controlled by adventurist commercial interests and the State Department as staffed by liberals without an understanding of the nature of East-West issues. These NSC officials, however, found it very difficult to maintain effective control over the extensive process that had by this time come to include several different agencies in Commerce, State, and the DOD, and several powerful Congressional Committees.

Finally, the Carter Administration put much greater emphasis on getting allied states to go along with controls. The Sperry computer case is illustrative of the allies' response. In 1978 the Carter Administration retracted a validated license it had granted to Sperry to export an advanced computer to the Soviet Union. The computer was designed to increase TASS data processing capabilities for the 1980 Olympics. The Administration publicly requested its allies to fall in line and not allow its firms to fill the order. The French and the Germans responded publicly rebuffing Carter. They stated in no uncertain terms that they would not subordinate trade in commercial goods to "political considerations." Shortly after the Administration's unilateral action, Thomson CSF of France agreed to supply the Soviets with a comparable system (see Mastanduno, 1985). In oil and gas equipment the story was much the same. In response to the Soviet arrests of American

businessman F. Jay Crawford, and Anatoly Shcharansky on charges of crimes against the state, the Carter Administration froze Dresser Industries' export license to export a turnkey rock drill bit plant to the Soviets (*Transfer of Technology and the Dresser Industries Export Licensing Actions*, 95th Cong., 2nd sess., October 3, 1978). It appeared that Carter was holding fast to his stand on the issue and supporting the NSC staff approach to the use of export controls for foreign policy purposes.

Carter, however, began to reconsider his position quite quickly. In September 1978 he reversed his decision on the Dresser case and began to urge the Commerce Department ahead on the approval of a number of validated license applications. There are a number of explanations for this change. First, there was arguably an improvement in United States-Soviet relations. There was movement in the SALT II talks and the Soviets had agreed to allow Crawford to leave the country. The most important reason for Carter's changed stand was that it had become apparent that the allies were not going to follow United States leadership on the institution of controls for foreign policy reasons. Western European officials did not share the United States view of the nature of the Soviet threat nor did they believe it legitimate or effective to demand

specific _quid pro quos_ from the Soviets and in particular when such demands concerned Soviet domestic issues.

In addition, United States industry leaders had pointed out in Congressional hearings that there was in fact foreign availability in many of the types of items that the Carter Administration was attempting to control (*Use of Export Controls and Export Credits for Foreign Policy Purposes: Hearings*. 95th Cong., 2nd sess. 1978). In early 1977 many United States oil and gas firms lost sales as a result of the licensing delays that resulted from inept processing procedures and the NSC strategy. NL Industries of Texas, for example, lost a contract valued at over half a million dollars to Technip of France because of licensing delays designed to enhance Huntington's "conditioned flexibility" strategy. William Verity, chairman of Armco Inc. argued that this lost sale alone cost the United States $15 million in capital formation, $225 million in balance of payments, and 10,000 jobs (Verity, 1978). It appeared that in the face of widening trade deficits and with the prospect of continuing lost sales to Western European firms, the Carter Administration became willing to abandon its hopes of effective political leverage, and to allow American firms to compete for the Eastern bloc market. The Administration was willing to do this even if it meant trading strategically sensitive technologies. This attempt by the Administration

to control East-West trade for foreign policy purposes was once again a situation in which international economic competition, a divergence in understanding of the nature of the Soviet threat between the allies, and domestic political pressure undermined the well-laid plans of tactical linkage. The result of this swing pattern between the more liberal form of detente and the more close-knit tactical linkage of Carter, a pattern George Shultz called "light switch diplomacy," was radical fluctuations in United States-Eastern bloc trade. The consequences of this pattern also had a significant and lasting impact on the COCOM program.

COCOM in The Late 1970s

During the late 1970s COCOM became conflict ridden. There still seemed to be a consensus on the part of the Western allies that a control organization of some type was necessary to prevent West-East trade in strategically sensitive technologies with direct military applications. The weakening of COCOM as an effective multilateral export control organization during this period is evidenced, however, by the fact that there were fundamental conflicts over its rules and principles. There is also evidence of widespread non-compliance as the Soviets were able to acquire large amounts of strategically significant technologies. This was no doubt due in part to effective Soviet Acquisition networks. Finally, COCOM member states

accused each other of not being genuinely interested in maintaining the control program.

This weakening of COCOM, during the 1970s, has been explained by Micheal Mastanduno as a consequence of the fact that the United States became unwilling to exercise leadership in the COCOM program. He argues that once the United States indicated its was willing to relax its restrictions on strategic trade, other Western powers followed. This was because they saw the United States behavior as a justification of strategies of trade liberalization. There is certainly some truth in this interpretation in that the United States did compromise the integrity of COCOM. Once the United States began to move away from the broader economic denial or economic warfare program in the 1960s its position in COCOM became confused. This process, as we have noted above, began in the Kennedy Administration. In addition, like so many other elements of United States foreign policy, once the number of domestic players involved increased in the late 1960s, the export control system became more complex and at points paralyzed.

Mastanduno's explanation falls short, however, in that it does not include a full consideration of the importance of the intensification of intra-Western trade competition as a factor that helped to undermine strong commitments to COCOM. In addition, his explanation does not include a

consideration of the changing perception of the Soviet bloc and the belief, held by Western European officials, that trade relations could produce Soviet moderation or concessions. It is arguable whether or not the other COCOM states would have even followed if the United States was willing to exercise strong leadership for a more extensive embargo. The Carter example is a case in point. During the 1980s the United States was willing to provide leadership for strengthening COCOM. Soviet actions and the international environment, however, had brought clear changes in the perceptions and beliefs of the Western European leadership. In addition the United States signaled its willingness to use leverage if persuasion failed.

During the 1970s the United States requested more exceptions to multilateral controls than any member of COCOM. In 1974 a total of 1,380 exception requests were submitted to COCOM. Of this total 567 requests were submitted by the United States. In 1975, 1,798 cases were submitted and the United States requested 798 of these exceptions. During these years 32 exception requests were denied and in each case this was a result of United States opposition. In some years (1976-1978) the United States requested more exceptions than the total of all of the other member states combined (Mastanduno, p. 260, 1985; *Export Licensing of Advanced Technology: A Review*, 94th Cong. 2nd

sess., March 15, 1976). This number did not include the "administrative exceptions" of lower end technologies at national discretion. By 1977 COCOM was granting exceptions to controls on strategically significant technologies at a rate of over $300 million per year. The great majority of exception requests that were submitted during the 1970s were approved. When asked why the United States had begun to submit more requests, the Director of the State Department's office of East-West trade said that this reflected the "growing commercial interest among American companies in developing the Communist country market . . ." (*Export Licensing of Advanced Technology: A Review*, 94th Cong., 2nd sess., March 15, 1976). In 1974, for example, of the 1,380 exception requests submitted to COCOM, 343 of them were for United States computer sales.

In addition and perhaps ironically, it was the United States that led in using its veto to deny other COCOM states' exception requests. On several occasions the United States allowed its firms to export high technology items to the East bloc states while opposing exception requests for comparable exports to the same countries by COCOM partners (*Export Licensing of Advanced Technology: A Review*, 94th Cong. 2nd sess., March 11, 1976). In addition the United States took longer than any COCOM state to respond to exception requests. In 1974, the United States

representative in COCOM postponed taking action on some 25 exception requests by Western European states for several months. In a highly competitive international economic environment such delays in many cases resulted in lost sales. This pattern was detrimental to maintaining the multilateral consensus and added to the perception that the United States was willing to use COCOM and export controls to serve its own commercial interests. Western European states reacted strongly against what they perceived as a misuse of the veto power by the United States in COCOM. The French on several occasions threatened to withdraw from COCOM altogether if the United States did not approve certain exception requests. As a consequence, the United States reversed its position on two exception cases covering the export of semiconductor equipment to an Eastern European country (*Export Licensing of Advanced Technology: A Review*, 94th Cong. 2nd sess., March 11, 1976, p. 6). It was also reported that the "United States had reached an understanding with COCOM countries that the United States objection(s) (to exceptions) would be merely for the record as opposed to censure intended to stop the transaction" (*Export Licensing of Advanced Technology: A Review*, 94th Cong. 2nd sess, March 11, 1976, p. 47).

The fact that the multilateral export control program became the victim of growing intra-Western export

competition was also reflected in the types of technologies and items that allied states were willing to allow firms to sell to the East. The most widely known cases involved the participation of numerous United States firms in the construction and outfitting of the Kama and Zil vehicle plants. These plants significantly increased the Soviet Union's ability to produce heavy trucks, and it was known that the vehicles produced in these plants were to be used by the military. United States high technology firms were also permitted to export computer systems and state of the art equipment to the Zil plant where missile launchers were produced (*Proposed Legislation to Establish an Office of Strategic Trade*, 96th Cong., 2nd sess., September 24, 1980). In a perhaps more significant case the United States allowed the Bryant Grinder Corporation to export machine tools used to make precision anti-friction bearings to the Soviet Union. Some critics of detente had argued that these bearings were essential to developing effective guidance systems for Soviet MIRVed ballistic missiles (Gufstafson, pp. 10-14, 1981). By obtaining these machines the Soviet Union acquired the capability to mass produce these precision bearings.

In addition to these cases, it should be pointed out that the Soviet Union was able to use intra-Western economic competition to its advantage. Many of the East-West trade

promotion programs developed in the 1970s included visits by Soviet technical experts to the plants of firms that were bidding for commercial ventures. DOD officials claimed that Soviet technical experts were able to acquire sensitive information in the course of such visits. Miles Costick from the Institute on Strategic Trade claimed before a Senate hearing that in one case Soviet technical experts that visited, the Boeing plant in the 1970s wore "special soles built on their shoes in which they were picking up various alloys used in the construction of aircraft. These were to be taken back to the Soviet Union to be analyzed" (*Proposed Legislation to Establish an Office of Strategic Trade*, 96th Cong., 2nd sess., September 25, 1980, p. 153). Also in the context of the increased competition for Eastern bloc markets, Western firms often provided strategically significant technical data on the proposed project. The DOD was highly critical of this state of affairs and claimed that the Soviet Union throughout the 1970s had been able to acquire strategically sensitive technical know-how from firms eager to sale.

Despite the fact that the United States entered into competition for Eastern bloc markets its domestic export control licensing program seemed to be designed to do anything but promote an expansion of East-West trade. Matanduno argues that the complexity of the process to

obtain an export license for a controlled item was particularly suited to a tactical linkage strategy. By bogging down a proposed project in an extensive bureaucratic process officials could stall on approval until political concessions were obtained. Officials from Western European firms and states, however, viewed delays and denials on export license requests as products of commercial and intra-Western leverage considerations. Holding up a license or exception request application could conceivably give competitors time to undercut deals. For United States firms, however, these delays were viewed as commercially detrimental. The delays resulted not from cooperation between the central state actors and firms wishing to move into Eastern bloc markets, but were rather the result of an inept and overly complex bureaucratic process. As a result of the nature of the export control program there were several layers of agency and inter-agency input involving the NSC, the State Department, the Commerce Department, and the Defense Department. This weighed the system down and led to delays of months on export license and exception requests. In a fast moving, narrow, and highly competitive market these types of delays were mortal. Steps were taken throughout the 1970s to remedy this situation: mandatory review deadlines were established, a Technical Advisory Committee (TAC) system made up of industry and government

representatives was established and mandatory deregulation based on foreign availability was enacted. None of these solutions seemed to solve the licensing and exception request processing delays in the 1970s. Despite Congressional attempts to make the process more conducive to trade liberalization, the export control program remained under the firm control of the Executive (see Long, 1989). It is true that this made the export control system more or less subject to the foreign policy agenda of the president. The export control system, however, also remained a hostage to entrenched bureaucratic interests. As Graham Allison pointed out:

> The positions taken by each of the agencies appear almost a caricature: Defense officials vetoing any item they can get a handle on, if even to delay for a couple of years Communist acquisition of the technology, reflecting their earlier commitment to economic warfare against Socialist states; State and the White House, especially in the Nixon period, prepared to make an exception for almost any item as long as it appears in some way to contribute to detente: Commerce generally making American firms' case that since the technology is going to be sold anyhow, the United States should at least reap some of the benefits from making the sale (*Export Licensing of Advanced Technology*, 94th Cong., 2nd sess., March 11, 1976, p. 11).

Conclusion

Each of the four theoretical explanations set out in chapter one contributes to our understanding of the dynamics of alliance collaboration on East-West trade policy in the 1964-1979 period. From the vantage point of the modified

structuralist view we see that there was a shift in issue specific capability. The United States' disproportionate share of high technology production began to be eroded in the mid to late 1960s. From the vantage point of the market explanation we see that intensified economic competition led Western firms and political officials to believe that expanded East-West trade and significant reductions on export controls would serve their interests. Finally, superpower strategic relations began to change in the 1960s.

All of these factors came together to undermine the power of the absolutist discourse at the domestic level. Discourses that had been submerged during the 1950s in the United States re-emerged. The late 1960s and early 1970s involved a clash of discourses in the United States where alternative policy visions were offered by various groups. Executive officials, beginning with the Kennedy Administration, came to have a confidence in the instrumental value of United States economic and technological advantages over the Soviets. The shift from economic warfare to economic diplomacy was initiated by elements in the Executive branch. Congress and domestic interest groups were divided, however, between those who continued to adhere to an absolutist position and those more inclined to a neo-kantian position.

The policy vision of the executive during this period legitimated a linkage approach to East-West trade. Despite the sanguine hopes of some members of the Executive, however, factors at both the alliance and domestic level undermined their program. By 1969, for example, the continued intensification of market competition helped establish the conditions in which the neo-kantian discourse camp gained the upper hand in Congress. The result of this shift was the passage of the Export Administration Act.

The White House and the NSC during the Nixon and Carter Administrations remained committed to linkage and an instrumentalist discourse while the Commerce and State Departments became somewhat more neo-Kantian. At the intra-allied institutional level it appears that State Department officials worked with Ministry of Foreign Affairs and Ministry of Economics officials from various European governments to minimize conflicts. Recall that COCOM representatives began reaching tacit agreements that the vetoes in COCOM would only be for the record.

United States policy on East-West trade became confused during this period. At the international level White House officials encountered opposition when they attempted to get the Western Europeans to go along with an instrumentalist linkage strategy. At those points when executive officials believed that they had domestic support

and that a linkage strategy would work with the Soviets, they were unable to gain the necessary cooperation from the allies. This was not simply a result of failed United States leadership, but also resulted from the fact that Western European leaders did not share the American understanding of the appropriate relationship between East-West trade and Western security. One camp in Western European had a policy vision that was driven by a neo-kantian discourse. The plausibility of this discourse was reinforced by the Soviet's peaceful coexistence line and complementarity of economic interests. On the other hand the policy vision of some Western European groups was in fact driven by an instrumentalist discourse. This linkage vision was, however, limited in ends to national interest concerns as in the case of the Germans and the French instead of more comprehensive issues.

In conclusion then the shift in issue specific capability, intensified global economic competition, and the gradual change in the East-West strategic balance enhanced the plausibility of the instrumentalist and the neo-Kantian discourses in the United States. The result was that the absolutist discourse declined. In this context contending discourse camps emerged. These camps drew on conflicting images of the Soviet Union and divergent understandings of the relationship between East-West trade and security. They

also advocated conflicting policy packages. As these groups struggled to gain control over the domestic policy process the United States position became confused. Attempts by the executive to construct a common purpose for Western policy in the context of this divergence of discourses failed. The dynamics of collaboration that this situation produced was best expressed by Robert Wright, Director of the Office of East-West Trade in the State Department in his testimony before a 1976 Senate hearing:

> . . . there have been continuing differences in the perception of these risks (the Soviet Union and trade with the East bloc) internationally so that a number of other countries in COCOM have not been as enthusiastic about continuing a tight system of control.
>
> Over the years the scope and extent of the COCOM control has reduced. We feel that by-and-large this reduction has been one that is justified in terms of a realistic evaluation of the essential items that should be kept under control, while taking account of the commercial interests that other countries have and that we have been sharing more equally in recent years (*Export Licensing of Advanced Technology: A Review*, 94th Cong., 2nd sess., March 15, 1976, p. 59).

Despite this assessment, the United States turned in the 1980s, to the use of compliance rents and surveillance in an attempt to bring allied states and firms into line with a more restrictive position on East-West trade policy.

CHAPTER V

REFORMING EXPORT CONTROLS UNDER THE REAGAN ADMINISTRATION: POWER, INTERESTS, INSTITUTIONS, AND DISCOURSE

Revival of the Absolutist Discourse

Following the invasion of Afghanistan in 1979 the Carter Administration attempted to gain allied collaboration on economic sanctions against the Soviet Union (Mastanduno, 1985). The nature of the United States initiatives and the reluctance of the allies to follow rested on a divergence of opinion over the appropriate scope and function of export controls and over the relationship between East-West trade and Western security. As in the past, this inter-allied divergence of opinion resulted from conflicting interpretations and representations of the nature of the Soviet threat to Western security.

These differences led to open inter-allied conflict during the Reagan Administration when an absolutist discourse began to regain preponderance in United States domestic debates over East-West trade and Western security policy. The Reagan Administration moved to renew a strategy of economic warfare against the Soviet Union. This program involved first an extensive reinvigoration of surveillance on West-West high technology transfers. Defense Department

and Commerce Department officials within the Reagan Administration also advocated the use of coercive instruments to bring allied states into line with a coordinated and more restrictive export control strategy. However, turning to these instruments in the context of a radically changed global political economy had far-reaching economic and political repercussions for United States-Western alliance relations.

The purpose of this chapter is threefold. The first part of the chapter reviews attempts by the Carter Administration to reinvigorate the United States and the COCOM export control program in 1980. This part also analyzes the sources and the nature of United States intra-governmental divergences of opinion on the issue of East-West trade in the 1980's. The second part examines the way in which some Reagan Administration officials attempted to bring allied states to accept a policy of economic warfare. This includes an analysis of the instruments that were drawn on to strengthen the United States position in negotiations, with the allies, particularly during the COCOM list review in 1982-84.

During the Reagan Administration the inter-agency balance of power in the export control system shifted away from the State Department. The State Department's traditionally more conciliatory approach to negotiations

with the allies was eclipsed by an activist alliance between hard-line, unilateralist officials in the Defense and Commerce Departments.

"Hard-line" in this context refers to a belief that nothing could be gained, in economic or political terms, from East-West trade. For hard-liners ending East-West trade was not only in the strategic interest of the West but, a moral issue as well. Officials in this camp believed that the West should use its resources to isolate economically the Soviet bloc states. These officials articulated an absolutist discourse which they believed legitimated an economic warfare strategy.

"Unilateralist" refers to a belief that the United States should formulate an overall broad export control and embargo strategy and attempt to impose such a strategy on the allies. Unilateralist officials believed that if necessary the United States should go it alone in a more restrictive export control program. I will show that during the first Reagan Administration officials in this camp, from the DOD and the Commerce Department, were able to influence decisions about negotiating tactics in COCOM and with Western firms. The United States in the early 1980s thus turned to a coercive compliance extraction strategy with the Western allies and some Western high-technology firms.

I use selective individuals as representatives of the hard-line unilateralist position that was held more widely by officials in the Reagan Administration. I refer here to Casper Weinberger, Richard Perle, Lawrence Brady, and Stephen Bryant. These men not only most clearly articulated this vision, but they organized and domined United States policy on East-West export controls.

The third part of this chapter evaluates the consequences and costs of turning to such a strategy. Advocates of East-West trade denial and of tighter West-West export control regulations generated opposition at both the domestic and inter-allied level. By 1985 East-West strategic relations began to shift. As the political, economic, and competitive costs of the more restrictive United States position became apparent, the Reagan Administration attempted to repair damages by turning to a more conciliatory line with the allies. Hard-line unilateralist officials in the Executive branch began to lose some power as a result of rising domestic constraints, allied opposition, and changes in overall East-West relations.

The Roots of the Attempt to Expand COCOM After 1979

The Carter Administration met resistance when it applied economic sanctions in response to the Soviet

invasion of Afghanistan. Domestically agricultural and high-technology interests addressed the Carter move (Bertsch, 1985). At the alliance level Western European officials disagreed with both Carter's response and with his view that the Soviet action represented "the greatest threat to world peace since World War II." Most leaders shared West German Chancellor Schmidt's view; their governments would not permit "ten years of detente to be destroyed by Afghanistan" (Mastanduno, p. 371 1985; Jacobsen, 1988).

The breakdown of consensus in the United States foreign policy community during the late 1970s resulted in intense debates over the detente linkage approach to East-West trade (Gaddis, 1984; Destler, Gelb and Lake, 1984). The invasion of Afghanistan served to shift the inter-agency balance of power on this issue from officials in the State and Commerce Departments who supported liberalized of linkage East-West trade policy to officials in the Department of Defense and the National Security Council who were critical of such economic interaction (Bertsch, 1985).

Many State Department officials believed that the Soviets could be manipulated with economic levers. These officials continued to draw on arguments put forward for expanded East-West trade articulated during detente. The arguments were rooted in sets of representations and images

of the Soviet leadership as "tameable" through the cultivation of mutual economic interests. The expansion of trade deals rested on faith in the malleability of Soviet perceptions of interest. United States' policy in the early 1970s had been defended through a language that was partly an instrumentalist and partly a neo-kantian discourse. East-West trade was seen to have political and economic value. As long as this image of the Soviet Union and these representations of superpower relations were authoritative, then detente trade-linkage arguments seemed plausible.

Within the DOD images and symbols of an absolutist discourse had had greater authority throughout the 1970s. DOD officials were convinced that liberalized trade, particularly in high technology sectors, had been detrimental to Western security interests. They believed that lax controls eroded Western qualitative superiority and technological lead times. The actions of the Soviet Union in the early 1980s seemed to confirm the hard-liners' interpretation of the nature of the Soviet threat to Western security. The Soviet action in 1979 became the occasion for an attempt by critics of detente to move export control policy in a more restrictive direction (Mastanduno, 1985; Jentleson, 1986).

Criticisms of the detente trade-linkage approach advanced by the DOD and by several Congressmen in the

aftermath of the invasion of Afghanistan were based in part on a particular reading of a set of proposals articulated by the Defense Science Board Task Force in 1976. This DOD study, known as the "Bucy Report" (after Taskforce chair, J. Fred Bucy) reflected an attempt to establish a more cohesive national policy on technology export controls. It was the most significant and explicit attempt to articulate systematically a set of principles for the entire United States export control program (see Mastanduno, 1985). Since 1949 one aspect of the rationale for the export control program had been that Western security was enhanced by maintaining qualitative lead-times through restrictions on Soviet bloc access to advanced technological goods. The Bucy Report centered on this issue. The Report focused on three areas of concern: efforts to control the transfer of technological "know-how" as opposed to goods; efforts to develop more extensive mechanisms to maintain United States lead-times in technological advances; and efforts to develop means of providing for greater scrutiny of intra-Western transfers of state of the art technology (see Mastanduno, 1985).

The intentions of the authors were trampeled under by the force of events. Bucy, in 1976, argued that the principles set out in the Report could serve to rationalize the United States' system, and also remove the burden of an

overly extensive control system from high-technology firms. Members of the Reagan Administration DOD, however, were able to appropriate the ideas contained in the Report to serve their own ends. As Bucy put it, "they took a Report intended to rationalize controls and created a control list as thick as the New York phone book" (quoted in MacDonald, p. 78, 1990).

The Bucy Report established concepts that became part of the official lexicon of the export control establishment in the 1980s. The Report differentiated between technological products and technological "know-how," between "active" and "passive" transfers of technology, and between evolutionary and revolutionary technological advances.

Bucy explained these differentiations to the House Subcommittee on International Trade and Commerce in March 1976 [Subcommittee on International Trade and Commerce (hereafter SITC), March 11-30, 1976]. Technological "know-how" is design and manufacturing knowledge. This type of knowledge was described "as the heart of a nation's power capability." In the Congressional hearings Bucy said: "If the United States were forced to sell all of the products that it had available, high technology all the way to the lowest technology, we would recover from that. But if we were forced to divulge all of our design and manufacturing know-how to any nation that wanted it, we would not recover

from that blow" (SITC, Bucy, p. 214, March 30, 1976; cited in Mastanduno, 1985).

The first part of the Bucy Report argues that knowledge is power. The Report then moves on to explain the forms and avenues through which such knowledge is transferred. According to the recommendations of the Report, greater emphasis should be placed on controlling the transfer of information necessary to produce technical products. This included design, operating, and application information and sophisticated maintenance procedures. Central to this position was the concept of "process know-how"; defined as the knowledge, methods, and skills generally associated with industrial production on a mass scale (Mastanduno, p. 321, 1985). The Report also called for greater controls on "keystone" equipment; unique equipment essential to completing a production process. For example, a manufacturer can produce most of the parts of a jet aircraft with widely available multi-purpose machinery. Completing the construction, however, requires unique titanium forging equipment. The titanium forging equipment is thus the "keystone" in the process of jet aircraft production. Finally, the Bucy Report emphasized the control of process "know-how." In short, the product and its application were not as significant as the capability

provided through the transfer of particular products in terms of technological "know-how."

The Report called for tighter controls on "active" as opposed to "passive" transfer mechanisms. As Bucy pointed out in the Congressional hearings, this meant that the United States should not be concerned as much with the transfer of specific products. Rather it was essential to regulate "active relationships, characterized by an intensive teaching effort by the donor company and by frequent and specific communications between donor and receiver" (SITC, Bucy, p. 215, March 30, 1976). Active technology transfers, Bucy argued, involved communication between a company and a nation, and this always involved design and manufacturing "know-how" transfers. Such relationships, the Bucy Report maintained, improved the technical capability of a nation's population. This approach is revealing in that the target of the controls then moves away from military systems capability to the civilian population. Along these lines the Bucy Report was highly critical of the sale of turnkey factories - entire factories complete with extensive personnel training and ongoing maintenance arrangements.

The United States, the Report suggested, should also attempt to identify and to control technologies that would allow competitors to make revolutionary advances in

technological capability. Certain advances or discoveries represent "quantum jumps that are based on conceptual departures from current practice" (SITC, Bucy, p. 217, 1976). The protection of United States lead-time required that these kinds of advances be identified and controlled. The Bucy Report was unique in that it dismissed end-use guarantees as useless. In other words, it was insignificant whether or not a state diverted a particular product to military applications. What was important was the value of a product or system in terms of "know-how" and its form of transfer. After the Bucy Report some officials in the DOD came to believe that intelligence should not focus on whether or not Soviet bloc states abided by end-use assurances (Mastanduno, 1985). The key was how the "know-how" obtained from active transfers of certain technologies increased a particular state's technical and manufacturing capability.

The Bucy Report was unique in other ways. It articulated and expressed in a clear form certain attitudes that had been the backdrop to United States export control program since 1949. One of these was the belief that technological knowledge had been and would be the key both to United States economic power in the global political economy and to its strategic superiority over the Soviet bloc.

Second, the Bucy Report was used in the 1980s to articulate an argument for a clear break with the ideas of detente. The arguement maintained that transfers of Western technology into the Soviet bloc would not result in a "crisis of rising expectations" in the general populations of these states, but that such transfers would allow the Communist party to avoid making choices between fulfilling civilian needs and military outlays. The Report held that there was no instrumental value in exchanging technological "know-how" for political quid pro quos (Mastanduno, 1985). Finally, the Report dismissed the notion that communication between Western firms and Soviet bloc economic officials would result in an interdependence with the potential of bringing about liberalizing transformations.

The findings and recommendations were highly controversial for a number of reasons. The recommendations included a call for greater restrictions and surveillance on certain West-West technology transfers. The Report expressed a skepticism about the integrity of allied COCOM member states' and firms' assurances that United States technology would not be re-exported to controlled destination (SITC, Bucy, p. 229 1976; Mastanduno, 1985). As a consequence of the arguable unreliability of the Western allies in this regard, the Report argued that: "Any COCOM nation that allows such technology to be passed on to

Communist countries should be restricted from receiving further [U.S. origin] strategic know-how" (Mastanduno, p. 306, 1985). The implication of this position was enormous for United States-Western European economic interdependence. Imposing West-West restrictions and sanctions could interrupt transactions between United States firms and subsidiaries or joint-venture activities where there was dependence on a parent firm for design and manufacturing "know-how."

The Bucy Report recommended even more restrictive controls on transfers of United States technology to neutral states. Some neutral states such as Sweden, Switzerland, and Austria had always expressed a reluctance to accept United States re-export control authority. Their national export control enforcement programs were minimal or non-existent. Given this fact the Bucy Report stated that the United States should only allow transfers of technology to these states that "we would be willing to transfer directly to Communist countries" (Mastanduno p. 307, 1985).

Even in 1976, DOD officials used the Bucy Report to argue for much more extensive vigilance on West-West technology transfers. While the rationale for this increased surveillance was set out in terms of national security, there were strong neo- mercantilistic undertones (Baranson, 1976). The Report expressed a concern over the

increased intensity of global economic competition in high technology sectors, over the erosion of the competitive position of United States high-tech industry, and over the rapid and relatively unregulated diffusion of United States' origin leading edge technology into the global market.

Many corporate and government officials believed that United States firms aggravated this situation by regularly and liberally transferring state of the art design and manufacturing techniques (Mastanduno, p. 326, 1985). The fact that some firms were readily willing to sell, trade, or barter leading edge technology with foreign affiliates and firms was seen by some officials as aiding foreign competition in ways that worked to the disadvantage of United States industry as a whole. In some cases state of the art technology was bartered for finance capital as in the IBM-Fujitsu case or was traded for concessions in particular domestic markets as in the General Electric-SMECMA France case (Baranson, 1976). Given these issues and the nature of the Bucy Report's recommendations, many allied officials believed that the primary target of the Bucy Report was intra-Western trade (Interview, Brussels, January 1990).

In the late 1970s the Department of Defense (DOD) was given the task of implementing the overall recommendations of the Bucy Report. This task included responsibility for

developing lists of critical technological "know-how," identifying revolutionary technological advances, and setting out formal criteria to distinguish active from passive transfers. This job was given over to the Office of the Undersecretary of Defense for Research and Engineering (DRE) and the Office of the Assistant Secretary for International Security Affairs (ISA) (Mastanduno, p. 310, 1985). The approach developed by the DOD out of the Bucy Report recommendations came to be called the "critical technologies approach." The Department of Defense argued that United States lead-time in a number advanced technology areas had been eroded by the liberal policies of detente. The Department of Defense in the late 1970s begin to push for a much greater role in the export control licensing process based on this approach. The Bucy Report became ammunition in this inter-governmental competition. DOD officials attempted to gain ground with the White House, the NSA, and in Congress by arguing that the critical technologies approach would result in a net reduction of the number of products subject to control. The DOD argued that there was a limited category, at any one time, of identifiable state of the art technological "know-how" that should be placed under transfer surveillance and control.

In practice, finding a way to implement the Bucy Report proved to be almost overwhelming. The DOD spent

enormous amounts of time and resources developing a "militarily critical technologies list" (MCL). The list consisted of fifteen classes of technology: 1) computer network technology; 2) large computer system technology; 3) software technology; 4) automated real-time control technology; 5) composite and defense materials processing and manufacturing technology; 6) directed energy technology; 7) large-scale integration and manufacturing technology; 8) military instrumentation technology; 9) telecommunications technology; 10) guidance and control technology; 11) microwave component technology; 12) engine technology; 13) advanced optics and fiber optics technology; 14) sensor technology; and 15) underseas system technology (SITC, p. 225, 1976; Mastanduno, 1985). Within each of these broad categories the DOD was to identify which particular technology was of critical military value. Then DOD officials were going to determine what technologies were keystone state of the art, and revolutionary technologies. Finally, DOD would have to determine for each specific technology, the present level of Soviet capability in terms of "know-how," alternative suppliers in the global market, and the rate and sources of transactions in these technologies in intra-Western trade. To accomplish this the DOD-DRE along with the DIA set up a classified program called "Socrates." This was a massive data gathering effort

and computer system established to monitor break-throughs and technological advances in Western societies and global transfers of those technologies (Interview, Washington D.C., 1990).

Western European officials were skeptical of the Bucy Report recommendations. They did not believe that the United States would be willing to allow the export of high technology items to the Soviet bloc that were going to be used in military systems simply because those items did not transfer critical technological "know-how." They also had reservations about the implications of such an approach for the free exchange of information. In addition, Western European officials were skeptical of the practicality of enforcing technological "know-how" controls. Finally, the Bucy Report generated resentment because of its allegations that Western European COCOM states disregarded re-export control arrangements (see Mastanduno on these issues, 1985).

This Report was significant for the domestic politics of East-West trade for three reasons. First, the Report helped to swing the bureaucratic momentum on the issue of export controls away from the State Department to the DOD and the office of the National Security Advisor. The Report provided a coherent conceptual framework from which the detente trade linkage policy could be challenged. It also and perhaps more significantly, resulted in greater resource

outlays for the evaluation of the United States export control program in the DOD. This put the DOD in a better position to challenge other agencies. Secondly, the Bucy Report helped to shore-up a disparate coalition of actors who were advocates of tighter restrictions on export and technology transfer controls. This alliance included, conservative members of Congress (such as H. Jackson) who were concerned with national security issues; members of Congress who were concerned with the erosion of United States economic and technological competitiveness (such as J. Garn), critics of detente in the Department of Defense, and Commerce Department officials who believed that United States firms were being disadvantaged by Western European firms' disregard for export control regulations. Thirdly, the Bucy Report brought the issue of technology transfer controls to center stage and provided a symbolic ground on which to critique the implications of liberalized East-West trade in the 1970s.

The Carter Administration Takes Action

The 1979 version of the Export Administration Act (EAA) did not adopt the Bucy Report's harsher recommendations. The Report did, however, provide the framework for debate over the EAA legislation. The invasion of Afghanistan in late 1979 provided the opportunity for groups that supported a harder line to gain the high ground.

President Carter ordered a review of the United States export and technology transfer control program and a review of the United States position on COCOM controls. Advocates of a more restrictive policy used this as a forum to move the administration away from liberalization and linkage.

In the context of this inter-agency review the DOD clashed with representatives from the State Department over how to reform policy strategy. In a series of hearings before the Senate Committee on Governmental Affair's Permanent Subcommittee on Investigations in 1980, DOD officials outlined their position and the goals of what they called a long term strategy on export controls [Permanent Subcommittee on Investigations of the Committee on Governmental Affairs [hereafter PSI], Feb. 1980 and Sept. 1980]. In response to questions posed by Senator Henry Jackson at the February hearing, Under Secretary of Defense William Perry asserted that the approach to East-West trade followed in the 1970s had been a mistake detrimental to Western security, and that a reconsideration of the entire export control program was long overdue. Perry stressed that the most important areas for renewed restrictions included intellectual property, technological "know-how" embodied in items, and process "know-how" that could indirectly aid Soviet military strength (PSI, pp. 25-59, Feb., 1980). Throughout 1980 DOD officials appeared before

this committee to argue that technologies and goods contributing to the industrial base of the Soviet Union, or supporting military manufacture, should be strictly controlled. As several scholars have pointed out, this position was a significant shift away from a limited strategic export control strategy (Jacobsen, 1985; Mastanduno, 1985; Jentleson, 1986; Long, 1989). It was part of an attempt to move policy to a broader program of economic warfare or economic isolation with the Soviet Union (Mastanduno, 1985; Jentleson, 1986; Elliott, 1988). It also represented the beginning of the re-emergence and growing re-legitimation of what we have called the absolutist discourse. Senator Jackson drew on the symbols, images, and language of this discourse in his attacks on past approvals of high-technology sales to the Soviets. In particular he attacked the Administration for selling high technology items to the Zil vehicle plant; a plant known to be used in the production of missile launchers. He said "the whole Soviet Union is a Zil complex. Isn't it really when you get down to it?" He then evoked the image of the evil-other by saying that approving export licenses for sales to Zil was "like selling to the Krupp works under Hitler" (PSI, p. 49, Feb., 1980).

In these and other statements Senator Jackson articulated some of the fundamental perceptions rooted in an

absolutist discourse. First, individuals who supported the hard-line perspective saw the Soviet civilian economy and military production as being tightly integrated. Technology sold for use in the civilian sector, according to this view, was bound to end up in the military sector (Parrott, 1985). In addition, within the terms of the absolutist discourse, there were no grounds for peaceful coexistence or strategically insignificant commercial relations.

Many Western European officials and some United States officials sharply disagreed with these perceptions. They did not believe that the Soviet Union "was one big Zil complex." Western European analysts in general believed that Soviet military production was isolated from the rest of the economy. They were also much more skeptical of the ability of the Soviets, given the central planning system and the archaic infrastructure, to quickly or effectively diffuse Western technology (Woolcock, 1982; Schaffer, 1985; Rode and Jacobsen, 1985). In addition, most Western European policy elites believed that when it came to the question of East-West trade, there were ways of separating political or strategic issues from economic issues (Bertsch, 1988). These areas became major points of disagreement during the Reagan Administration.

The Carter Administration, after 1979, did break with the detente strategy of trade-linkage (Mastanduno, 1985;

Bertsch, 1985). A "no exceptions" policy prohibiting exceptions for the export of controlled goods to the Soviet Union was instituted as the official United States position in COCOM. In addition, export licenses for the transfer of technologies to industries that could indirectly improve Soviet military strength were to be denied indefinitely. These moves represented a significant shift in the focus of the United States position on export controls (Bertsch, 1985; Mastanduno, 1985; Jentleson, 1986). The focus of the control system was expanded by this action to include technologies with indirect military potential.

The allies' reactions in COCOM were mixed. They were receptive to the Carter Administration's suggestions on the need to strengthen the strategic multilateral export control program. In the early 1980s, some allied officials had come to share the perception that too lax a system of controls on transfers of state of the art technology to the Soviet bloc could be a detriment to Western security interests. Western European officials were unwilling, however, to see the COCOM program turned into a forum for the continuation of Carter's use of export controls for foreign policy purposes. Attempts to move the COCOM program beyond the control threshold of a narrow strategic embargo met with stiff resistance (Bertsch, 1985). The allies did accept the "no exceptions" policy, but under the condition that it applied

only to the Soviet Union and that it included "exceptions to the no exceptions" (Mastanduno, 1985). They also resisted an attempt by the United States to get COCOM to accept criteria that would restrict technologies with indirect military significance and a proposal that any export of technology to the Soviet Union with a value of over $100 million be subject to full COCOM review (Mastanduno, 1985).

This resistance to the Carter Administration initiatives had several sources. Most of the allies had much more at stake economically in East-West trade than the United States. Yet unwillingness to harm their own economic interests was only part of their motivation for resisting the proposals. While there was some political consensus on the need to increase the efficiency of a strategic embargo, the resistance to the broadening of COCOM that the Carter Administration encountered was indicative of more fundamental divergences of perception in the alliance (Hoffmann, 1981).

This divergence of perception was bound up in long standing differences in national experiences of trade with Eastern bloc states. It stemmed immediately from growing divergence of discourses; in representations of the Soviet Union. There was a divergence in the construction of the nature of the Soviet threat to Western security and in the relationship between East-West trade and Western security

interests. There were important differences between and within the allied states in these areas. The divergence of discourses at both the domestic and intra-European level, however, was never as great as it has been between the United States and Europe at points in the past (Agnelli, 1980). French Foreign Minister Claude Cheysson would later describe the United States-Western European conflict over East-West trade in the 1980s as "a progressive divorce" because "we no longer speak the same language" on the issue of East-West trade (Jentleson, p. 195, 1986).

West Germany's position, for example, was bound up in its greater political stake in East-West trade due to the division of Germany. This situation helped to shape a particular conceptualization of the relationship between East-West economic relations and Western security in the 1970s. Perceived successes on intra-German issues with the Ostpolitik trade inducement program meant that FRG officials, more than any within the alliance, believed economic ties with Eastern European states could achieve positive political results (Stent, 1981; Jacobsen, 1985 and 1988). In addition, there was a strong and broad based consensus that the expansion of commercial ties with Eastern Europe was in the economic interest of a number of groups in the FRG. In early 1980 the SPD was reluctant to take steps to alienate these groups. As an absolutist discourse

legitimating a broader economic warfare strategy was gaining authority in the United States foreign policy establishment, in the FRG an instrumentalist and a conservative neo-Kantian discourse remained the basis of a national consensus on East-West trade policy. This consensus legitimated both a strategy of trade inducement when possible to encourage concessions on intra-German issues and a liberal East-West trade policy qualified by an acceptance of the necessity of a limited strategic embargo of goods with direct military significance (Stent, 1985).

British and French officials were much more skeptical about the potential political benefits of East-West economic ties (Bertsch, 1988). In fact, in both of these states since 1979, but for different reasons, it appears that a type of conservative neo-Kantian discourse de-linking political and economic issues has had more legitimacy in debates over East-West trade policy. France's Gaullist traditions and perceptions of autonomy from the political affairs of the superpowers, has provided the ground for opposition to a renewed economic warfare program (Labbe, 1988). The strong French support of liberalized East-West trade throughout the 1970s was, however, modified somewhat in the early 1980s. French intelligence obtained the "Farewell Papers" from a high ranking KGB agent in the early 1980s. This documented in detail Soviet bloc high technology

acquisition networks in the West. Soviet KGB line "X" officers, technology acquisition specialists, had built up extensive networks in France through the 1970s. Thus, by the early 1980s, the French were open to strengthening domestic enforcement of controls on the transfer of militarily significant technology. French intelligence set up the "Surveillance" committee and organized DST - Direction de la Surveillance du Territoire - to counter the Soviet network (Tuck, 1986). They expelled 47 Soviet diplomats involved in attempts to obtain controlled technologies in 1983.

The British historical tradition of advocating a free trade system provided a ground on which several of its officials argued in opposition to the United States attempt to expand COCOM in the early 1980s. These officials maintained that trade with all states should be viewed as a right and not a privilege (Bertsch and Elliott, 1988). British officials were resistant to conflating political with economic issues when it came to questions of East-West trade. The British expressed a willingness to strengthen the strategic embargo, but strongly objected to the expansion of the multilateral export control program to include items of indirect military significance (Jentleson, 1986).

The Reagan Administration and the Renewed Predominance of the Absolutist Discourse

The divergence in these discourses in the alliance set the stage for an all out alliance conflict in the early 1980s. This conflict became full-blown when an absolutist discourse gained preponderance as the guide-post of the Reagan Administration policy on East-West trade. Reagan's campaign rhetoric, the images and symbols he evoked, the success of the neo-conservative movement's public relations and lobbying programs, and the actions of the Soviet Union were all factors that helped to revive a Cold War absolutist discourse (see Fred Holiday, 1986). In campaign speeches Reagan referred to the Soviet Union as the "evil empire" and said that "the Western world should quarantine the Soviets until they decided to behave like a civilized nation" (quoted in Jentleson, 1986). The appointment of Richard Perle as Under Secretary of Defense for International Security Policy and Lawrence Brady as Assistant Secretary of Commerce for Export Administration were clear signals about the direction the Reagan Administration would go on the issue of East-West trade (Bertsch, 1985; Root, 1984). Both Perle and Brady had earned reputations as virulent cold warriors. Perle, Henry Jackson's chief aide in the 1970s, did "as much as any American to doom detente in drafting and

engineering the Jackson-Vanik amendment" (Jentleson, p. 175 1986; see Fred Holiday, 1986).

The appointments of critics of detente to key posts in the export control apparatus assured energetic implementation of particular policies designed to economically isolate the Soviet Union. It was also part of an overall administration strategy to remove remaining supporters of trade inducement from the American foreign policy establishment (Mastanduno, 1985; Lowenfeld, 1987; Jentleson, 1986). Perle called for the end of the legitimacy of the instrumentalist-trade linkage and the neo-kantian positions in the United States domestic debate, saying, "it is simply no longer convincing to suggest that trade (in any form) will moderate Soviet behavior or deflect it from its build up of military power" (Defense '82, Feb. 1982; Jentleson, p. 173 1986). Administration officials publicly construed the export control situation of the last decade as having resulted in a loss of lifeblood, saying that there had been a "massive hemorrhaging" of U.S. technology (Bertsch, 1985). The construction of representations of technology as having organic and life-sustaining value were often curious elements of the absolutist discourse.

Early in the first Reagan Administration some officials, led by Secretary of Defense Wienberger, became

convinced that the crisis in the Soviet economy in the early 1980s offered a grand strategic opportunity. According to Wienberger the Soviet industrial base, "without constant infusions of advanced technology from the West, would experience cumulative obsolescence that would eventually constrain the military industries" (Annual Report to Congress Secretary of Defense, FY, 1983; Mastanduno, 1985; Jentleson 1986). Wienberger argued that by allowing the Soviet Union access to advanced Western technologies, the United States helped to preserve a totalitarian dictatorship and allowed Soviet leaders to avoid the choice between its military-industrial priorities and the civilian sector. Hard-liners within the Administration became uncompromisingly committed and relentless in their policy stand on the desirability of a broad embargo on industrial technology and equipment to the Soviet bloc (Bertsch, 1985). Economic and technological competition was represented as a peacetime surrogate for military struggle (Mastanduno, 1985).

Most shocking for Western European leaders was the fact that some of these officials advocated forcing the allies to comply with the United States position. Wienberger suggested that the allies should be forced to chose between their economic interests in the East and their loyalty to the United States (Bertsch, 1985). In early 1981

the hard-liners had not yet gained full control in the intra-governmental struggles over export control policy. Inter-agency conflicts centered on whether or not, and if so, the extent to which the United States would pursue a strategy of economic warfare (Mastanduno, 1985). Hard-line officials, however, began pushing policy in this direction on a number of fronts at both the domestic and the inter-allied level (Jentleson, 1986).

Early on, these Reagan Administration officials sought to obtain compliance with their views from the allies and from Western firms. They sought to achieve their goals through persuasion in bilateral diplomatic missions and in multilateral fora that included not only COCOM, but also NATO and the annual economic summits (Bertsch, 1985). At the Ottawa summit in July 1981 Reagan wanted East-West trade as a central topic of discussion. He was able to obtain allied consent on a proposal to hold a ministerial-level review of COCOM controls in January 1982. Some hard-line officials believed that this ministerial-level meeting and the COCOM list review negotiations scheduled to begin in November 1982 would be fora in which the allies could be brought in line with their overall strategy (Mastanduno, 1985). They also turned to attempts to strengthen the export control license application review process and thereby to place pressure on Western firms that were subject to the United States system.

In January 1982 Richard Perle, in a briefing before the President's Export Council Subcommittee on Export Administration, expressed the view that a combination of argument and pressure - "a good deal more pressure than we have applied in the past" - should be able to bring reluctant allies in line (Bertsch, p. 246, 1985). Finally, the fact that the Administration decided to pursue an economic warfare strategy brought the United States into direct conflict with the allied states over the Soviet pipeline deal. The Fall 1981 declaration of martial law in Poland provided the excuse, but the real root of sharp Reagan Administration reaction to allied refusals to scrap the deal was tied to the rise of the absolutist discourse and its legitimation of a strategy of economically isolating the Soviets (Jentleson, 1986).

At the domestic level Administration officials sought to expose the extent of Soviet intelligence networks set up to illegally acquire Western technology. They took steps to broaden the scope and substance of items subject to control and also to reform administrative enforcement and surveillance programs to monitor individual firms' and states' compliance with United States and COCOM controls. Several means were used to achieve these goals.

"To elevate the level of public consciousness on the issue," the Commerce Department asked the CIA to release a

de-classified version of its 1980-1981 comprehensive analysis of Soviet technology acquisition methods. The Commerce Department under Brady's direction also set out to develop an extensive data base to document "information (technical data) and technological capabilities in free world and communist countries" (Committee on Governmental Affairs, p. 275, May, 1982). In addition, the Commerce Department instituted an organizational restructuring designed to improve enforcement. A "special analytical unit" in conjunction with the Customs Service was set up to enhance the capability of identifying firms engaged in diverting controlled technology to the Soviets and to uncover diversion routes (Committee on Governmental Affairs, p. 206, May 1982).

The DOD, Defense Intelligence Agency, and the Defense Technology Security Agency, under Perle's direction also launched several new surveillance programs. These included the "Ramparts" and the "Socrates" programs; unprecedented expansions of United States' vigilance on intra-Western and East-West transfers of high technology. The role of the DOD in the export control program was expanded greatly. The DOD was given the power to review COCOM and non-COCOM neutral states license applications (Freedenberg, 1987). The DOD's input in developing United States positions for COCOM negotiations was also increased (Root, 1984). The

Administration launched "Customs Operation Exodus," using extensive domestic personnel and overseas attaches, as part of the attempt to increase enforcement effectiveness through monitoring the compliance of COCOM and non-COCOM free world states, firms, and individuals (Committee on Governmental Affairs, p. 206, May, 1982).

Use of the name "Exodus" to describe the outflow of Western technology to the Eastern bloc was expressive of the hard-liners belief that there were massive movements of illicit items. Each discovery of a new case of "violation" seemed to be used as evidence that more authority should be ceded to enforcement agencies within the intelligence community, the DOD, Customs, and the Commerce Department. These agencies would then be able to ensure that "straegically significant technology" did leak out of the West.

The narrative of the loss of what was represented as the life-blood of the West, in the form of "strategically significant technology," articulated and reinforced a particular conceptualization of the source of United States power or advantage over its superpower rival. Stories of uncovering plots to transfer controlled technology illicitly were often set out in the press with a James Bond adventurism; with spies, cops, and robbers (see MacDonald, 1990). These stories would build up to a final moment when

the combined forces of authority, from the West, would uncover the plot of the forces of evil, and recover the technological device "just in the nick of time" (MacDonald, p. 75, 1990). The use value of these dramatic narratives and the notion of guarding "strategically significant technology" was increased by the fact that often the details of cases were classified.

Perhaps the most notorious story along these lines is that of the West German businessman Richard Mueller. Mueller attained a type of mythical status in high-techno-bandit theater (MacDonald, 1990). For a time in the 1980s, he was like "Carlos The Jackel" in terms of terrorism, a symbol of the ubiquitious threat of the techno-trader. Since 1976 Mueller used front corporations in South Africa, Austria, and Sweden to acquire large amounts of controlled telecommunications, computer equipment and chemical weapons technology for the Soviets and other target states. In 1983 Meuller attempted to obtain a Digital Corporation VAX-11-782 for the Soviets. Western authorities finally tracked it down in Sweden just before the shipment was to be transported to Moscow, but Meuller escaped (see NAS, 1987; accounts of this and other cases can be found in: U.S. DOD. Soviet Acquistion of Militarily Significant Western Technology: An Update, 1985).

Many of these violations were uncovered as a direct consequence of massive increases in the authority and budgets of United States agencies responsible for enforcement. The operations of these agencies was not limited to uncovering illicit acquisitions and sales of products, but enforcement was also extended to the transfer of controlled information and know-how. The United States barred foreign nationals from several conferences on a variety of technical and scientific topics. In addition, the DOD began demanding that American academics who were presenting papers at conferences on technologies which were subject to controls apply for export licenses (MacDonald, p. 71, 1990). In one case, DOD officials in 1982 insisted at the last moment that over 100 papers be withdrawn from the 26th Annual International Technical Symposium of the Society of Photo-Optical Instrumentation Engineers. Other enforcement agencies during this period launched awareness programs to sensitize the business community and the public to the need to guard "strategically significant technology." For example, the Commerce Department sent out elaborate packages of information to high technology firms instructing employees on what to look for regarding violations of the export control regulations. They even, it appears, sent out awareness material to their fellow agencies in Western European countries. In the Foreign and Commonwealth Office

in London stickers, courtesy of the Commerce Department, are pasted on the secure cabinets that contain top secret files. They read "Techno-Busters, We Ain't Afraid of no Spies: Did you Remember To Lock Up?" (observed by this auther, October, 1990). The FBI also launched its "Library Awareness Program" through which they encouraged librarians to "report frequent use of specialist collections (particularly technical and applied science) by suspicious aliens" (quoted in MacDonald, 1990).

Some European officials pointed out that during the early 1980s, DOD wanted to cast the debate over United States and multilateral national security export controls in strictly technical terms (Interview, Bonn, January, 1990). The DOD seemed to share the view of some scholars that "political scientists should be wary of pontificating on the implications of lists of controlled items whose contents include things such as: "coaxial cable with the outer conductor electro-plated directly on spirally grooved cable dielectrics" or "tubes in which space charge control is utilized as the primary functional parameter including but not limited to triodes and tetrodes" (P. Hanson, 1981; quoted in MacDonald, p. 14, 1990). All COCOM lists are classified, but the British list of controlled items published by the DTI is thought to be a copy of the COCOM lists (Interviews, Brussels and Bonn, September, 1990). By

accepting such a hard-line, officials may have wanted to silence broader social, political, and economic questions about the costs of an expansion of the export control program.

Inter-Allied Conflict Erupts

The United States failed in its attempt to persuade and finally to coerce the allied states to stop the Siberian pipeline deal. The details of this conflict are familiar by now (Jentleson, 1986; Lowenfeld, 1987). The dynamics of the conflict are complex and undoubtedly deserve more than the passing glance given to them in this chapter. The conflict is significant for the analysis of COCOM, however, because it demonstrated the nature of the dynamics of the United States domestic politics and inter-allied politics on the East-West trade issue.

At the Ottawa summit in July 1981, President Reagan attempted to use American prestige as the alliance leader to get Western European heads of state to stop pipeline contract negotiations with the Soviets. Despite success in getting allied officials to agree to hold a ministerial review of COCOM, Reagan failed to cajole the heads of state away from the energy trade deal. All of the companies involved in the Siberian pipeline deal had trade connections to the United States either "as subsidiaries, technology licensees, or parts users" (Jentleson, p. 194, 1986).

Desser of France was an American subsidiary, France's Alsthom Atlantique and Thompson-CSF used United States licensed technology, and Italy's Nuovo Pignone, West Germany's AEG-Kanis and Britain's John Brown Engineering all used parts supplied by GE (Jentleson, 1986). The Soviet Union lacked the technological "know-how" to produce 25-megawatt turbines, compressor stations, and computerized control equipment for the pipeline. The Reagan Administration believed that it could stop the pipeline by getting allied leaders to agree to block export contracts for these technologies. In addition, the Administration argued that contracts to import gas from the pipeline would not only increase Soviet hard-currency earnings, but that such an arrangement was also a threat to Western security. This argument was based on the idea that the deal would make Western European states dependent on Soviet energy supplies.

The economic stakes were very high for Western European firms. Many of the firms involved had experienced sharp declines in earnings in the early 1980s. For example, Mannesmann suffered a loss of nearly $52 million in 1981, AEG-Kanis, a subsidiary of AEG-Telefunken, had not shown a profit since 1978, and almost all of the firms that signed contracts for wide-diameter pipe had not shown profits for a least three years. The general contractors were Mannesmann Anlagenbau (West Germany), Creusot-Loire (France), and Nuovo

Pignone (Italy) (Jentleson, p. 190, 1986). These firms had signed contracts valued at $2.1 billion. The major manufacturing subcontractors for the 25-megawatt turbines were John Brown Engineering and AEG-Kanis. In addition, on the manufacturing and supply side of the deal were hundreds of subcontractors and suppliers scattered across Western Europe. On the gas import side of the deal, large state-owned utility firms negotiated major contracts with the Soviets.

When the attempt at diplomatic persuasion failed, the Reagan Administration tried to put together a compensation package. Administration representatives were sent to Western European capitals with offers of increased supplies of United States coal and with the suggestion that Norwegian gas could be substituted for Soviet gas. This compensation package was a blunder for a number of reasons. It was unrealistic because the United States could not have produced or delivered the necessary amount of coal. Secondly, it was ill planned because not only were the Norwegians unwilling to increase their gas production, their gas would have cost more than Soviet gas to tap and to deliver. Thirdly, the package was misdirected. It would not have compensated, in the midst of a global recession, for "the loss of exports or their favorable effects on

employment, balance of payments, and industrial production" (Jentleson, p. 188, 1986).

The declaration of martial law in Poland intensified the conflict as the United States increased its pressure on European firms. The Administration became increasingly frustrated with the failure of persuasion or compensation to sway allied leaders. The conflict went back and forth from January until June 1982. At the Versailles summit in June, the heads of state failed to reach an agreement on collective sanctions on the Poland issue. On June 18, the Reagan Administration turned to coercion. The Administration imposed extraterritorial export controls on a retroactive basis. The sanctity of existing contracts was ignored and the Administration threatened criminal penalties and additional sanctions for violations.

Western European firms were reluctant to act against the Administration due to the potential consequences for their access to the United States market and technology. This move back-fired, however, as the British, French, West German, and Italian governments all invoked national laws that ordered their companies to fulfill contracts. The first violation occurred when Dressor-France and Creusot-Loire shipped compressors to the Soviets on August 26, 1982. President Reagan reacted by issuing an executive order prohibiting all U.S. exports to these firms and their

subsidiaries. From August until November the United States imposed sanctions on British, Italian, French, and West German firms that violated the etraterritorial United States controls.

At the inter-allied level this conflict represented more than simply a divergence of economic interest. It was a result of a more fundamental conflict over the Western alliance foreign policy strategy. Allied leaders were willing to agree to deploy Pershing and cruise missiles to counterbalance Soviet strategic advantages in Europe. They were unwilling, however, to link economic and strategic issues by agreeing to a coordinated alliance economic warfare program. As Bruce Jentleson points out, "allied leaders were dismayed by what they considered to be the extremes and excesses of the Reagan approach" to the Soviet Union (Jentleson p. 190, 1986). This divergence of opinion was based on differences between the way top Reagan Administration officials and Western European leaders perceived the Soviet Union.

Western European officials disagreed in particular with the Administration's assessment of the consequences of the pipeline deal for Western security. They did not believe that the Soviets would gain a strategic advantage by supplying energy to Western Europe. In addition, they

argued that the Administration overestimated the strategic significance of increasing Soviet hard-currency earnings. Many of the Western European officials argued that the pipeline deal could serve to stabilize East-West relations (Mastanduno, p. 424, 1985). Perhaps more importantly, the Reagan Administration's public action challenged the prestige of Western European leaders who had resisted domestic pressure by deploying medium range nuclear missiles. Finally, the extraterritorial application of United States law was an offense to European sovereignty.

At the domestic level the decision to impose sanctions was a victory for the hard-line in the Administration. National Security Advisor William Clark and Secretary of Defense Wienberger worked to bring reluctant officials around in support of sanctions. Secretary of State Haig was "cut-out" of the NSC meeting where the decision to impose sanctions was made. This was the issue over which he resigned. Stopping the pipeline deal came to be seen as essential to the overall success of the economic warfare program (Mastanduno, 1985; Jentleson, 1986). Preventing Soviet hard-currency earnings from gas sales was considered essential.

The United States backed down from the imposition of sanctions in November, 1982 by claiming that Western European officials agreed to a "plan of action" (Mastanduno,

1985). This plan was nothing more than an agreement not to sign new contracts until a series of studies was completed on East-West trade and Western security. What this failed attempt at economic coercion implied about the erosion of United States power was pronounced because of the heated and public nature of the conflict. The consequences of the conflict in fact threatened to undermine the ability of hard-liners' to extract compliance and concessions from the allies on strengthening the multilateral export control system (Root, 1984; Jentleson, 1986). The costs of this strategy and the domestic opposition to restrictive export controls it generated, as discussed below, helped to eventually erode the hard-liners' strength in the Administration.

When it became apparent that Western European officials were not going to be persuaded by the argument that stopping Soviet access to hard-currency was in the interest of Western security, expanding technology transfer controls became even more of an imperative. If hard-line officials could not control Soviet capability to buy, they reasoned that the next best thing was devising better ways to control what the West would sell.

In ministerial level COCOM meetings, in the list reviews that began in November 1982 and through bilateral initiatives, hard-line officials attempted to bring the

allies in line with a broader strategy of economically isolating the Soviets. These officials began to pressure the allies over the objections of the State Department and despite the fact that there continued to be inter-agency conflicts. Their initiatives were unsuccessful on a number of fronts. United States proposals to elevate COCOM to formal treaty status and to establish a permanent military subcommittee in the multilateral organization, however, were resisted (Mastanduno, 1985). More significantly for the economic isolation strategy the allied states consistently resisted United States proposals in 1982-1984 to broaden COCOM control criteria to encompass technology that would indirectly contribute to the improvement of Soviet military capability (Bertsch, 1985; Mastanduno, 1985).

When it came to getting COCOM member states to agree to strengthen their domestic enforcement programs and to agree to expansions of the control list, the United States met with more success. The 1982-1984 negotiations extended controls in telecommunications, on certain classes of computers and software, and on robotics (Mastanduno, 1985). These extensions entailed economic costs for alliance firms that had landed contracts and had begun to develop Eastern markets in these areas. For example, in the telecommunications sector the British firms Plessey and GEC were forced to scrap $200 million contracts they had signed with

Bulgaria as a result of the COCOM revisions. Some scholars have argued that this was an indication of a consensus on the part of alliance states to strengthen the multilateral export control program despite economic costs (Mastanduno, 1985). This assessment is based on the argument that there was agreement on the need to make the multilateral strategic embargo more efficient. This is an accurate characterization of the view of only some Western European officials, particularly the French.

Achieving concrete commitments and reaching agreement on particular issues was difficult. The first round in 1982 established tighter controls on electronic grade silicon, printed circuit boards, commercial spacecraft, some oil and gas technology, large floating dry docks, and industrial robots (Mastanduno p. 477, 1985). The final round from 1983-1984 was a battle over computers, software, and digital switching tele-communications equipment. There is evidence that the final compromises made in the 1984 talks were reached as a result of more than just "the persuasive power of sound technical arguments" by the United States. Several scholars have argued that the compromises resulted from implicit and explicit threats by the United States to withhold access to military technology, defense contracts, and other rents from states and firms that did not go along with the United States interpretation and position about

particular controversial items in the COCOM list negotiations (Crawford and Lenway, 1985; Schaffer, 1985; Bertsch and Elliott, 1988).

While the United States did agree to some compromises (i.e. microcomputers), top Reagan Administration officials expressed a willingness to use instruments available for leverage to bring reluctant allies into line. This was particularly the case for classes of items in which the United States accounted for a disproportionate share of global production. Allied officials stated that their ability to resist United States proposals for restrictions on particular items (i.e., telecommunications) was often curtailed by the level of their industry's dependence on U.S. technology (Bertsch and Elliott, 1988). This seems to have provided U.S. officials the upper-hand in negotiations over particular items in the COCOM talks.

Richard Perle personally directed initiatives to apply pressure on the allies. He indicated that United States military technology was withheld from certain allies until they agreed to strengthen their domestic export control programs (Mastanduno, 1985; Bertsch, 1985). In a particularly undiplomatic move, Assistant Secretary Brady threatened that the "United States would reconsider military commitments to Western Europe" if full cooperation on trade controls was not forthcomming (NYT, p. 1 April 24, 1983;

cited in Jentleson, 1985). In addition, Defense Department officials under Perle's direction usurped State Department negotiations on a number of occasions by sending delegations directly to Western European capitals. This led to a public conflict between Perle and William Root, the State Department's long time chief COCOM negotiator and head of the Office of East-West Trade. Root resigned in the midst of the protracted negotiations alleging that the DOD had made agreement impossible.

The United States also used leverage to attempt to extract compliance with controls on particular items from non-COCOM states and firms. Austria was told that they would be left with only "pastries and 1950s machinery" if they did not tighten restrictions on controls in compliance with COCOM (Mastanduno, p. 500, 1985). Similar pressure was placed on Sweden and Switzerland.

Executive officials, during this period, were also actively involved in protracted negotiations on the renewal of the 1979 EAA (discussed below; Freedenberg, 1987). They sought, among other things, a strengthening of Executive power for extraterritorial extensions of U.S. export controls. This power was to include the ability to impose import sanctions on firms that violated U.S. and COCOM controls. This invigoration of the United States surveillance program, the strengthening of Executive power

to withdraw access to technology and to the U.S. market were attempts to strengthen instruments for leverage. The relationship between these instruments can be explained by drawing on the an enforcement rent compliance extraction model. The expansion of surveillance systems that occured under the Reagan Administration increased United States capability for guaging compliance and detecting defectors. In addition, the fortification of the ability to apply sanctions for non-compliance gave United States officials a bargaining chip for negotiations with the allies.

Costs and Consequences

Refortifying domestic surveillance and enforcement programs and broadening executive powers for extra-territorial sanctions did strengthen the instruments at the United States' disposal for attempting to extract compliance from COCOM and non-COCOM states and firms on specific controls. This, however, was done in the context of a divergence of discourses at the inter-allied level and in a situation where the distribution of global high-technology production had shifted. There was a pronounced divergence of perception over the nature of the Soviet threat to Western security in relation to the issue of East-West trade. By using coercion in the pipeline case and by attempting to extract compliance for its position in COCOM

the United States incurred high economic and political costs.

The cost of being subject to the United States leverage and surveillance system led Western European states and firms to seek ways of reducing exposure. After the Siberian pipeline conflict Western European states, with the encouragement of the EC and following the example of Britain, began developing extensive legislation to prevent firms from complying with the extraterritorial extension of U.S. law (Schaffer, 1985). In addition COCOM and non-COCOM firms began to factor in the cost of being exposed to the United States compliance extraction system (National Academy of Sciences (hereafter NAS), 1987). Consequently many Western European firms begin to consider designing around United States technology and turning to Japanese and German technology so that they would not be subject to re-export controls (NAS, 1987; Bertsch, 1988). Western European firms also turned to joint ventures to develop technology production capability to reduce reliance on U.S. products and know-how.

Finally, the experience with United States economic leverage and with the extensive surveillance system led to an emphasis on broader intra-European multilateral efforts to counter exposure. An example of this is the ambitious EC-ESPRIT (the European Strategic Program for Research and

Development in Information Technology) project launched in 1982 (Jacobsen, 1988). This $1.3 billion program is designed to aid European firms in their efforts to form joint ventures to develop commercial programs in computers, tele-communications and related technologies. Clearly there were many factors that inspired this project, not the least of which was a desire to help Western European firms to break into capital-intensive markets. Yet one broader consideration was to develop a program that could aid Western European firms in their desire to reduce exposure to United States economic leverage (Interview, Brussels, EC, 1990).

Hard-line officials' ability to hold sway in domestic debates over East-West trade policy began to slip after the failure of coercion in the pipeline deal. In 1983 when the 1979 EAA came up for renewal, business groups and some members of Congress concentrated efforts on opposing the Administration's hard-line. Throughout negotiations on the renewal of the legislation, business groups lobbied for a greater relaxation of controls on West-West trade and consistently objected to the economic and competitive costs of such controls. Over 300 high technology firms joined forces in the Industry Coalition on Technology Transfers to lobby for relaxations of controls. In addition, groups such as the Business Roundtable, the Computer and Business

Equipment Manufacturing Association, the Electronics Association, and the Electronics Industry Association, all put pressure on the Administration for greater relaxations.

There had been both hidden and overt costs to the pipeline sanctions. For example, Caterpillar Tractor suffered a $300 million loss as a result of the sanctions, Fiat Allis lost over $500 million in contracts; and GE, one of the principle suppliers, lost major contracts as a result of the trade sanctions (Jentleson, p. 207, 1986). In addition, business groups argued that the Reagan Administration action increased the perception that United States firms were unreliable suppliers. In this context Don Bonker (D-Washington) sponsored a revision of the EAA that reflected the belief that the export control program should be scaled back significantly. His version of the bill was supported by business interest groups. The bill would have limited the role of the DOD and the Customs service in the export control program and would have reduced regulations on intra-COCOM trade in controlled items.

The DOD and other executive officials attempted to counter this opposition by working through the Senate. The Senate version of the bill was sponsored by Jake Garn (R-Utah) and John Heinz (R-Pennsylvania). The bill was in fact a compromise between the more liberal and conservative camps in the Senate. The more liberal camp pushed for

measures designed to limit executive discretion in the imposition of export controls for foreign policy reasons. The bill also included a sanctity of contracts provision designed to satisfy the concern with U.S. supply unreliability. Conservatives, along with the DOD, pushed for a significantly expanded national security export control program. The bill provided for greatly increased surveillance program with more oversight given to the DOD and Customs. The bill also stipulated closer screening of export license applications by the Commerce Department and the DOD. The differences between the House and Senate bills and the intensity of the conflict on the issue bogged negotiations down in conference committee for three years. During this period the 1979 EAA expired. The Reagan Administration only maintained export control authority by invoking the International Emergency Economic Powers Act.

The outcome of the Congressional imbroglio was mixed. The Senate prevailed on the issue of maintaining and strengthening Executive authority for extending controls extraterritorially. The final bill reaffirmed export and re-export control authority and established statutory authority to impose import sanctions on firms that violated United States and COCOM controls. The House prevailed in its attempt to establish requirements to increase the efficiency of export license application processing.

It is difficult to establish precisely when the hard-liners in the Reagan Administration begin to lose control over the policy process on East-West trade and over the administration of export controls. The pipeline conflict did help to discredit their position, but a number of factors came together in late 1985 and early 1986 to tilt the intra-governmental balance of power. Continuing declines in the United States share of high-technology markets and changes that began to take place in the Soviet Union in 1986 lent support to arguments for a reevaluation of the United States program and for relaxations on controls. By the beginning of the second Reagan Administration there was also a vocal and organized opposition to an economic warfare strategy and particularly to tighter restrictions on West-West technology transfers. An absolutist discourse still guided the perception of some officials in the agencies charged with oversight on export controls. The authority of symbols and images representing the United States as having lost the strategic edge to the "Soviet Threat," however, began to wane. The image of the United States in economic and technological decline vis a vis its Western competitors gained wider circulation. The dynamic of this trend became a growing focus of analysis among scholars and policy elites. A sense of urgency to reverse the trend of decline took hold in the policy establishment.

President Reagan delivered a speech in 1987 on the need for the fortification of economic security through strengthening commercial competitiveness (WSJ Feb., 6 1987). In addition, in early 1987 the National Academy of Science released an influential study entitled Balancing The National Interest: US National Security Export Controls and Global Economic Competition (NAS, 1987; WSJ Feb. 6, 1987). This study had been commissioned by the Congress as a result of the protracted conflicts over the renewal of the 1979 EAA. The NAS study brought together an array of business and government officials and academics. The NAS sent delegations to all of the alliance states and some non-COCOM states to collect information and opinions on the entire Western export control program. The final analysis estimated that the direct, short-run economic costs to the United States economy associated with U.S. export controls was $9.3 billion in 1985 alone (NAS, p. 264, 1987). This was based on a complex calculation of administrative costs of compliance for firms ($500 million), revenue loss for West-West and East-West exports, and associated GNP loss. This did not include a measure of the competitive costs to United States firms and affiliates. The investigations revealed deep resentment by Western European government and business officials of the United States export control program and re-export control authority. It was found that

over 100,000 Western firms came under the "very broad reach of the United States export control system" because they were recipients of U.S. controlled technologies and goods. Long processing times for license applications and the inefficiency of the overall system were found to have created competitive disadvantages in situations where alternative Western foreign availability existed. This was significant given the fact that in 1985 over 40 percent - approximately $78 billion - of United States exports of nonmilitary manufactured goods required a validated license. Associated with lost United States exports was also a reduction in U.S. employment of 188,000 jobs (NAS p. 275 1987). In short the study exposed the real economic cost associated with the United States more restrictive position on export controls. The study did not consider the more intangible, but no less significant, long term political cost of attempting to extract compliance. The key conclusion was that in the context of the transformed international economy, the United States had to find ways to balance national security export controls with the demands of global economic competition.

In February 1987 new White House staff members, such as National Security Advisor Frank Carlucci and former Ambassador Robert Dean, appeared to be more open to industry's position on the economic and competitive costs of

controls (WSJ, Feb. 6, 1987). Carlucci, no liberal but known for his "business sense," instituted a National Security Council study that was expected to offer proposals for relaxations on West-West controls. At the December 1986 COCOM meeting United States officials had pressed the allies to strengthen domestic control programs in exchange for a shortening of the list of items subject to control and in exchange for relaxations of the strenuous licensing requirements on intra-COCOM re-exports. The NSC study was designed to set out concrete proposals for the July 1987 COCOM meeting. In addition to the steps taken by the Executive some members of Congress began proposing amendments to the EAA designed to reduce impediments to West-West trade flows.

Hard-liners in the Pentagon and in Commerce reacted by portraying the movement toward any relaxation as a willingness to trade long term security away for short term economic interests (WSJ, Feb. 6, 1987). They called the proposals "The Soviet Technology Relief Act of 1987" and argued that the long term R & D costs of having to make up for losses in lead time gaps would require a high price (WSJ, July 22, 1987). Again Perle became the point man. In public declarations he drew on a set of images reflective of the absolutist discourse in an attempt to counter the rising tide of demands for relaxations in the export control

program. He criticized those who he said were driven by short term commercial interests. He claimed that guarding the vital organs of the body politic by way of technology transfer controls was still paramount to Western security. Perle said, "We've sewn up the patient! Nobody wants to rip him up again" (WSJ, Feb. 6, 1987).

Administration opponents of export control relaxation proposals sought to maintain their position by using their alliances with like-minded members of Congress. Just prior to the July 1987 COCOM meeting the DOD released reports that Toshiba Machine Co. of Japan had been shipping COCOM controlled machine tools, used to make ultraquiet submarine propellers, to the Soviet Union. In addition, the report revealed that Kongsberg Vaapenfabrikk of Norway had been shipping COCOM controlled computer software to the Soviet Union to run the machines. During the Spring of 1987 there were additional disclosures of illicit sales of controlled technologies to the Soviet bloc by French, Italian, and United States firms.

These revelations resulted in a flurry of Congressional activity out of which several proposals were put forward to impose import sanctions on Toshiba and Kongsberg. Senator Jake Garn introduced a bill that would have barred the two firms from the United States market for five years. House bills called for barring the firms from

bidding on DOD and government procurement contracts. Both Houses demanded compensation from Norway and Japan for the cost of developing technology to counter the quieter Soviet submarines. The Pentagon barred Toshiba Corporation from participating in any new defense contracts until Japanese officials had completed full investigations.

The timing of the revelations was clearly designed as an agenda setting move and were intended to give the United States diplomatic leverage in the July COCOM talks. The NSC study and the Congressional amendments for relaxations were far from calls for total liberalizations. They called for the elimination of re-export licenses for intra-COCOM transfers of low end technologies. In addition, by submitting to a United States audit of internal safeguards against diversion, some COCOM firms were given pre-approved cosignee status eliminating the need for a re-export license. Re-export licenses were still required to transfer items incorporating United States origin technology to third countries. Re-export licenses were also still required for the transfer of goods "with U.S. technology content over 10% for the East and over 25% for the West" (Bertsch and Elliott, p. 234, 1987).

Over the summer hard-line control of the policy process on East-West trade and export control issues began to erode. Brady had been removed from his position in

Commerce in 1985 and in the summer of 1987 Perle, the key point man in intra-governmental battles, left the DOD for the American Enterprise Institute. Upon his departure Perle railed once again against the allies. He said that for seven years the administration "had urged" and "had implored" the allies to strengthen the multilateral control program. "Almost without exception," he continued, "our allies have resisted our efforts, sidetracking our initiatives or watering them down; delaying, diminishing, and deflecting us with every dilatory tactic and bureaucratic maneuver they could devise" (WSJ, July 22, 1987). Even though Perle left the DOD was able to hold onto most of the ground it had gained in the early 1980s. Perle's staff, particularly Stephen Bryand, his sucessor, had the will and the capability to guard the DODs position. It was not until 1989 that the Commerce and the State Department began to gain some renewed power at the expense of DOD (See Chapter 6).

Policy Confusion and Negotiations With The Allies After 1987

Out of the domestic conflicts of 1987 the United States strategy on multilateral export controls became dominated by two broadly related goals aimed at making a strategic embargo more efficient. The first was to get allied states to shore up domestic enforcement programs and

to harmonize their control criteria. The second was to find ways to shorten the list of items subject to control and to remove restrictions on intra-COCOM trade. Throughout late 1987 the United States pressed COCOM states to strengthen their domestic control programs and to toughen statues for punishing violators (Post Oct. 17, 1987; Post Nov. 11, 1987). In October 1987 high ranking United States export administration officials, Allen Wendt from the State Department and Undersecretary of Defense Stephen Bryen, conducted a series of bilateral initiatives to generate support for these two policy goals. These officials also sought allied agreement on the need for a high-level multilateral meeting on export controls to be held in January 1988 (Post, Oct. 17, 1987).

In the bilateral 1987 talks and at the January 1988 high-level COCOM meeting at Versailles, the Reagan Administration was able to gain allied commitments to strengthen their domestic control programs. The Toshiba-Kongsberg case did raise the consciousness of allied officials. Representatives from allied states warned the Reagan Administration, however, that any sanctions such as the "Garn Proposal" would do harm to United States commercial interests. Taking such an action they pointed out, risked undercutting Western European political commitments to COCOM (NYT, Jan. 26, 1988). As a result of

this case, however, COCOM states expressed a strong interest in upgrading their domestic control programs. Norway, Japan, and other COCOM states promised to shore up their domestic control programs by committing additional resources and personnel.

During the January 1988 COCOM meeting United States officials consistently maintained opposition to applying retroactive import sanctions on Toshiba and Kongsberg and stated that "unilateral steps like the sanctions proposed in Congress would not work" (Post Jan 29, 1988). This demonstrated that the Administration was more committed to a multilateral solution to strengthening COCOM. The January meeting was one of the highest level COCOM meetings ever held. It was announced as a success in that it reconciled American concerns over stricter domestic enforcement programs with member states' criticisms of the problems posed by trade inhibiting regulations on intra-COCOM (re)exports (NYT Jan. 27, 1988). The principle "higher fences around fewer goods" in East-West trade and "no fences on intra-COCOM trade" emerged as the ground for commitment to continued collaboration on the multilateral export control program (Interview, Bonn, 1990).

Despite these pledges, action was slow on the part of both the United States and the allies. United States officials thus continued to press allied states to harmonize

control criteria and to strengthen domestic enforcement. Member states, particularly Great Britain and West Germany pressed for a faster paced streamlining of controls. In 1988 tension between the United States and the allies begin to mount again as orders for machine tools, industrial equipment, computers, and telecommunications equipment poured into Western Europe. Chancellor Kohl, who took prominent German business officials with him to the Moscow economic summit, announced new trade agreements with the Soviets in October 1988. Other Western European officials began to move policy in directions that would allow their countries' firms to take advantage of the commercial opportunities presented by perestroika. Thus the transformations in the East and the continuing United States intra-governmental divisions set the stage for another inter-allied conflict over the relationship between East-West trade and Western security.

The Reagan Administration left office with the Secretary of State calling for greater relaxations and the Secretary of Defense warning allies to "beware of repeating the experience of the 1970s" and arguing that "we need to prevent our technology from flowing into the Soviet military machine" (CSM, June 7, 1988; WSJ, Nov. 4, 1988). After nearly eight years of inter-agency conflict, experiments with economic warfare, endless Congressional reviews, and in

the face of rapid changes in Eastern Europe, the dilemma of United States export control policy resembled the myth of Sisyphus.

Conclusion

The four theoretical perspectives set out in chapter one provide a framework out of which we can explain the complex dynamics of United States export control policy and inter-allied COCOM negotiations. Reagan Administration officials came to office determined to reverse what they saw as the mistake of detente. They believed that the Soviet invasion of Afghanistan and the apparent swing right in the domestic political scence provided a strategic opening in which the plausibility of the absolutist discourse could be revived. Hard-line officials believed that the absolutist discourse would serve as the rationale and legitimacy for their preferred economic warfare policy. Reagan Administration officials who orchistrated this policy hoped that the power of this discourse and the leadership ability of the Reagan Administration would do two things: first, silence counter discourse camps and override any substantive criticism at home; second, persuade the Western European governments to follow the United States lead. If this failed to bring the allies along, however, Administration hard-line officials believed that compliance could be extracted.

The assumptions of Reagan Administration on this issue were wrong. As a result the story of the 1979-1989 period is about how the attempt to revive the absolutist discourse and an economic warfare program failed. At the level of issue specific capability the United States' relative economic power and its share of global high technology production declined through the 1970s. The technological lead that the United States had held in areas such as radar, sonar, microcomputers, and semiconductor manufacturing was eroded. This meant that compliance rents available to the United States were generally reduced. I am defining rent here then as simply granting to firms and states relatively free access to high-technologies that the United States considers to be strategically significant.

In this context of rent decline Reagan Administration officials strengthened surveillance systems for both East-West and West-West technology transfers. This increased vigilance included a closer scrutanity of export license applications and an increased DOD role in the review of license applications. It also involved greater resource outlays for data collection and special intelligence operations to map technology transfers. These steps enhanced United States' capability to detect violations of its unilateral and the COCOM export control program. The United States also increased its ability to withdraw rents

by re-affirming the claim of extraterritoriality. In addition, the Executive was given greater authority to impose sanctions on firsm and states for violations of United States and COCOM export controls.

Through the contested exchange model I demonstrate the relationship between the instruments used by the United States to attempt to ensure Western firms' compliance with restrictive controls and in an attempt to extract concessions from allied states in COCOM negotiations (figure 5:1). Hard-line Reagan Administration officials believed that compliance with their policy vision could be obtained by the combination of rents, surveillance, and the threat of the withdraw of rents for non-compliance. What is significant here is that as rents available declined the outlays and the intensity of surveillance were in fact increased.

This strategy had two significant and inter-related consequences. First, due to the increased bureaucratic burdens surveillance and exposure to United States extraterritorial claims Western firms perceived an increasing cost in compliance. This accelerated the fall of rents as Western firms turned to next best alternative suppliers of high-technology (see National Academy of

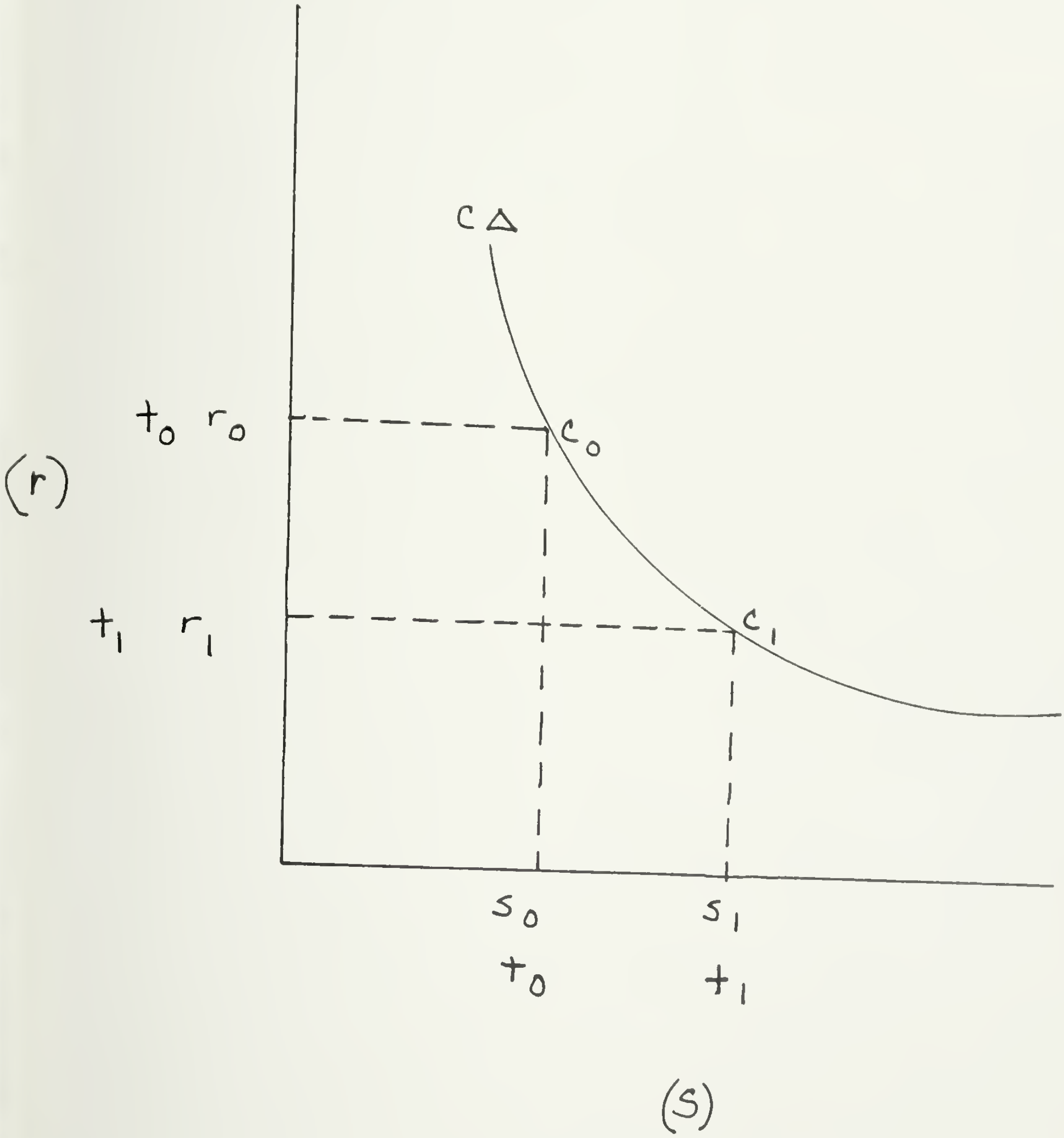

Fig. 5:1. "The Absolutist Model": Contested exchange model and the dynamics of compliance extraction on multilateral export controls.

<u>Note</u>: In addition, as this chapter has shown the necessity and degree of reliance on these instruments is also a factor of the level of congruence or incogurance in the discourses of the parties in the transaction. As the shared discourse breaks down actors turn to these instruments to attempt to extrace or ensure compliance.

Science, 1987). Western European firms in many cases began to design around United States technology.

The second consequence was that this leverage strategy began to entail high diplomatic costs. The insistance on strengthening these compliance extraction instruments, by hard-line DOD officials, began to alienate Western European officials and had the potential to lead to an alliance rift. The greatest irony in the entire strategy was that carrying through with the threat of rent withdraw could have theoretically undermined Western security by denying alliance states access to technological items that were considered to have strategic significance. Perhaps there were some individuals in this camp, namely Richard Perle and Lawrance Brady, who favored this path if it would keep advanced technology out of the hands of the Soviets. The absolutists' policy vision and their prefered strategy for bringing the allies in line was ultimately undermined, however, by considerations of broader diplomatic costs and the domestic resistance that this strategy generated.

The first Reagan Administration's more restrictive stand on export controls and the strengthening of surveillance programs on West-West technology transfers met with important opposition at home. Business interest groups were quick to recognize the potential competitive cost of the more restrictive United States position. As a result of

the global diffusion of high-technology productive capability Western firms increasingly had alternatives to relying on United States technology. In the context of increased and intense global economic competition these United States business groups were unwilling and perhaps unable to absorb losses that might result from the absolutists compliance extraction strategy. This situation sparked the domestic opposition. Unable to launch a frontal assault on the absolutists' policy vision, high-technology business interests focused their efforts on issues such as the sanctity of contracts and finding ways to decrease the processing time for export license despite the increased vigilance. The revived Cold War language of the absolutists was not strong enough to silence counter discourse camps. In an earlier time, as in the 1950s, United States business interests might have lived with this increased vigilance because their customers did not have next best alterative suppliers. The state of the world economy in the 1980s, however, meant tht these groups were less willing to accept the policy vision of the absolutist discourse. The state of market competition helped to undermine the plausibility of the absolutist discourse. For a short time in the first Reagan Administration, however, the hard-line did gain the upper hand.

The institutionalist analytical cut shows us how the abolutists camp from the DOD was able to colonize for a time the Commerce and State Departments. Western European Ministries of Economics and Ministries of Foreign Affairs had always determined their states' COCOM policy stands. Officials from these Ministries did not share the United States DOD's vision of the world. This was in part a result of the fact that the Ministries and the DOD had divergent organizational routines and missions. In addition, DOD did not have ongoing trans-governmental links with these Ministries. The DOD kept trying to get Western European Ministries of Defense more involved in the process, but to no avail. DOD officials in bilateral and multilateral talks put enormous amounts of pressure on the allies to conform to their policy vision. The institutionalist perspective gives us insight into why DOD dominance on the COCOM issue in the United States helped to produce discord at the alliance level.

By analyzing issue specific capability and market competition we can see how the material conditions for the prescriptions of the absolutist discourse were wrong. The power of the terms of the absolutist discourse, as the vision that was to provide the purpose behind the economic warfare policy, was curtailed by material conditions that resulted in strong and effective domestic and alliance level

opposition. Contending discourse camps were thus able to hold ground until changes in broader superpower relations lent great plausibility to their discourses and alternative policy visions.

CHAPTER VI

MUDDLING THROUGH, MUTATION OR "THE WAY OF THE DODO": COCOM TRANSFORMATIONS 1989-1990

Revamping East-West Trade Policy

The multilateral export control program entered a critical phase just when the Bush Administration came to office. Radical transformations in Eastern Europe and the Soviet Union were fundamentally altering the East-West strategic balance. In this context it was inevitable that the content and the logic of maintaining the COCOM program would come under increased criticism by Western commercial interests and by some political leaders. The Bush Administration faced the chore of responding to demands for immediate and broad liberalizations of controls on West-East trade, particularly technology transfers. Yet many members of the Administration believed it necessary to try to maintain an effective alliance consensus on the need to keep an effective multilateral strategic embargo intact in the interest of Western security. As the political transition of the Eastern bloc proceeded, however, it became increasingly difficult for the Administration to explain the rationale for the continuation of the extensiveness of the embargo on East-West transfers of industrial dual-use items.

The fluidity of the situation in the Soviet Union and Eastern Europe made forming a long term policy program a difficult task. On the whole United States officials were cautious about opening East-West trade. They argued that the liberalization of export controls should be done in a deliberate fashion. In addition, many officials in the United States DOD and intelligence community remained skeptical of Grobachev and the durability of the changes. They argued that liberalizations would prove detrimental to Western security if the hard line reemerged in the Soviet Union or if the Soviet Union fell into chaos. Some of these United States officials believed that differentiations between the Eastern European states should be made with regard to the terms of liberalizations. Many Western European officials did not share this skepticism about changes in the East. They wanted more immediate and comprehensive changes in the nature of the multilateral control program.

The compromise alliance solution eventually worked out at the June 1990 COCOM talks was facilitated by several factors: first, effective diplomatic pressure by European officials, particularly the British and the Germans; secondly, a shift in the U.S. inter-agency power balance on this issue away from remaining hardliners in DOD; and third, the pressure of commercial interests. The actual solution

was a product of close diplomatic collaboration between the United States and Great Britain. The plan served to keep political commitments intact for the June 1990 COCOM meeting. It is not clear, however, that United States determination alone can contain forces and pressures at work that have the potential to undermine coordinated efforts. In addition, the effective enforcement of controls will require a more concerted multilateral effort.

This chapter examines the consequences of the changes in Eastern Europe and the Soviet Union for the continuation of the multilateral export control program. In so doing it focuses on analysis of the reasons for the relative decline of United States leadership in the orchestration and enforcement of the multilateral export control program. Several factors have helped erode the United States position. First, the United States' ability to offer rents to states and firms for accepting its more restrictive position on COCOM or COCOM type controls, and for compliance with these controls, has decreased. This is a result of the growing relative decline of United States' economic power and the wider global distribution of dual-use high technology productive capability. Secondly, the United States' ability and willingness to maintain a conservative stand on the extensiveness of the multilateral East-West export control program and a cautious pose on deregulation

has weakened. This resulted from the fact that actual and perceived decline in general economic competitiveness strengthened the position of domestic commercial interests actively seaking export control programs less restrictive of their access to potential Eastern markets. The understanding of national security in Washington D.C., has also been broadened to include economic and technological competitiveness (NAS, 1987). This allowed agencies, sympathetic to commercial groups' demands, to improve their inter-governmental power position at the expense of the traditionally "control minded" DOD. Finally, there was an erosion of a common discourse - shared images and symbols - of the nature of the Soviet Union and the Soviet threat to Western security. This hindered United States' attempts to formulate a new consensus on the nature and rationale of COCOM controls, in 1988. While the phraseology of an absolutist discourse shifted to constructions of Iraq, there remains an alliance divergence of perception on appropriate East-West trade policy.

The first part of the chapter reviews the history of alliance discussions of East-West multilateral export controls in 1989 and 1990. An analysis of the outcome of the June 1990 COCOM talks will show how the United States begin to lose, and then attempted to regain, its position of leadership in COCOM.

The second part deals with problem areas that pose significant challenges to COCOM's future and to the future of United States leadership in maintaining any type of multilateral export control program. These areas include: disagreements about the content of the international lists of items subject to control and the structure of the core list negotiations, the revision of enforcement programs, the impact of German unification, and the impact of the EC 1992 program. This section analyzes the present role of the United States in these areas, in the COCOM program in general, and in enforcing controls on COCOM and non-COCOM firms. In addition, it assesses the degree to which commercial competition and the growing foreign availability of high technology are likely to undermine political commitments to COCOM.

The third section of this chapter examines those factors that are helping perpetuate the multilateral export control program. These include the United States perception of the Soviet Union, bureaucratic inertia, and recent calls for shifting COCOM from an East/West to a multidirectional gaze. Finally, the section considers some proposed methods to increase the flow of technology to promote economic and political reform in Eastern Europe, and at the same time maintain control and management systems to protect Western security interests.

The Bush Administration and Ongoing Dilemmas

During 1989 inter-allied tensions in COCOM multiplied. Alliance leaders pressed for a reconsideration of the rationale of the program. At the very least, they wanted revisions and broad relaxations of the international industrial list, procedural and institutional reforms, and a reassessment of the categorization of Eastern European states subject to controls (WSJ, Aug. 4, 1989; Interview, Bonn, January, 1990; Interview, Brussels, January, 1990; Rudolf, 1990). Despite continued pressure, the Bush Administration did not respond to these demands in any substantive way until January 1990. The April 1989 COCOM meeting was stalled because Bush had yet to appoint individuals to oversee policy on strategic exports (NYT April 14, 1989; Interview, Bonn, January 1990). The inter-allied conflicts and stalemate thus continued throughout 1989 and the first half of June 1990.

The Bush delay proved significant to the inter-agency balance of influence in the United States. Stephen Bryant left his post in the DOD as the Bush Administration came to power in early 1990. Bryant had been Richard Perle's successor in the Pentagon heading up the Defense Technology Security Agency (DTSA). Bryant was a formidable inter-bureaucratic warrior and was known unaffectionately in European circles as "Dr. K(no)w" (Interview, Europe,

October, 1990). Bryant had apparently been able to hold some of the ground that Perle carved out for the DOD during the 1980s in the inter-agency power balance on export control issues. In early 1990, the Bush Administration appointed a temporary replacement for Bryant until a decision could be made on a more permanent replacement. That decision was bound up in the broader issue of the direction of United States policy in this area. Bryant's temporary replacement was not as adept at inter-agency politics and was unwilling to engage in pressure tactics with the Western Europeans (Interview, United States Embasy, London, October, 1990). The slow presidential transition and the effectiveness of United States commercial interests' pressure on the administration, gave State and Commerce Department officials room to maneuver in Washington. Over the course of 1989 they were able to improve their positions in the complex United States inter-agency export control structure.

At the April COCOM meeting, however, the Administration was unwilling to move. Alliance officials pressured the United States to agree to remove the "no exceptions" policy on the Soviet Union in response to its removal of troops from Afghanistan. Allied officials also began applying pressure on the United States to liberalize the control lists in the area of telecommunications,

precision machine-tools, and computers. The British and the Germans, in particular began to apply pressure on the United States by claiming unilateral discretion to license items for export on grounds that the items were not subject to COCOM controls. In many cases United States disagreement with the unilateral action of these states led to heated disputes.

In May, the Bush Administration did agree to lift the no exceptions policy that had been in place since 1979 (WSJ Nov. 20, 1989). Then over the summer, the Administration announced liberalizations on controls of computer exports to the Soviet Union and Eastern European states. The new threshold set by the United States nearly doubled the performance level of computers and computer operated devices that could be shipped East (WSJ, July 31, 1989). Sales of IBM's PC/AT and its clones, Digital Equipment Corp.'s PDP 11/44, 11/60, and 11/84-P, Hewlett- Packard's number 9000 desktop computer series 200 and 300 to the Soviet Union and Eastern Europe were all permitted (WSJ, Aug. 4, 1989). Perhaps more significantly, the United States agreed to allow the sale of portable computers to the East, including laptop computers. This meant that Toshiba, NEC, Compaq, and Zenith all stood to benefit from the liberalizations. The Commerce Department announced the changes amid much fanfare, but maintained that the changes were the result of foreign

availability determinations and that they did not represent a compromise or a shift in overall policy (WSJ, Aug. 4, 1989). This change was significant in that the computer threshold issue had been one of the DOD's primary concerns under Perle and Bryant. Secretary of Defense Cheney disagreed with the changes in the control threshold for computers and publicly announced that the DOD opposed the changes.

Most Western European officials claimed that the United States decision to liberalize in the computer category while not moving on machine tools, telecommunications, or other areas where questions had been raised was driven by commercial interests (Interview, Europe, October, 1990; Interview, Brussels, September, 1990). Several United States firms such as IBM, Data General, and Digital did stand to benefit from these deregulations (NYT, Dec. 17, 1989). In addition, there had been pressure on the Administration over the threshold on computer export controls throughout the summer of 1989 (Interview, Washington, April, 1990). Whatever the actual motivation, the perception of the commercially motivated nature of these changes among Western European officials increased the growing tension. It began to show signs of undermining alliance commitments to the multilateral process.

The allies were determined to push the United States toward a comprehensive reconsideration of the control program. They continued to argue for a relaxation on machine tools and telecommunications, and they wanted a reconsideration of states subject to control. The British and the Germans were the key players in putting extensive pressure on the United States. In the spring and summer of 1989, European governments and firms began to show a willingness to defy the United States and ignore the multilateral process. The British, over strong United States' objections allowed Simon-Carves Ltd. to go ahead with a deal to build a plant to manufacture factory automation equipment and industrial microcomputers in the Soviet Union. Similarly, the French government supported Alcatel's development of a project contract to manufacture telecommunications equipment in the Soviet Union, despite the fact that the United States maintained that the deal would violate COCOM (WSJ, May 3, 1989). These openly announced decisions were indications that some Western European officials were ready to risk a major diplomatic confrontation with the United States over this issue. Some Western European officials stated that they believed in the summer and fall of 1989 some COCOM members were ready to consider withdrawing from cooperation on maintaining the international industrial lists if the United States

continued to stall (Interview, Brussels, September, 1990; Interview, Europe, October, 1990). At any rate, alluding to such an eventuality in the press became a means by which Western European officials and perhaps some United States agencies, applied pressure on the Bush Administration (Interview, Brussels, September, 1990; Interview, Washington, April, 1990). It should also be said that most British officials interviewed, claimed that the Simon-Carves case was not intended as a diplomatic pressure move (Interview, London, October, 1990). It, however, was interpreted by United States officials as such (Interview, Washington, July, 1990; Interview, London, October, 1990).

The fact that many Western European firms were moving ahead on major deals in the East resulted in increased domestic pressure in the United States (Interview, Frankfurt, September, 1990). In the late summer and early fall 1989, it appeared that an open intra-governmental and intra-alliance disagreement was about to erupt once again on the pace of liberalizations. Domestic and Western European high technology business lobbyists "turned up the heat" on the Bush Administration. As in the past, disagreement between the Commerce Department on one side and the DOD and the intelligence community on the other began to appear, but this time in a less intense form because extreme hardliners no longer dominated the DOD. The task of the NSC in the

fall of 1989 appeared to be heading off such a conflict and formulating a policy option that would be satisfactory to all agencies involved.

As dissatisfaction grew among the allies United States leadership was threatened. Moreover, there was concern in Washington that some European allies might begin to ignore COCOM agreements on industrial items altogether (Freedenberg, 1989). In September 1989, President Bush sent letters to all of the leaders of the COCOM states admonishing them about apparent laxity in enforcement of COCOM controls and urging them to "tighten-up on controls until issues could be resolved" (Interview, Bonn, January, 1990; Interview, Brussels, January, 1990; NYT, Oct. 9, 1990). In addition, the Administration sent Ambassador Allen Wendt and the new head of the Defense Technology Security Agency, William Rudman, to European capitals in an attempt to establish a framework for the October 1989 talks (WSJ, Nov. 20, 1989). As part of this mission, Rudman announced dramatic new figures on illicit machine-tool deals with the Soviet bloc. Such announcements by now, had become a standard practice. Just prior to every political level COCOM meeting throughout the 1980s, the United States, usually someone in DTSA, revealed new cases of allies' failure to prevent or detect the illicit transfer of sensitive technology (Interview, Brussels, January, 1990).

Perle and Bryant's practice in the past was usually to line up Senators, such as Jake Garn, to help publicize the issue by making statements in Congress. On this occasion, Rudman stated that since 1983 European COCOM states and Japan had delivered more than 6,000 embargoed machine tools to the Soviet Union (WSJ, Nov. 20, 1989). Almost all of these machine tools, he argued, had been used in projects run by the Soviet Military Industrial Commission. The most critical case involved the Italian firm, Ing C. Olivetti, that sold machine tools to a Soviet aeronautics factory where they were used to build the YAK-41 fighter bomber (WSJ, Oct. 16, 1989). President Bush confronted Italian President Francisco Cossiga himself over the issue when he visited Washington in October (WSJ, Oct. 16, 1989).

These disclosures seemed to be designed to blunt and slow down Western European demands to relax the multilateral export control program until the changes in the East had solidified and until the United States could regain the diplomatic advantage (Interview, Bonn, Jan., 1990). The public criticisms raised by President Bush also seemed designed to allow the NSC time to find a way to forge an inter-agency consensus on an adjusted policy stand.

The United States delegation to the October 1989 COCOM meeting was lead by Under Secretary of State Reginald Bartholomew, Under Secretary of Defense Paul Wolfowitz, and

Under Secretary of Commerce Dennis Kloske. Relying on sources in Paris, the Wall Street Journal and the New York Times reported that the United States delegation had been outnumbered 16 to 1 in its opposition to immediate action on comprehensive changes in the COCOM program (WSJ, Nov. 20, 1989; NYT Oct. 27, 1989). However, Stephen Saboe a United States official in Ambassador Allen Wendt's office, denies that this was the case. He stated that there was greater consensus in October than the Western Europeans were willing to disclose, particularly, on the need to slow down the pace of relaxations. He also said that public statements of opposition to the United States position "were a smoke screen and, in fact that they too wanted to slow the pace of relaxation" (Interview, Washington, July, 1990). Officials in Bonn stated, however, that there was general dissatisfaction with the United States' position on the pace of relaxations at the October 1989 talks (Interview, Bonn, January, 1990). This perception was shared by leaders in other European capitals (Interview, London, October, 1990; Interview, Brussels, September, 1990; Rudolf, 1990).

Great Britain and West Germany led in applying strong pressure on the United States to alter its position on relaxations. Representatives of both states made public the intensity of their commitment to see a general liberalization of the multilateral control program (The Week

in Germany, Oct. 27, 1989). German officials publicaly raised the question of whether or not COCOM was any longer a viable organization. This was an attempt to pressure the Bush Administration (NYT, Oct. 9, 1989; CSM, Nov. 2, 1989; WSJ, Nov. 20, 1989; Rudolf, 1990; Rummel, 1990). One German official stated prior to the October meeting that "in an age where, via dialogue and cooperation, we try to assist reform processes in Poland, Hungary, and the USSR, COCOM is outdated" (NYT, Oct. 6, 1989). Minister of Foreign Affairs Genscher also stated just after the meeting that "COCOM had become outdated" (CSM, Nov. 2, 1989). The Social Democratic spokesman on economic matters, Wolfgang Roth, called on the West German government and other EC member states to "no longer follow the COCOM program even if this would risk a trade conflict with the United States" (The Week in Germany, Oct. 27, 1989). Finally Mikhail Gorbachev attempted to seize the opportunity of the growing transatlantic rift and told a meeting of the European Parliament in Strasbourg that "COCOM should be dismantled so West and East can join together in a common European home" (WSJ, Nov. 20, 1989).

The October meeting ended in a stalemate. The Bush Administration was able to delay immediate action in COCOM by agreeing that the Western European proposals and the changes in the East required a review of the entire program (NYT, Oct. 27, 1989). The United States indicated at this

meeting that it was willing to consider the possibility of moving Eastern European states into a category separate from the Soviet Union (Interview, Bonn, January, 1990). This meant that they would be placed in a "China type category" lowering the threshold of control (WSJ, Nov. 20, 1989). The United States delegation, however, registered strong criticisms of other COCOM states' enforcement programs and issued warnings about actions against firms found in violation of controls. The standards and strength of enforcement, Bush Administration officials pointed out, were not uniform among the COCOM states. Several members did not have satisfactorily rigorous administrative processes or systems for surveillance on compliance with controls in place (NYT, Oct. 9, 1989; WSJ, Nov. 20, 1989; Interview, Bonn, January, 1990; Interview, Brussels, January, 1990). It is generally recognized that this criticism was directed at the so called Southern tier states (Italy, Spain, Portugal, Greece) (Interview, Brussels, Jan, 1990). In addition, some United States Congressmen once again brandished the threat of withdrawing compliance rents from Western high technology firms that violated controls by stating that Olivetti might be prohibited from government procurement contracts and access to the United States market for its violations (NYT, Oct. 27, 1989).

Assessment of 1989: The European-United States Divide

The European reaction to the United States criticisms at the October meeting was highly critical. By December 1989 United States officials began to realize that they might see a collapse of COCOM as a whole or at least an end of collaboration on the industrial list items if they did not adjust their position (NYT, Dec. 17, 1989; Interview, Bonn, January, 1990; Interview, Brussels, January, 1990; Interview, Washington, D.C., 1990). According to European officials, at the mid-levels in DOD and the intelligence community, advocated withholding as much Western technology as possible from the Soviet Union. They wanted to hold out until "the economic crisis had fully undermined the position of the communist party." These individuals maintained that "transfusions" of Western technology would only prolong the life of communist rule. They saw Gorbachev's policies as shrewd tactical moves to save the position of the party (Interview, Bonn, Jan. 1990; Interview, Washington, April, 1990).

Most Western European government officials disagreed with the hardline view and stated their determination to move ahead with deregulations on East-West trade controls in no uncertain terms. As one German stated, "streamlining will occur with or without the United States" (Interview, Bonn, Jan, 1990). Western European resolve to move ahead

with encouraging economic ties and high technology transfers was a consequence of several factors.

First, there was a general perception that the security issues in East-West trade policy had begun to change. The question had begun to shift from how to prevent such trade from enhancing Eastern bloc military capabilities to how to use offers of access to Western economic and technological capability to induce further reform and stability. Thus there was a renewed conviction that increased trade and technology transfers had an instrumental value (Interview, Bonn, January and September 1990; Interview, Brussels, January, 1990).

Secondly, there was a perception, initially at least, that the economic liberalizations in these countries held vast commercial opportunities. This resulted in domestic commercial pressure on these governments to oppose the United States desire to slow the pace of liberalization. Thirdly, Western European officials seemed to be less willing to cling to Cold War-informed images and suspicions (Interviews, Brussels and Bonn, Jan, 1990; Interview, Washington, April, 1990).

Several export license cases in the fall strengthened Western European perceptions that United States discussions on relaxations of controls were driven by its own commercial interests. While Secretary of Defense Cheney continued to

voice concerns over the pace and the scope of any decontrol, the Pentagon approved license applications for Innovation International Inc. to transfer computer assembly technology in a joint venture with the Soviet Ministry for the Radio Industry (NYT, Dec. 17, 1989). This was significant since it involved a trade that could improve Soviet computer manufacturing capability because it transferred process know-how and unassembled computer components. In the past, DOD officials had successfully prevented the issuance of such licenses on grounds that such transfers would indirectly contribute to Soviet military potential. The DOD also did not prevent a license issue for a Data General sale of a 32-bit MV 2000 minicomputer to the Soviets. Several other United States high-tech firms, such as Control Data Corporation and US West, began pursuing more vigorously contracts with Eastern bloc states for more extensive telecommunications and computer system projects (NYT, Dec. 17, 1989; Interview, Bonn, January 1990). It is difficult to establish whether these changes signaled some flexibility among DOD and intelligence officials or whether it was an indication of the overall inter-agency power shift away from DTSA in the DOD on this issue to the Commerce and State Department. What is clear is that cases such as these added to Western European suspicions and resentments. This was because the United States was unwilling to move in other

areas such as machine tools and telecommunications (Interviews, Brussels and Bonn, Jan, 1990; Interview, London, Oct, 1990). It should be pointed out, however, that the DOD did not object to some significant license issues to European firms in the computer area, such as Siemanns-ASEA's deal to sell 300,000 personal computers to the Soviet Union (CSM, Nov. 2, 1989; Interview, Bonn, Jan, 1990).

The United States more restrictive stand on relaxation of controls was being undermined by several factors. First, the rapid pace of changes in the East and a growing perception that they were more than superficial was undermining this position. The drive to alter policy on the multilateral control program was obviously in part a response to changes in the strategic situation brought on by the political and economic trans-formations in Eastern Europe and the Soviet Union. However, the move to alter policy was also a direct result of the domestic and alliance level pressure being exerted on the Administration. An official in Bonn informed this author that his government was "placing hope in the effectiveness a combination of allied pressure and pressure from the United States high technology lobby to force the Administration to raise the control thresholds" (Interview, Bonn, January, 1990).

Perhaps more significant than the domestic factors that helped to shift the Bush Administration policy position

were the factors that threatened the United States leadership position in COCOM. The first factor was the 1989 stalling on a policy shift that had lead to resentment. Secondly, Western European governments and firms seemed to have come to believe that the costs of being exposed to the whims of the United States Congress and the potential costs of being cut off from compliance rents, in whatever form, did not outweigh the potential benefits that could result from moving ahead with trade liberalization. Thirdly, Western European leaders were not confident that the United States could successfully negotiate agreements with or offer effective compliance rents to, non-COCOM suppliers of COCOM controlled items or technologies (Interview, Bonn, Jan, 1990). The adage "he who hesitates is lost" seems initially to have characterized the thinking of some Western European firms when it came to entering these new markets.

The United States Policy Shift

The shift in the United States position on the multilateral export control program came in two stages. The first policy shift was announced in January 1990 and the second in May 1990 just prior to the June COCOM talks. Following a meeting between President Bush and President Mitterand on St. Martin in late December 1989, the Administration announced that it was going to recommend a reorganization of domestic constraints on East-West trade

and a substantial shorting of the COCOM list (NYT, Dec. 17, 1989; NYT Jan. 23, 1990). The details of the policy shift were to be worked out through a NSC study to be completed by the end of January 1990.

The January shift was based on a concept of "differentiation" among countries. The policy did not affect control criteria to be applied to the Soviet Union, but it did call for a phased easing of controls for the Eastern European states. First Hungary and Poland, then East Germany and Czechoslovakia and finally, perhaps, Rumania and Bulgaria would be placed in a "China type" category (NYT, Jan. 23, 1990). This would give those states access to a much greater array of technology than in the past when they were categorized with the Soviet Union. In order to qualify for this recategorization, Eastern European states would have to agree to develop safeguards against diversion of technology into military applications. This meant that they would have to establish legal and administrative frameworks similar to those imposed by COCOM states. In addition, this would include agreements for on-site inspections by United States officials (NYT, Jan. 23, 1990). The proposal also included significant reductions in controls over computer technology and machine tools and some liberalization on telecommunication equipment.

The United States proposal of January, 1990 met with strong and by now familiar criticisms, particularly from West Germany and Great Britain (Interview, Bonn, September, 1990; Interview, London, October, 1990). The proposed shift, European officials argued, did not adequately reflect the changes that had and were occurring in the GDR, Czechoslovakia, and the Soviet Union. Western European firms had begun to move into these newly liberalized markets. The prospect of not easing controls on the Soviet Union and only gradually easing controls on Eastern Europe, beginning with Hungary and Poland where United States firms had begun to conclude contracts for major projects, struck the Europeans as unnecessary due to the political changes that were occurring. The proposal also appeared to be driven by commercial interests rather than strictly security considerations (Interview, London, October, 1990). Many major European project deals would have been placed on hold by the criteria of this new policy. West Germany's Standard Elektrick Lorenze AG, for example, had been developing a massive joint venture with the GDR to construct a plant in Arnsadt to install SEL's system-12 digital switching technology to replace East German telecommunications equipment (WSJ, Mar. 12, 1990).

The result was once again a stalemate. The Europeans rejected differentiations between the various Eastern

European states and to retention of existing controls on the Soviet Union. The United States attempted in bilateral talks to convince the allies to go along with the program, but to no avail (Interview, Brussels, September, 1990). In light of the opposition, the United States established an inter-agency working group to produce a new more workable proposal before the COCOM talks set to begin in June (Interview, Washington D.C., April, 1990). The new position announced on May 2, 1990 called for what seemed to be the most radical reorganization of multilateral export control collaboration in the history of COCOM. The May initiative appeared to be a diplomatic success for the United States (Interview, Bonn, September 1990; Interview, Brussels, September 1990). One German official told this author that with this move "the United States exerted effective leadership in COCOM and put itself back into the drivers' seat" (Interview, Bonn, September 1990). The United States had been, however, working closely with the British on the proposals for the June talks. In all likelihood, what emerged was a collective British-United States policy proposal (Interview, London, October, 1990). As one United States official in London put it, "what was finally agreed upon could be called British wine in an American bottle" (Interview, London, October, 1990).

The key change was that the United States changed its position on differentiation and also agreed to a certain degree of relaxations on controls for the Soviet Union. The United States agreed that one single streamlined list needed to be created. In return, the other COCOM member states agreed to compromise on the issue of differentiation between the Soviet Union and the Eastern European states by establishing a "special procedure." This special procedure allowed some Eastern European states to apply individually for exceptions in order to allow controlled items to be transfered in specific cases. The compromise solution broke the stalemate and effectively renewed the allied states' commitment to the COCOM process to negotiate the particulars of the changes in the multilateral control program.

At their Paris meeting in June 1990, the COCOM states agreed to sweeping liberalizations. The outcome of the talks was complicated. The COCOM states agreed to fully rework the list of controlled items. In the interim they agreed to drop 30 of the 116 product categories from the list as it existed prior to the June talks. Member states agreed that the international lists, particularly the industrial list, should be redrawn "from scratch" (Interview, Paris, November, 1990). The goal for the industrial list of controlled dual-use items was to establish by the end of 1990 a "core list" of eight

categories, each comprised of a number of items (Interview, Bonn, September, 1990; Interview, Brussels, September, 1990). The industrial core list categories were to be: telecommunications; computers; navigation and avionics systems; propulsion systems; sensors and sensor systems and lasers; electronics design, development, and production; advanced materials and material processing; and marine technology (Interview, Paris, November, 1990). The list would be subject to ongoing assessments so that items would be removed when and as soon as foreign availability determinations were made (Interview, London, October, 1990; Interview, Paris, November, 1990). In January 1991 the new core list was to be presented at a high level political meeting for approval and was to be implemented in each state by April 1991.

The streamlined core list was designed to apply to all of the target states, but Hungary, Czechoslovakia, and Poland were given the "special procedure" right. This gave these states the opportunity to appeal to COCOM for exceptions to the core list controls. Exceptions would be granted on a case-by-case basis and would be decided on the grounds of end-use assurances and the verification of safeguards that these states would establish against diversion. Thus these states would be required to establish COCOM like procedures and enforcement mechanisms. According

to German officials the decision can be interpreted as allowing Eastern European states to be taken off of the COCOM list of proscribed destinations if they instituted systematic and effective safeguards (Interview, Bonn, September, 1990). The British delegation read this to mean only that these states would given favorable treatment in case-by-case requests for exceptions to the lists (Interview, London, October, 1990).

In addition to the core list there was an agreement to harmonize each governments individual enforcement, administrative, and licensing procedures by April 1992. Finally, an agreement was reached on an "interim regime" on the issue of the united Germany.

The Continuation Of COCOM Consensus and the Issue of United States Leadership

While the June talks were successful in terms of establishing a framework out of which states could negotiate there exited a number of areas of potential conflict. One German official told this author that while the United States broke the stalemate in May, "there is still the potential for a stalemate by January and there will no doubt continue to be terrible fights at the technical level" (Interview, Bonn, September, 1990). Aside from the conflicts that might arise in the process of deciding on Eastern European exception requests in a number of areas

United States leadership has been eroded and conflicts over issues in these areas could potentially undermine effective multilateral collaboration. The areas that pose the greatest challenge to continued commitment to COCOM and to United States leadership include: the details and content of the core list; the difficulty of harmonizing, standardizing, and enforcing controls and enforcement procedures; the tension between intra-COCOM controls and EC 1992 full integration; and the problem of COCOM and German unification.

The Core List Negotiations

The core list discussions involved intense conflicts over the threshold of technologies in particular categories of items that should be kept under control. The transformations that occurred in Eastern Europe and the Soviet Union have made it imperative that a common list be agreed upon as soon as possible. Friction between the COCOM states and the United States centers on the fact that "there will be competitive disadvantages for nations that take a more restrictive, comprehensive approach to controls" (see statement by Kloske; FT, July 13, 1990).

As to be expected, many states came to the core list discussions with proposals for very minimal lists. Under Secretary of Commerce Dennis Kloske stated that many COCOM states want only a select few items to be retained on the

industrial core lists. There have been disagreements over a number of items such as supercomputers, cryptographic equipment, and telecommunications. It is important to bear in mind that the United States has often been able to maintain the upper hand in discussions over the addition or deletion of an item from the control lists. This has been explained in earlier chapters in terms of the micro-economic model of contested exchange and in relation to the United States' preponderance in intelligence information and technical expertise on the military applicability of particular technologies. In the context of the present negotiations, however, the United States finds itself in a difficult position for several reasons. First, the United States agreed to the European proposal to rewrite the core list from scratch (Interview, London, October, 1990; Interview, Paris, November, 1990). This means that the core list discussions begin with a blank slate. Recall that COCOM operates on a principle of unanimity. Thus, placing an item on the list requires unanimity. Prior to this agreement, the United States was able to control, to some degree, the pace of relaxations because unanimity was required to remove an item from the international list. The United States could also often effectively get items added to the list by threatening to hold "items hostage on the list" that other states wanted to decontrol (Interview,

Paris, November, 1990). The present arrangement significantly alters the bargaining position of the United States in negotiations. DOD officials have expressed extreme frustration with this situation. One DOD official stated that the individual who agreed to this idea, at a Spring meeting in London, "was either asleep or is an idiot" (Interview, Paris, November, 1990).

One particular item of contention on the control list bears analyzing in some detail if not for the irony of the case then for the dynamics of the negotiations that it exposes. At points there have been intense conflicts between the United States and Great Britain, France, and West Germany over the control threshold that should be established for telecommunications equipment (Interview, Bonn, September, 1990; Interview, London, October 1990). DOD officials, throughout the 1980s maintained that the threshold should be relatively low and that by providing the Eastern bloc states with sophisticated digital-switching equipment and fiber optic technology, the West would increase Soviet bloc military command and control systems. Now that the perceived threat from the Eastern bloc has diminished, the United States has been unwilling to move on the telecommunications issue, despite the fact that there has been extensive pressure from European officials. The reason: Sophisticated telecommunications technology makes

eavesdropping difficult (Interview, Bonn, September, 1990; Interview, Brussels, September, 1990; Interview, London, October, 1990). The United States intelligence community and the DOD have strongly opposed liberalizations on telecom equipment. While some ministries of defense in Europe share this DOD view, most continental European COCOM members would like to see extensive liberalizations in this area (Interview, Bonn, September 1990; Interview, London, October 1990).

Several Western European firms, however, have begun to develop extensive, large scale contracts to produce and install entirely new up-to-date telecommunications systems in central European states. In many cases these systems were ancient. Officials in Bonn, for example, could not in many cases get through on the regular phone lines to the GDR. Aside from the commercial interests involved, some European officials have pointed out that in order to establish a pluralistic society, there must be an effective and operational telecommunications system. The United States, however, has been unwilling to move on this issue. The United States believes that it is not in the security interests of the West to allow these states, particularly the Soviet Union, to import sophisticated telecommunications equipment that would allow them to put together effective national communications networks. Effective tele-

communications systems are, however, seen by Western European officials as a key factor in fostering pluralistic societies in these countries. One exasperated German official said "we have to find a way to balance the eavesdropping interest with the pro-democratic and commercial interests" (Interview, Bonn, September, 1990). Given the new structure of the international list negotiation process, the issue could prove to be a test case for future dynamics of core list disagreements.

Enforcement Issues

Each COCOM state after the June talks was required to report on the nature and extent of their legal and administrative procedures for enforcement of export controls. Some COCOM states have extremely divergent state bureaucratic traditions and histories as well as resources to commit to developing effective regulatory procedures. This is particularly the case for the so-called Southern tier COCOM member states: Greece, Turkey, Spain, and Portugal. Since the June talks, Under Secretary of Commerce Dennis Kloske has invited representatives of these states to Washington to demonstrate the operations of the United States Bureau of Export Administration.

There have been conflicts over the approach that the United States has taken in its attempts to get these states to strengthen their enforcement systems (Interview,

Brussels, September, 1990). One problem is that the United States has in many instances offered its export control program up as a blueprint for these Southern tier states (Interview, London, October 1990). This is not only unrealistic for these states, but often United States' "evangelism" verged on cultural elitism because officials did not take into consideration the divergence in cultural traditions (Interview, London, October 1990). As of the fall 1990, there was a political will on the part of these states to develop enforcement programs, but United States prodding has produced resentment that could undermine such commitments (Interview, Brussels, September, 1990). Many of these states' representatives have also argued that they lack the technical capability and the resources to establish such an extensive enforcement program (Interview, Brussels, September, 1990). In addition, even if there can be a standardization in terms of administrative procedures, there are serious questions left about equivalency and performance standards. For example, will there be common penalties for violators and will all of these states pursue surveillance on enforcement of compliance with the same vigor? It appears that here once again United States' vigilance and surveillance systems might have to stand in for states that have ineffective regulatory and enforcement procedures, but

the question remains as to whether or not the nature of United States actions will alienate these governments.

In addition to attempting to achieve a harmonizing of COCOM control standards, Secretary Kloske set up a fund to help Eastern European states develop safeguards and legal and administrative systems, to prevent controlled technology from being diverted to military use or from being re-exported to the Soviet Union. This fund of some $1 million is to provide for consulting services for setting up an enforcement and licensing structure. The issue of whether or not these states have established effective regulatory procedures and can therefore be legitimately given certain favorable treatment or removed from the COCOM list of proscribed destinations will no doubt be an enduring source of friction between the United States and the other members of COCOM. British MOD officials have expressed concern over the fact that extensive networks still exist by which such dual-use technology could be quickly transferred to the Soviet Union (Interview, London, October 1990). This view is shared by the United States, but the Germans are much more sanguine about the prospects of these states being removed from the proscribed list within the near future.

The United States' Role in Ensuring Enforcement: The Diffusion of Advanced Technology and the Erosion of Compliance Rents

The United States still perceives itself as responsible for ensuring compliance with multilateral export controls. For example, the United States continues to insist on its right to impose its unilateral export control program extraterritoriality. As pointed out in other chapters, firms that use or incorporate United States origin technology or access to controlled items are subject to United States re-export control authority and in addition are subject to Commerce Department inspections and reviews of internal company enforcement systems. Present versions of the revised Export Administration Act, now under consideration, are actually designed to strengthen the extent of United States discretion in using extraterritorial controls and in imposing sanctions on individuals and firms that violate United States and COCOM export control regulations. These penalties involve threats to withdraw what we have called in other chapters compliance rents (i.e., government procurement contracts, access to United States technology). This means of insuring compliance with the export control program was criticized throughout the 1980s by Western European business and government officials.

Recall that Western European governments have no laws that require their national firms or firms operating in their countries to comply with United States extra-territorial export control claims (Interview, Brussels, September, 1990; Interview, Bonn, September 1990; Interview, London, October 1990). Officials in Great Britain and Germany said, however, that they advise their companies to "strongly consider their own commercial interests when deciding whether or not to comply with United States re-export control authority or with United States demands to audit firms to inspect enforcement systems" (Interview, Bonn, September 1990; Interview, London, October 1990). British officials stated that if one of their firms protested to United States extraterritorial claims they would "stand by that firm because our government is opposed in principle to extraterritoriality, but these firms must be pragmatic" (Interview, London, October 1990).

The Commerce Department and the DOD continue to maintain a "grey list" of firms and individuals that are believed to be risks for diversion of controlled items, technology, and technical data (Interview, Europe, October 1990). If a firm refuses to comply with United States' extraterritorial claims or with multilateral control agreements, then it is understood that this can be grounds for being placed on the "grey list" (Interview, London,

October 1990; MacDonald, 1990). Once this occurs, the perception, on the part of grey listed firms, is that other firms, out of their own commercial interest and in the interest of seeing their license applications processed through the Commerce Department in a timely fashion, will be reluctant to do business (Interview, Frankfurt, September, 1990). This practice is criticized by the British in particular because firms and individuals gain grey list status simply on the grounds of suspicion or on the grounds that they are seen to be not cooperating fully with United States extraterritorial claims or COCOM controls. During the early 1980s, as discussed in chapter five, there were several intense public conflicts between the United States and Great Britain over this issue (see Cahill, 1988; MacDonald, 1990).

If a firm or an individual is actually discovered to be involved in illicit transactions in violation of the United States or the COCOM export control program, then they are placed on a blacklist called the List of Denials. Once placed on this blacklist it is:

> Unlawful . . . for any such person to order, buy, receive, use, sell, deliver, store, dispose of, forward, transport, finance, or otherwise service, or participate in any transaction which may involve any commodity or technical data exported or to be exported from the US or any re-export thereof (Denial Orders Currently Affecting Export Privileges, 1987; MacDonald, p. 58, 1990).

As argued in previous chapters, the instruments of extraterritorial claims, compliance rents, and surveillance to monitor compliance have been central institutions in the United States' enforcement program directed at COCOM firms. These instruments have even been more central in attempting to ensure compliance by non-COCOM firms. This has been particularly the case with firms in newly industrialized countries (NICS) where there are often extremely ineffective domestic export control enforcement systems.

In chapter five I discussed the competitive and the economic costs to the United States that resulted from the use of these instruments. At present several significant factors are eroding United States' ability to ensure compliance with multilateral export controls. First, a general and growing proliferation of advanced and dual-use technologies means that the number of actual and potential suppliers of controlled items has been expanded (Interview, Paris, November, 1990; see Bertsch and Elliott-Gower, 1990). In addition, the United States technological lead in many areas of advanced and dual-use technology has been eroded by the expansion and development of sophisticated productive capabilities by COCOM and non-COCOM firms. Bertsch and Elliott-Gower point out that the United States lead has been eroded in areas such as: aircraft, radar, sonar, microcomputers, transformers, semiconductor manufacturing,

and radio and television technology (Bertsch and Elliott-Gower, p. 8, 1990). This means generally the that United States compliance rent of uninhibited access to advanced technology is no longer effective for enforcing instruments controls. In order to verify empirically this more general claim it would be necessary to assess specifically the relationship between those sectors where the United States lead declined and the relationship between particular enforcement rents, surveillance and compliance. Unfortunately such data is difficult to obtain at this point.

There is, however, evidence to support this general conclusion. The United States, for example, has experienced difficulties in the past few years in its attempts to gain compliance from non-COCOM supplier firms with COCOM controls (Interview, Paris, November, 1990). United States' representatives to COCOM also stated that it was becoming much more difficult to offer incentives to some firms and states for compliance with the United States position (Interviews, Paris, November, 1990). The use of government procurement contracts as compliance rents has also been undermined to some degree by Congressional initiatives for so called "buy America" legislation (Interview, Paris, November, 1990).

The basis of United States leadership in enforcement efforts has also been harmed by the way in which the American officials have sought to extract compliance in the past. The political cost of the claims of extra-territoriality and of attempts to unilaterally enforce multilateral controls, according to EC officials, "have accumulated to a critical point" (Interview, Brussels, September 1990). The harmonious relationship between the allies has been stretched to the breaking point so many times over this issue in the past ten years that it has left permanent marks. As one British official put it "We have a deep collective memory of United States activities in this area" (Interview, London, October, 1990). As one American official stated: "The Toshiba case sent a loud and clear message to Western firms about the potential consequences of ignoring COCOM and United States controls" (Interview, London, October, 1990).

The United States, by insisting on its claims of extraterritoriality, expresses a distrust in the enforcement programs of its allies. This has done lasting harm to cooperation on enforcement in some cases. One European official involved in a domestic export control program stated that his government had become reluctant to share information about their system or intelligence on diversions with the United States because of the potential repercussion

for his agency and for his country's firms (Interview, Europe, October 1990).

In addition, the perception on the part of Western European firms remains one of deep distrust of the entire system of United States extraterritorial controls and enforcement efforts. Some European business officials still express the view that the information the Commerce Department obtains through the re-export licensing process and from audits or inspections could be used to do significant harm to their commercial interests (Interview, Bonn, October, 1990). Despite the fact of whether such misuse of information has ever taken place, the significant issue is that the perception exists (Interview, Brussels, September, 1990; Interview, Bonn, September 1990; Interview, London, 1990).

In addition to these intra-allied factors, United States domestic level pressures have helped erode its position as the leader in the enforcement of a restrictive multilateral East-West export control program (Freedenberg, 1990; Vogel, 1990). High technology firms, having organized over the past ten years, were effective in 1989 in pushing the Bush Administration toward a streamlining of controls (Interview, Washington, April, 1990; see Freedenberg, 1990, and Bertsch and Elliott, 1990). The prospect of placing United States firms at a disadvantage in entering into the

Central European market was also a consideration in the Commerce Department's position on liberalizations of controls (see statements by Dennis Kloske, FT, July 13, 1990).

In addition to these factors, the ability of the United States to enforce compliance is weakened by the fact that there continues to be an inter-governmental and intra-allied divergence of discourses regarding the relationship between East-West trade, the nature of the Soviet threat, and the requirements of Western security. Contrasting images of the Soviet reform program and of Gorbachev are used to bolster conflicting positions on whether or not the West should offer its advanced technology and economic power to aid reform.

COCOM and the EC in 1992

There is a potential for a head on collision between COCOM controls and the EC goal of full integration. The goal of the 1992 program is to remove all impediment to the free flow of goods and services among member states. Unless all facets of the multilateral control regime can be agreed upon by all of the COCOM members that are EC members, then controls within the community will not be fully removed (Interview, Brussels, EC, September 1990). Agreement must be reached on the criteria for determining an items' strategic significance, the actual content of the lists,

standards and procedures of enforcement, and the destinations that are subject to what type of control. If there is a divergence of opinion in any of these areas, some states may be unwilling to fully remove intra-COCOM controls.

The first issue that confronts the EC Commission in dealing with this problem is that Ireland one of the members of the community, is not a member of COCOM Because Ireland is neutral, but has developed a COCOM state equivalent export control program, it has been granted special status by most other EC states and the United States, but not by all of them. Secondly, there are wide variations, as stated above, in Community members' control procedures and enforcement programs. The Commission shares with COCOM a desire to see the harmonization of these programs succeed. Within the Commission there are two schools of thought on how this should be accomplished and how a community wide system of controls, regulating the transfer of items that flow out of the community, can be maintained (Interview, Brussels, September, 1990). The first is a "maximalist" school advocating the creation of one grand community wide export control enforcement and processing system administered from Brussels. Conceivably, this would mean that all member states would turn over control authority to a Commission bureau made up of export control experts from

all member states. Intra-community controls would be removed then and the Commission "export control office" would process "EC export licenses" for controlled items shipped outside of the EC.

The European Round Table of Industries recently published a report that calls for such a program. The report states that the Commission from Brussels should operate the strategic embargo "as the government of the USA does rather than by the governments of all the US states individually" (ERTI, p. 10, 1990). There are very few people in Brussels these days, however, who even entertain the idea of the Commission assuming such a role. Commission members are not excited about the prospect of having to figure out how to process the thousands of licenses that would be needed if such a community wide system was established (Interview, Brussels, September 1990). EC member governments are also unwilling to see the Commission be given competence in this area.

The contrasting "minimalist" school of thought would like to see the issue worked out through informal agreements between the member states (Interview, Brussels, September, 1990). They thus would like to see harmonization between the EC states on all levels of the export control programs. This harmonization from within might then mean that since all of the states have confidence in each others' programs,

they all would be willing to remove any intra-COCOM-EC controls. The key issue here, of course, is confidence.

In order to attempt to facilitate such confidence, the EC Commission embarked on an ambitious project to collect data on all member states' control and enforcement programs. Ironically, Commission members encountered problems, due to government stonewalling, obtaining information from member states on the particulars of their programs. As a result, the Commission has now turned to relying on multi-national firms for information on particular control programs (Interview, Brussels, September, 1990). At one point a Commission member who was involved in collecting data on member states control programs stated that "the variations, in administrative procedures, control criteria, and enforcement systems were so great at points that they did not even appear to be part of a common program" (Interview, Brussels, September, 1990).

Reconciling these divergences will take time and as one EC official remarked, "We're running out of time in resolving these problems before 1992" (Interview, Brussels, September, 1990). As a result of the cross comparative data that the Commission collected, officials there are in an excellent position to provide an information service to member states. Commission officials could provide administrative and technical assistance on how to improve

and harmonize enforcement programs. In some cases, with the Southern tier states for example, it might be necessary to provide some type of financial assistance to enable these states to upgrade enforcement programs and to upgrade licensing systems.

It has often been suggested that the EC Commission should participate in the COCOM process. This makes sense given the fact that these control systems have a direct bearing on the Commission's directives. Many Commission members favor the proposal to make the EC a member of COCOM, but they are emphatic that there should not be EC input with regard to the content of the control list or in the designation of destinations subject to control (Interview, Brussels, September, 1990). There should be observer status given to the EC so that Commission officials could provide advice on how COCOM controls and EC full integration can be worked out.

If harmonization of enforcement programs cannot be worked out to the satisfaction of all of the EC states in COCOM, a two tier system might be the result. This would mean that some states in COCOM might treat others differently or might maintain tighter controls until certain states can develop adequate enforcement systems. The Germans, for example, might not have confidence that Greece could adequately prevent some items from being transferred

to controlled destinations. Consequently, if Germany maintained controls on the flow of items from Germany to Greece, it would do harm to the goals of 1992.

Despite all of these difficulties and potential problems, the movement to full integration is an additional factor that will undermine the United States position in COCOM. Once internal controls are removed, it will be much more difficult to maintain surveillance on the flow of technology within the community. This will no doubt present problems for the United States enforcement agencies.

The German Question

German unification poses some particularly complex problems for the maintenance of the multilateral export control program. The problem is that the GDR has had in place a series of contractual agreements to supply the Soviet Union with high technology items that were on the international lists as of the June 1990 COCOM talks. At the June talks, a so-called "interim regime" was established whereby the GDR would continue to fulfill its contractual obligations until the core list discussions had been completed. FRG officials initially hoped that the GDR issue could be solved before unification. With unification occurring far faster than expected, they now hope for either of two changes. First, the threshold of controls could be raised high enough that the items under supply contract in

the GDR would no longer be subject to COCOM control (Interview, Bonn, September, 1990). Secondly, these arrangements be allowed to remain in place due to foreign availability determinations. The level of GDR technological sophistication in militarily significant technologies, however, was much higher than Western analysts expected (Interview, Bonn, September, 1990). It now appears that items the GDR is supplying to controlled destinations, namely the Soviet Union, will remain subject to ccntrol after the core list discussions. This means that Germany as a member of COCOM will be contractually obliged to supply these controlled items to the Soviets. There is some indication that the United States will put pressure on the Germans to break or to not renew contracts (Interview, Bonn, September, 1990). The United States ability to persuade the Germans on this point is questionable, but there will certainly be demands that prohibitions be placed on upgrading and modernizing the technology. A United States official in Bonn said that as a result of these demands he wondered when "the Germans would have enough and say, stick your COCOM" (Interview, Bonn, September, 1990). The United States does seem, however, to have COCOM member state support that the German question needs to be resolved in a multilateral forum. Some European officials have stated that they believe the Germans should be required to bring

the GDR contracts before COCOM on a case by case basis for a multilateral determination (Interview, London, October, 1990; Interview, Paris, November, 1990).

German officials have stated, however, that the Soviet Union should not be punished for supporting German unification. Thus, they would rather see some sort of comprehensive agreement worked out. One possible solution is that the Germans might offer a replacement of some type or some form of compensation if the Soviets agreed to drop contracts. This might make some sense given the Soviets' need for supplies of basic goods over highly sophisticated technology. It is unlikely, however, given Soviet security interests. In all likelihood most of the GDR agreements will remain intact for a specified period. This might mean a situation exists where firms from the former FRG would be prohibited from trading in certain items while firms in the former GDR would be allowed to continue to supply equivalent items to the Soviets. The issue will prove to be an ongoing source of tension between the United States and Germany.

The Future of COCOM: Survival, Mutation, or Dodoism

While all of these issues are at work in ways that might pull alliance commitments to COCOM apart, particularly on the industrial list, there are a number of factors that work to hold the organization together. First, is the

legacy of the perception of the threat posed by the Soviet Union. A British Foreign Office official stated that "as long as the greater proportion of our nuclear arsenals are pointed at the Soviets instead of the Polynesians COCOM will continue to function" (Interview, London, October, 1990). Despite the extensive changes over the past year and the transformation in overall East-West relations, officials in the West continue to perceive the Soviet Union correctly as potentially posing the greatest threat to Western alliance security. British MOD and United States DOD officials on occasion point to what they say are extensive technology acquisition networks that the Soviet Union continues to maintain (Interview, London, October, 1990). It is proving hard to dislodge the image of the Soviet Union as the major source of rivalry with the United States in Western Defense and intelligence agencies. Even in light of the evident reality of economic catastrophe in many Republics, a NATO official stated that "it is difficult to swallow this idea of trade promotion particularly with the Soviet Union. No one is interested in paying for or supplying the technology that would result in an economic recovery that would benefit the Communist party" (Interview, Brussels, September, 1990).

The second factor working to hold the multilateral export control program together is the inertia of the bureaucratic system as well as the size and nature of the

bureaucratic systems set up to maintain the East-West export control program. All of the COCOM states and several non-COCOM Western states have established agencies or branches of agencies charged with maintaining and enforcing the export control program. Responsibility for export controls, as was pointed out in earlier chapters, is usually spread out among several agencies including the Ministries of Economics, Defense, Foreign Affairs, and the Customs Service. Where greater or lesser responsibility and power resides depends on each state's distinct administrative and legal tradition and in some cases on the perceived function of controls by political leaders.

The United States maintains its own extensive unilateral export control system. The system involves numerous personnel in the Defense and Intelligence community, in the Commerce Department, in the State Department, and in the Customs Service. All of these agencies charged for forty years with the responsibility of vigilance on and controlling the diffusion of Western nuclear, arms, and dual-use technology, represent a formidable force (see Long, 1989; Interview, Brussels, September, 1990).

Inertia and standard operating procedures mean that adjustment to a transformation in the international system and East-West relations is a difficult task (Long, 1989).

There has been a demonstrated shift at the highest political levels in an attempt to bring the control program in line with changed conditions. This shift in attitude, however, has yet to seep down to the lower levels of the bureaucracy (Interview, Brussels, September, 1990; Interview, London, October, 1990).

A Multidirectional Multilateral Export Control Program

The final and perhaps the most intriguing factor that will help hold the collaborative framework on export controls in COCOM together is the emergence of support for broadening the gaze of the organization from East-West to include vigilance on North-South transfers of strategically significant technologies (Interview, Brussels, September, 1990). COCOM, however, has been specifically designed to prevent diffusions of particular technologies to Communist ruled states based on assessments of their technological, industrial, and military capability (Interview, London, October, 1990). Expanding the role of COCOM to include destinations outside of the former "target states" would necessitate similar intelligence evaluations for each controlled destination added to the list (Interview, London, October, 1990). So the first problem occurs at a technical level.

The second drawback to this idea occurs at the logistical level. Such a multidirectional control program would be undermined by the fact that non-COCOM states and firms could presumably have the capability to supply controlled destinations with items on the multidirectional COCOM lists. The question would be how to alleviate this foreign availability. The answer might be in resorting to the compliance rent and surveillance instruments used by the United States in the past. Compliance could be theoretically ensured by setting up a network of bilateral arrangements with Eastern European states and the Soviet Union for example. Compliance rents could then be offered, threats of their withdrawal for non-compliance could be made, and monitoring for compliance through some agreed upon surveillance mechanism could be carried out. Rents could take the form of some kind of aid. While in a different category of goods, bilateral talks have been underway for some time with Czechoslovakia on establishing tight controls on the export of symtex. It appears that headway in part resulted from the West offering what might be called rents, credits, and special consideration in COCOM, for compliance (Interview, Europe, October 1990). It would require a multilateral effort to establish such a system.

The third and more complicated issue occurs at the political level. Even in times of extreme East-West tension

full agreement on what destinations should be subject to control and what items should be controlled has been fragile in COCOM. This has had to do with divergences in the perceived interests of member states in terms of which "target state" posed what type of threat to whom and what type of controls on trade were necessary to guard Western security. The problem of resolving this issue, once COCOM was broadened in a multidirectional way, would be massive. The image of the Soviet Union as "the Other" in the height of the Cold War provided an image around which Western states could legitimate export controls on dual-use industrial items; but in a period of growing fragmentation of perceived interest in the international system, forging consensus on which states to target would be near to impossible (barring some event similar to the Gulf situation).

In addition, if the list destinations subject to control is expanded in a multidirectional way then the possibility of such a two tier system within the European Community increases. This is due to the divergence in EC states' positions over which destinations should be subject to what type of control. In the post Cold War world, once the coherence provided by the common enemy is removed, working this issue out becomes very complicated. The British, for example, have expressed a concern over seeing

some classes of dual-use goods transferred to Argentina. Spain, however, would be unwilling to see Argentina subject to such controls. This could lead to some fairly obvious conflicts between the U.K. and Spain over the re-export of some classes of British high technology items (EC, Brussels, September, 1990). Such a difference in perception might lead to conflicts that would adversely affect the 1992 goals.

Despite all of these drawbacks there is apparently support in Ambassador Allen Wendt's office for shifting the gaze of COCOM (Interview, Washington, July, 1990; Interview, London, October, 1990). Some European members of COCOM have also expressed an interest in seeing the organization used as a blueprint for the construction of an entirely new export control regime (Interview, Bonn, September, 1990). These officials argue that agreements on controls on the transfer of missile delivery system technology, chemical and biological weapons technology, nuclear technology, and dual-use technology should be brought under one organization[1] (Interview, Brussels, September, 1990;

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[1]The Missile Technology Control Regime (MCTR) was established in July 1987. The members are the United States, Canada, the United Kingdom, France, the Federal Republic of Germany, Italy, Japan, Australia, Belgium, Luxenbourg, the Netherlands, and Spain.

The "Australia Group" established in 1984 is made up of the EC countries, the United States, the European neutrals, Australia, New Zealand, Japan, and Canada. It is designed to control chemical weapons technology diffusion. Targets

London, October, 1990). That organization they claim should mirror COCOM in the sense that it should not be a formal treaty organization. It should also incorporate the organizational structure and administrative procedures used in COCOM. This type of umbrella organization, according to these officials, should include all advanced industrialized states from the East and the West. This would solve the issue of obtaining compliance from the Soviet Union and the Eastern European states. The creation of such a regime, however, would result in some fairly strange arrangements. The Soviet Union would be, for example, cooperating in an institution to control the diffusion of certain technologies South with states that were members of COCOM. Aside from these types of puzzles, the key issue or drawback once again would be in reaching agreement on what destinations should be subject to what types of control. For these reasons many members of the Western alliance would prefer to see a multi-directional system evolve at first as a network of bilateral agreements (Interview, London, October 1990; Interview, Washington D.C., April 1990).

Finally, there has been some support for dismantling the COCOM industrial list and creating a new organization primarily designed to assist in the transfer and diffusion of Western technology that could speed the process of

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include: Iran, Iraq, Libya, and Syria.

political and economic reform in Central Europe and the Soviet Union (Interview, Brussels, September, 1990; see Bertsch and Elliott-Gower, 1990). According to officials who support this option, the key threat to Western security is not the technological and military capability of these states, but the potential for chaos and economic catastrophe. Political reform according to these officials could be undermined by the inability of progressive governments to supply and effectively produce goods due to inefficient technology. "Our security is threatened now," stated one officials in Bonn, "by their instability" (Interview, Bonn, September, 1990).

Conclusions

This chapter has detailed the interaction of the complex factors that lead to a shift in the United States' policy stand on export controls. It has also examined the factors that lead to a restructuring of the COCOM program. Despite the rapid and radical transformations in the Soviet bloc the Bush Administration was at first reluctant to alter the United States policy stand or agree to a significant restructuring of COCOM. Amid continued Western European pressure on the United States over the issue of liberalizations on controls there emerged a compromise agreement in June 1990 for the reorganization of COCOM. The four theoretical perspecitves set out in chapter one have

informed this narrative-historical account of the 1989-1991 period. How do they help us to account for the shift in the United States position and the outcome of the June 1990 COCOM talks?

First, multiple-factors came together to produce this outcome. The change in the East bloc made it obvious to members of the United States foreign policy community that the perceptual framework of the absolutist discourse was implausible. Continuing to adhere to that discourse came to be regraded by most as counterproductive. Contending discourse camps that had opposed the economic warfare policy during the Reagan Administration gained greater power then as their vision of the appropriate rationale of East-West trade gained greater plausibility. High technology business interests drawing on a neo-Kantian discourse pushed for extensive liberalizations on controls. Their redoubled pressure on the Bush Administration in 1989 resulted from the perceived market possibilities in the East. This camp, supported by the Commerce Department and some members of Congress, had argued throughout the 1980s that the extensiveness United States controls was detrimental to United States interests. As it appeared that Western European firms were going to gain the advantage in market entry into the East this camp became even more vocal.

The plausibility of their vision had not only been enhanced by events in the East, but their position in the inter-governmental power game had been improved. At the institutional level the power of the remaining absolutists was significantly undermined when Stephen Bryant left the DOD. No one was brought in to head up DTSA until the summer of 1991. This gave the Commerce and State Departments an opportunity to improve their positions. Both of these Departments were closely allied with domestic commercial interests and were in agreement with Western European officials who favored more immediate liberalization.

Western European officials, under heavy pressure at home, signaled to the United States with words and deeds that they were prepared to take unilateral steps toward liberalizations on East-West export controls. The United States share of high technology production continued to erode in the late 1980s. The Bush Administration's more cautious approach to liberalizations was thus undermined by Western Europeans willingness to sale. The United States could have still used recourse to rents and surveillance to attempt to slow the process down. Rents available were declining or were becomming more costly, however, and moreover no one in the Administration seemed prepared to take such action. The Bush Administration instead tried to embarrass the Europeans through public display and

condemnation of violations of the COCOM agreements. Bush officials thus attempted to persuade the Western Europeans to slow liberalizations on East-West trade controls.

As the Commerce and State Departments regained some power in the inter-governmental balance the NSC was able to put together a compromise policy proposal in early 1990. Western European states rejected the proposal. The United States, not wanting to further strain alliance relations, began working with British representatives to formulate a workable proposal for the June 1990 COCOM talks. The outcome was a reorganization that reduced to a considerable degree the United States power in COCOM. In additon the negotiation process of the early 1990 period was much less United States dominated.

So the 1989-1991 period can be assessed from the vantage point of the four theoretical perspectives in the following ways. At the structural level during this period the rents available to the United States continued to decline. There was some discussion of strengthening the extraterritoriality provisions of the EAA. This, however, would not change the fact that the capability of high-technology production is now more diffused among advanced industralized countries. Unless patriot missile systems and other such technology are unusually fungible the United States will continue to have difficulty in the future if it

turns to rents and surveillance instruments to attempt to extract compliance on export controls.

The transformations in the East bloc created the perception of expanded market possibilities. Most United States firms came to see the extensiveness of the export control program as extremely damaging to their commercial interests. During this period they saw controls as constraning entrance into Eastern European markets. Western European firms, however, argued that the Bush Administrations' refusal to take action on liberalization was intended to slow down the process so that United States firms could catch-up with European firms that were posed to take immediate advantage of the opening in the East. The pressure of market competition ultimately helped to shift the United States position toward support for greater liberalization.

From the institutionalist perspective there was a significant shift in the United States inter-governmental power balance in the 1989-1990 period. The Commerce Department and the State Department, traditionally more open to the views of domestic commercial interests and to compromising with the allies, gained ground over the DOD. This made it that much easier to achieve a compromise solution as State Department officials worked closely with the British to solve the impasse of 1989.

The changes in the East bloc discredited the absolutist vision and created a strategic opening into which contending discourse camps rushed. The neo-kantian and instrumentalist rationales for East-West trade policy gained greater plausibility. The absolutist camp retreated into the DOD and intelligence community, but continued to issue warnings about the danger of placing to much faith in Gorbachev. Their voice has again gained some ground as crack downs have occurred in the Soviet Union. There is at this point a highly contested environment in the United States where the various discourse camps continue to push their visions of the appropriate rationale for East-West trade policy. It is unlikely in this environment and in the context of the disorder and pace of the new world order that any coherent long term vision for the purpose of East-West trade policy can be worked out at the domestic or the alliance level.

CHAPTER VII

CONCLUSIONS

Accounting for the Dynamics of Collaboration

This project began with two problems and a set of questions. First, I wanted to assess the degree to which export control programs in general and administrative systems for the enforcement of such controls in particular, had a linage in the Western state system. To address this issue I examined past attempts by states to control exports and analyzed in detail the 19th century British export control system. The second problem had two parts, (a) to account for the construction of the post-1945 United States and multilateral export control system, and (b) to account for periods of discord and consensus over the terms of the Western alliance multilateral export control system. In order to address this problem, I analyzed within four distinct periods (1949-1964, 1965-1979, 1979-1989, 1989-1991), (a) How the structural distribution of power and the nature of United States policy and leadership affected collaboration on the form, the nature, and the enforcement of controls; (b) How the nature of global economic competition affected Western alliance states' collaboration on in COCOM and Western firms' compliance with multilateral

controls; (c) How the nature and the distribution of power in domestic intra-governmental politics on this issue affected United States policy and multilateral collaboration; and (d) How the nature of changing representations--of security and threats to security affected United States policy and the nature of multilateral collaboration.

A goal of this study was to refine theoretical perspectives by assessing the strength of a variety of approaches to account for the dynamics of United States-Western European collaboration on multilateral export controls. My thesis is, however, that a multi-factor analysis provides a full and appropriate understanding of the complex dynamics of alliance collaboration in this area. In order to conduct such an analysis I drew on all four of the theoretical frameworks set out in chapter I; modified structural realism, a market explanation, institutionalism, and discourse analysis. Thus this project does not end with a simple solution or an univocal answer to the problems posed at the beginning. I conclude, however, with a reconsideration of what I found regarding both the issue of the genealogy of this practice in the state system. Second, I reconsider what each theoretical framework allows us to explain about the dynamics of collaboration within each period (1949-1964, 1964-1979, 1979-1989, 1989-1991).

Third, I show how modified structural realism, the market explanation, institutionalism, and discourse analysis taken together enrich our understanding of the history of United States-Western European collaboration in this area. These theoretical perspectives are in fact modes of interpretation that allow us to tell different stories about why and how collaboration occurred at this point of intersection between economic and security policy.

These four modes of interpretation conflict, in epistomological and ontological terms, in a number of ways. I recognize these conflicts, but believe little is to be gained from adjudicating between these theoretical perspectives; to leave silence on one side and on the other a definitive voice of explanation.

Past work on multilateral export control collaboration has tended to focus on a single factor and thus has lacked a fully systematic multidimentional assessment. In this project I have provided a theoretically informed narrative-historical reconstruction of the dynamics of collaboration. In that sense then the project is an example of what Clifford Geertz once called "thick description." John Ruggie has argued that "thick description is an essential tool of all interpretive sciences" (Ruggie, p. 2, 1990). Thick description provides a more comprehensive picture of the multiple dimensions of collaboration in this case of

state interaction in a coordinate policy endeavor. This is not to deny that there may be more parsimonious paths to partial explanation. Such paths might focus on fewer variables. The parsimonious path, however, requires us to pass by the multiple dimensions that make possible and shape collaboration. Trying to find the most parsimonious path to explanation can also reinforce a vision of the enterprise of international relations theory as a process of establishing some perspective as having an "infinite versatility of apparent applications" (Ruggie, p. 2, 1990; also see Bull, 1966, Geertz, 1973 and Der Derian and Shapiro, 1989 on this issue). This view of international relations theory can remove us from the terrain of international relations by allowing us to believe that we can have more than simply "partial guides to an essentially intractable subject" (Bull, p. 31, 1966). Thick description serves to ground our feet in the complexity and dynamic history of international relations.

Reading Export Control Programs

The attempt to control the diffusion of material, instruments or technology perceived to give one state strategic or economic advantage over another is not new in the Western state system. While states have attempted, in various ways to control the diffusion of such items,

systematic export control and enforcement programs did not exist until the modern era.

The 19th century British control system, including its administrative structure and enforcement instruments, resembles the post-1945 United States and multilateral control programs. The British export control system was designed to ensure ongoing economic advantage by maintaining monopoly control of certain classes of machines and certain types of know-how. In that sense one could argue that the British system based on mercantilist considerations, was different in terms of rationale, goals, and function from the post-1945 Western alliance strategic export control system. The post-1945 system, particularly since the economic warfare period of the 1950's, has been designed to regulate the diffusion of "strategically significant technology" in order to maintain "lead-time advantages over the Soviet bloc."

My analysis showed, however, that the most revealing element in the comparison of these systems is the symbolic value of the categories of items that are controlled or considered subject to control: what they represent within the context of competition and rivalry between states. In order to demonstrate this I employed a semiotic reading of the texts of debates in the House of Commons in the early 19th century over the rationale of the British control

system. By reading these texts in terms of the language used to defend the programs and in terms of the symbols and images evoked in debates over the types of goods subject to control, it was possible to assess conceptualizations of power and advantage at this particular historical juncture. Based on this analysis I argued that some of the dynamics of the formation of 18th century export prohibitions can be explained by a fetishization of the notion of the "machine." This sign's signification politically, culturally, and socially was bound up in or fixed to images of power and advantage over rivals. "Strategically significant technology," I maintain, has had a similar use value in propelling the formation of post-1945 export control policy and in legitimating arguments for constructing and ceding authority to enforcement bureaucracies. Debates over the function, rationale, and maintenance of export control systems, in both the 19th century British case and the post-1945 case, can be read then as essentially clashes of conceptualizations held by policy elites of the source of power and advantage over rivals in the international system.

Explaining the Dynamics of Post-1945 Alliance Collaboration on Export Control and Control Enforcement

Following World War II, United States policy on East-West trade became dominated by a strategy of economic warfare. This strategy was designed to inflict damage on

Soviet bloc economic development and war making potential. This policy was legitimated by language, images and symbols that I defined as an absolutist discourse. The Soviet Union was represented, for example, as the embodiment of an Enemy-Other intent on disrupting international harmony and on destroying "Western civilization." In order to isolate and weaken this perceived threat the United States adopted rules and established institutional structures to carry out a broad export control program. United States officials sought Western European support in this endeavor, both to ensure its effectiveness and for the broader moral crusade legitimated by the terms of the absolutist discourse.

Western European officials were reluctant to follow the United States lead. They were suspicious of Stalin, but they did not share the image of the Soviet Union articulated by Kennan or the view of communism held by many members of the Truman Administration. I have explained this divergence in terms of the way Western European outlooks were inherited from and informed by cultural-historical experiences. Most groups within Western Europe wanted to re-establish traditional trading ties with the Soviet Union and Eastern European states. Some Western European officials argued that East-West trade could have an instrumental value in manipulating Soviet policy and dividing the Soviet bloc. I explained this view in reference to an instrumentalist

discourse because the possibility or accepting such a view was contingent on certain images and representations of the Soviet Union; that is, seeing it as a traditional Great power with an interest in maintaining the status quo and as a state that would react in a predicable fashion to economic carrots and sticks.

On the other hand there were Western European officials who argued that renewed trade ties held mutual economic benefits and that political and security issues should be decoupled from questions of trade or commercial ties. This policy vision was supported in terms of the neo-kantian discourse. Discourse analysis allowed me to account for the lack of alliance consensus because it provided the framework for assessing factors that resulted in a divergence in the alliance over the purpose that was to guide East-West trade policy. Clearly, there were divergences in economic interest as well. Discord, however, did not arise simply from divergences in readily apparent economic interests, but these discourses served as the grids through which officials perceived and understood the relationship between their economic and security interests.

Despite these divergences Western European officials agreed to follow the United States lead from 1951-1953 in an economic warfare program. I accounted for this shift with three inter-related factors. First, Stalin's aggressive

moves in the years immediately following the war and the outbreak of the Korean war weakened the immediate plausibility of symbols and images of the instrumentalist and neo-kantian discourses in Europe. Western European officials became less sanguine about the potential political or economic benefits of trade with the East.

Secondly, the United States expressed its willingness to use preponderant economic capability to attempt to bring Western European states and firms in line with its more restrictive position. United States instruments for leverage to ensure compliance took several forms. I demonstrated the relationship between these instruments through a micro-economic model of contested exchange. At one level the United States used rents in the form of Marshall Plan and economic aid, military assistance, and government procurement contracts to obtain compliance. The threat of the withdrawal of these rents was embodied in legislation requiring the executive to cut off all assistance to states that violated the United States' restrictive position. At another level the United States, through the ECA and Battle Act, instituted an export licensing system with extraterritorial application. This allowed the United States to use access to specific items and technologies that it controlled as rents for Western firms' compliance with controls. The United States could

withdraw these rents by denying or delaying export license applications, thus impeding access to relatively scarce goods and technology. This system also included an elaborate surveillance program for vigilance on West-West and East-West transactions and trade flows to gauge compliance and to establish blacklists of firms and individuals that violated controls. The micro-economic contested exchange model allowed me to explain the relationship between these instruments in United States compliance and enforcement efforts.

The third factor that helped to enlist Western European collaboration was the way in which State Department officials worked to accommodate some of the concerns of alliance officials in COCOM. State Department officials helped to ensure that some exception mechanism would be built into the COCOM structure so that particular Western European states would not be cut off from access to Eastern bloc raw materials. At the inter-governmental level in the United States there were then divergences between the States Department, the Commerce Department, and the Department of Defense positions' over the appropriate strategy to ensure Western European states' and firms' compliance. The inter-governmental conflict that emerged in this period was to characterize the next forty years of United States policy in COCOM.

After 1953 the nature of Western alliance collaboration on multilateral export controls shifted. Western European demands for a less restrictive multilateral export control strategy re-emerged. At the intra-allied level the United States conceded to these demands resulting in a series of relaxations in COCOM in the late 1950's. I explained this transformation by showing how the death of Stalin and the end of the Korean war resulted in the resurgence of instrumentalist and neo-kantian discourses in Western Europe. In the United States, however, the absolutist discourse was still preponderant in debates over East-West policy and thus the United States continued an economic warfare strategy through its own export control program. The Western European demands for relaxations arose in the context of declines in Marshall Plan aid and in the context of a global recession. Thus I showed how structural level factors also helped produce the shift in the Western Europeans' position.

The United States' willingness to concede to Western European demands was a result of two factors. First, American officials expressed a belief that it was not in the interest of the United States to risk an open diplomatic rift with the allies over this issue. This appeared to be based, in part, on the second factor: The United States, through controls on access to its technology and goods, via

the export licensing program, the IC/DV system, and surveillance systems, could continue to impose its more restrictive position on Western firms regardless of relaxations in COCOM. After 1954 the rationale for alliance collaboration in COCOM shifted away from economic warfare to maintaining a forum for coordinating efforts to control the flow of strategic goods and strategically significant technology to the Soviet bloc. The micro-economic contested exchange model, however, helps identify the instruments through which the United States attempted to maintain enforcement on a more restrictive control program.

In the 1965-1979 period I showed how the United States' shift, beginning in the late 1950's, away from economic warfare to economic diplomacy in East-West trade policy was bound up in the erosion of the authority of the symbols and images of the absolutist discourse. This shift was initiated by officials in the executive who came to believe that the United States could use access to its economic and technological advantages as carrots and sticks in extracting concessions from the Soviet Union. This policy stand was legitimated and made possible by the rise of an instrumentalist discourse based on a shift in representations and perceptions of the nature of the Soviet threat.

Intensified West-West economic competition and an increased desire by Eastern bloc states to expand trade with the West, resulted in a rapid expansion in the number of Western and United States firms with interests in developing Eastern markets. Attempts by the executive during this period to control and coordinate trade linkage programs were undermined either by members of Congress who adhered to a less refined notion of economic diplomacy as a series of sticks to bludgeon the Soviets into altering domestic policies while others, voicing competitive commercial concerns, wanted to forego linkage and institute and East-West trade policy based on more neo-kantian considerations. The United States executive's instrumentalist position, whether in the form of Nixon-Kissinger or Carter-Huntington linkage, was also undermined by allied officials' reluctance to play linkage with the Soviets on the United States terms. United States policy during this period became confused. The increased number of domestic commercial groups with interests in East-West trade policy and the contending discourses that emerged resulted in unpredictable policy outcomes. In COCOM the United States used exception requests liberally and restrictiveness in the export licensing program abated. This state of affairs was a direct consequence of intensified West-West economic competition and the erosion of a common understanding of the

appropriate relationship between East-West trade and Western security in the United States foreign policy establishment.

Following the invasion of Afghanistan in 1979 United States policy on East-West trade shifted. In the 1979-1988 period I explained this shift, away from economic diplomacy and trade expansion and back toward economic warfare, as a result of the re-emergence of the absolutist discourse as the guidepost for East-West trade policy strategy. I used the four interpretative frameworks to account for the United States attempts to reinvergerate domestic and multilateral controls and to account for the complex dynamics of alliance collaboration.

First, I demonstrated how officials within the Reagan Administration articulated a conceptualization of the nature of the Soviet Union and the nature of the Soviet threat that was clearly expressive of the absolutist discourse. This conceptualization legitimated an economic warfare program. It also reinforced these officials' determination to roll back detente and to silence other discourses and conceptualizations of the appropriate relationship between East-West trade and Western security. These hard-line unilateralist officials in the Administration believed that allied officials could be persuaded to collaborate in a reinvegeration of the multilateral export control program. If persuasion failed, however, they were willing to turn to

other forms of leverage. It was for this reason that these officials embarked on a massive expansion and strengthening of the instruments that the United States had used in the past to ensure compliance with its more restrictive position.

Secondly, I showed how these officials, in the DOD under Richard Perle and in the Commerce Department under Lawrence Brady, were able to gain the upper hand in intra-governmental struggles for control of not only United States policy on East-West trade, but over strategy to be used to bring the allies along. The consequence of this inter-governmental power shift was intensified pressure on alliance states and firms.

Third, through the contested exchange model I demonstrated the relationship between the instruments that the Reagan Administration used to attempt to ensure Western firms' compliance with restrictive controls and in an attempt to extract concessions from allied states in COCOM negotiations. Some Executive officials believed that a combination of rents, compliance surveillance, and the threat of rent withdrawal for non-compliance could be used to achieve their policy ends. This strategy not only failed, but it had some extremely negative consequences.

I showed that at the level of issue specific capability the United States relative economic power and its

share of global high technology production declined through the 1970's. United States disproportionate share of leading edge technological production was eroded in a number of areas. If rents are defined as simply the granting to firms and states relatively free access to United States leading edge technology considered to have strategic significance then we can say that the rents available to the United States declined. In addition the cost of offering any given rent, such as economic aid rose.

I showed that in this context Reagan Administration officials strengthened surveillance systems for both East-West and West-West technology transfers. This increased surveillance included a closer monitoring of export license applications and an increase DOD role in the review of license applications. It also involved greater resource outlays for data collection and special intelligence operations to map technology transfers. This increased vigilance enhanced the United States capability to detect violators of the COCOM and its unilateral export control program. In addition to this step the Executive branch also increased its ability to withdraw rents by reaffirming extraterritoriality in the EAA and by gaining more authority to impose sanctions for violations. The Reagan Administration hoped that this threat of rent withdrawal and the higher risk of detection would result in compliance from

Western firms and states. This was not a cost minizing strategy. The level of desired complicance was not settled upon endogenously from an assessment of an optimal combination of available rents and surveillance, but was set exogenously under the terms of the absolutist discourse.

Under the terms of the absolutist approach as rents available declined the budgetary outlays for surveillance and the intensity of surveillance increased. This strategy had two consequence, (a) Western firms perceived increased cost for compliance and thus where possible began to try to design around United States technology. This accelerated the fall of rents available to the United States as Western firms turned to next best alternative suppliers., (b) This strategy also began to entail high diplomatic costs as Western European leaders publicly reacted to the leverage strategy. The fourth part of the analysis of this period showed that the lesson of the potential competitive costs of such an extensive surveillance and export control program was not lost on domestic interest groups. The Reagan Administration believed that the terms of the absolutist discourse would be able to silence domestic opposition to economic warfare. This, however, proved not to be the case as business interest groups proved unwilling and perhaps unable to absorb the potential cost to West-West trade of such a restrictive stand on East-West trade.

In the 1989-1991 period I assessed the dynamics that lead to a shift in the United State's policy stand on export controls and to a restructuring of COCOM. The four theoretical perspectives set out in Chapter I informed this narrative-historical account.

Despite the rapid and radical transformations in the Soviet bloc the Bush Administration was at first reluctant to alter the United States policy stand or to agree to a significant restructuring of COCOM. Amid continued Western European pressure over the issue of liberalizations there emerged a compromise agreement in June 1990. Several factors came together to produce this outcome.

First, the changes in the East bloc made it obvious to members of the United States foreign policy community that the perceptual framework of the absolutist discourse was implausible. Continuing to adhere to that discourse camp came to be regarded by most as counterproductive. Contending discourse camps that had opposed the economic warfare policy during the Reagan Administration gained greater power as their vision of the appropriate rationale for East-West trade policy gained greater plausibility. Changes in the East bloc reacted a strategic opening into which contending discourse camps rushed to try and gain control of United States East-West trade policy. High technology business interests drawing on a neo-kantian

discourse pushed for extensive liberalizations on controls. Other groups, in the State Department and the Executive, pushed for a slower deliberate relaxation linked to continued reforms. Their policy vision was legitimated in terms of the instrumentalist discourse.

During the 1989-1991 period the plausibility of the neo-kantian and instrumentalist discourses had not only been enhanced by events in the East, but their positions in the inter-governmental power game had been improved. At the institutional level the power of the remaining absolutists in the DOD was weakened with personnel changes in 1989. No one was brought in to head up DTSA until the late spring of 1989. This gave the Commerce and State Department an opportunity to improve their positions in the inter-agency power struggle. As these Departments gained greater power over the formulation of policy, the NSC, working with the British representatives, was able to produce a workable proposal for the June 1990 COCOM meeting. The DOD, however, was critical of the reorganization, particularly the agreement to renegotiate the COCOM list from scratch.

At the alliance level Western European officials, under heavy pressure at home signaled to the United States with words and deeds that they were prepared to take unilateral steps toward liberalizations if the Bush Administration would not alter its position. The

Administration's more cautious approach to liberalizations was thus undermined by the growing willingness of Western European states to allow their firms to sell. The United States could have turned to leverage instruments to attempt to slow liberalizations. The rents the Administration could have used, however, were few. In addition, no one in the Bush Administration was willing to advocate such a clearly counter-productive strategy. Instead the Administration tried to pressure the Europeans through public displays and condemnations of export control violations.

At the market level United States high technology business interest groups redoubled their pressure on the Bush Administration as they perceived market possibilities in the East. This camp was supported by the Commerce Department and some members of Congress. These interest groups had argued throughout the 1980's that the extensiveness of the United States controls harmed commercial interests in West-West trade. As it appeared that Western European firms were going to gain the market entry advantage in the East, due to their governments willingness to liberalize with or without the United States, domestic interests pressure on the Bush Administration increased. The present state of allied and United States policy on East-West trade is thus rather divided as these discourse camps continue to try and gain control over policy

by establishing the most plausible conceptual framework for policy purpose.

Assessing the Theoretical Perspectives

This case study has allowed me to assess the explanatory strength of four theoretical perspectives in accounting for the dynamics of alliance collaboration. Taken together, these perspectives provide us a picture with sufficient detail to account for the creation of and shifts in alliance collaboration. The factors that these perspectives focus on interacted with each other to make collaboration possible and to alter the terms of collaboration in various periods. The historical narrative of the 1949-1964, 1964-1979, 1979-1989 and 1989-1991 periods was made possible by the modified structural realist, market, institutionalist and discourse frameworks.

I used the micro-economic contested exchange model to account for the role of the distribution of issue specific capability as a factor in the dynamics of alliance collaboration. At this level I showed how the erosion of United States capability preponderance over time altered its ability to extract compliance from alliance states and Western firms for its preferred policy position. Using this model I showed in a systematic fashion the relationship between United States compliance extraction instruments. These instruments are embedded in the United States export

control institutional framework that was established in 1949.

The contested exchange model is an effective framework for allowing us to explain the means by which the United States attempted to ensure compliance with economic warfare in the 1949-1964 period and during the first Reagan Administration. In order to establish the COCOM program and to ensure the integrity of controls the United States drew on a combination of enforcement rents, compliance surveillance and the threat of rent withdrawal for non-compliance. At the outset of the COCOM program the United States had access to an extensive mix of rents such as aid, access to leading edge technology and government procurement contracts. In the 1949-1953 period, compliance with the United States policy vision was relatively easy to obtain because United States rents were more attractive to Western States than recreating economic ties with the East. The threat of rent withdrawal was also effective because Western firms did not have alternative suppliers.

In 1953 as Marshall Plan aid declined, as the global economy contracted, and as the Soviet Union moved into the post-Stalinist period the United States ability to use the aid rent was constrained or became more costly. The United States, in the face of strong Western European pressure, agreed to some liberalization in COCOM, but resorted to

strengthening its unilateral program to ensure compliance. Rents during this period could still have taken a number of forms, however, the United States strengthened its ability to withdrawal, free access to leading edge technology and strategically significant technology. This was accomplished through extraterritoriality claims and the expansion of licensing systems and other surveillance systems to gauge compliance.

In the early 1980's when members of the Reagan Administration wanted to establish policy coordination with its economic warfare policy they turned to strengthen these instruments. While these instruments were embedded in the administrative and legal framework of the United States export control system they had been neglected during the trade linkage 1964-1979 period. The attempt to revive economic warfare, legitimated through the absolutist discourse, and to obtain alliance compliance failed in part as a result of the shift in the distribution of issue specific capability. The rents that were available to the United States for leverage had declined and those available were less attractive because of next best alternative suppliers. The attempt to strengthen this leverage system by increased surveillance and more extensive monitoring and by expanding Executive authority to withdrawal rents was counterproductive with the Western Europeans. It had the

three following consequences: it increased government resource allocation cost; it entailed costs for the competitiveness of United States high-technology interests as Western firms turned to alternative suppliers; and it entailed diplomatic costs as it strained alliance relations. Unless patriot missile systems or other such technology proves to be extremely fungible as rents the United States will continue to incur such costs in the future if it turns to these instruments in an attempt to extract Western European compliance with a preferred policy position on export controls determined exogenously.

Through a market explanation I was able to account for factors that helped to alter United States policy on East-West trade and that shaped the nature of collaboration on multilateral export controls. During the 1949-1964 period business interest groups in the United States, for a number of reasons, were not inclined to challenge the restrictive export control program. The incentive to pursue market possibilities in the East was minimal and thus most domestic groups did not see the United States program as imposing significant costs. In addition, because Western firms did not have next best alternative suppliers for leading edge technology United States firms did not see the licensing and surveillance systems as a hindrance to West-West trade or as a factor that could damage commercial competitiveness.

Significant domestic interest groups in Western Europe, however, did see the restrictive export control program as imposing costs by closing them off from the Eastern European market. Opposition to the economic warfare policy became particularly strong as Marshall Plan aid declined. The shift in the Soviet Union after 1953 and the end of the Korean war created an opportunity for interest groups in Europe to pressure their governments for liberalization. Support for the movement away from economic warfare came from both the right and the left in Western Europe.

The market perspective provides a particularly effective framework for explaining policy shifts and the dynamics of collaboration in the 1964-1969 and 1989-1991 periods. During these periods business interest groups in the United States, with allies in the Commerce Department and Congress, were able to pressure the Executive to move toward liberalizations. In both the 1964-1979 period and the 1989-1991 period the Executive sought to maintain control over East-West trade policy. In the case of the 1964-1979 period the Executive's preferred trade linkage policy was undermined by commercial pressures. As global economic competition increased, Western European states were more inclined to sell East on their own terms rather than play linkage on the United States' terms. Business

interests and government officials believed that this state of affairs effectively undermined the multilateral export control program and thus pushed an "if you can't convince them join them" policy line.

In the 1989-1991 period changes in the East created the possibility and intense economic competition was the incentive for intensified domestic business group pressure to alter East-West trade policy. In the United States high-technology business interest groups in particular placed extensive pressure on the Bush Administration to liberalize controls. Throughout the 1980's these groups had opposed the extensive United States surveillance systems and intensified monitoring of West-West and East-West trade. High-technology interest groups saw that these extensive programs hurt their commercial competitiveness as Western firms, rather than bear increased costs, turned to alternative suppliers. In the face of a situation were Western European officials, due in part to domestic pressure by commercial groups, indicated a willingness to liberalize without the United States these groups intensified pressure on the Executive through Congress and the Commerce Department.

The institutional perspective allows us to understand how the nature of inter-governmental power games affected United States policy and the dynamics of collaboration.

Western European officials from Ministries of Economics and Foreign Affairs have always been responsible for their states' positions in negotiations on multilateral export controls. The State Department has traditionally been dominate in setting the terms of the United States position in COCOM. Responsibility for United States export control policy, however, has always been spread out among the Commerce, the State and the Defense Departments. The Commerce Department has by and large supported a minimalist position on controls while DOD has advocated strict controls. In some instances, however, an ironic policy alliance between Defense officials and Commerce officials has been forged. This was the case in 1949-1953 and in the early 1980's. The Commerce Department's willingness to join DOD in such an alliance has been based in part on the idea that if a restrictive control system is to guide policy then the Europeans should be brought into line. The reasoning for this position being that United States firms should not experience lost sells as a result of Western firms non-compliance with controls. Competition between the DOD, the Commerce Department and the State Department to define the purpose, the nature and the scope of export control policy has been constant since 1949. The dynamic context of shifting Soviet-United States relations has been the background for this competition. Soviet foreign policy

adventures have often presented the opportunity for the DOD to aggrandize its position in the politics of United States export control policy. This was the case in the 1949-1953 period and after 1979. Soviet moderation has provided the opening for the Commerce or State Department to push their policy vision.

The State Department has often been more inclined to try and find pragmatic workable solutions on the nature and extent of export control cooperation by agreeing to compromises with their counterparts in the Western European Ministries of Foreign Affairs. The State Department has been, in some instances, willing to strike compromises with Western European officials that ran counter to the position advocated by Congress or other United States government Departments. This was particularly the case in the 1949-1964 period. During the early 1980's the State Department's position in the COCOM negotiation process was undermined as the DOD gained the upper hand in the inter-governmental power struggle over defining the terms of East-West trade policy. The consequence was that DOD officials in bilateral and multilateral talks intensified pressure on Western European Ministry of Economics and Ministry of Foreign Affairs officials. In cases where the DOD was unable to persuade these officials of necessity of economic warfare DOD officials were less inclined to compromise and more

likely to advocate or threaten leverage. DOD dominance of inter-governmental politics on export control policy has lead to discord at the alliance level. This discord results from the fact that the key Western European representatives to COCOM are from Ministries whose vision of the appropriate relationship between East-West trade and Western security diverges from the DOD.

Discourse analysis allowed me to show how policy choices are legitimated through constructed understandings of interests. Discourses simultaneously frame and mediate these understandings making possible some policies and precluding others. In this case I showed how particular images of the Soviet Union, representations of technology and trade in relation to security, and the image of the nature of threats to security constituted particular policies as legitimate. Economic warfare, trade linkage, and trade liberalization are all East-West trade policy options. Each of these options is made plausible by a vision of purpose that is constructed and given meaning through a particular discourse. I showed here how the terms of the absolutist discourse legitimated economic warfare, how the instrumentalist discourse legitimated trade linkage, and how the neo-kantian discourse legitimated liberalization.

All of these discourses have been present throughout the history of post-1945 debates on United States and COCOM export control policy. These discourse camps, both in the United States and in Western Europe, have competed to establish the purpose of their states' East-West trade and export control policy. Soviet actions, states' historical experiences, and the state of overall Western alliance-East bloc relations affects the persuasive power of the images and representations of these discourses. Collaboration on export controls has taken place within a dynamic context where discourse congruence between alliance officials has produced greater cooperation while incongruence has produced greater discord.

By reconstructing a theoretically informed narrative-historical account of alliance interaction in this policy area I have shown how collaboration is made possible by multiple factors. Accounting for the dynamics of discord and cooperation in this case requires that we draw simultaneously on several different theoretical frameworks. Thus I do not claim that discourse analysis surpasses other perspectives in its ability to account for policy formation or alliance collaboration. Its main function in this case has been to help us to understand how policies are made possible by particular visions of purpose (see Der Dervan, 1990; Klein, 1990; Shapiro, 1990; Chaloupka, 1990; Weber,

1990). The institutionalist framework allows us to explain how such visions get sifted in governments and among allies. The issue-specific capability and market frameworks allow us to explain whose vision can hold sway at any given time among the allies. Taken together these frameworks help us to understand the multiple factors that interact in the dynamics of Western alliance collaboration on export control policy.

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