Disciplining trade finance: the OECD Export Credit Arrangement

Andrew M. Moravcsik

The salience of tariffs, quotas, and other import restrictions in discussions of trade policy obscures what may well become a more significant form of government intervention: subsidized export promotion.[1] Higher exports are viewed almost universally as a vital national objective. Governments mount export drives, mobilizing vast public and private financial resources to expand sales abroad. Export promotion commonly takes the form of financial subsidies to the inputs, production, or sales of export industries. The existing literature on conflict and cooperation in the international political economy has paid little attention to the increasing role in world trade of subsidies and other trade-finance links. Yet such links may have a decisive long-term effect on the distribution of wealth and power in the international system. Econometric evidence suggests, for example, that declining American global market shares in high-technology sectors reflect neither reduced cost and price competitiveness nor changes in the structure of comparative advantage, even when exchange rates are taken into account. Instead, they may result from foreign export promotion policies.[2]

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1. For evidence of the increasing importance of export promotion, see Michael R. Czinkota and George Tesar, eds., *Export Policy: A Global Assessment* (New York: Praeger, 1982); Gary C. Hufbauer, "Subsidy Issues after the Tokyo Round," in William R. Cline, ed., *Trade Policy in the 1980s* (Washington, D.C.: Institute for International Economics, 1983), pp. 327–62; and Gary C. Hufbauer and Joanna Shelton Erb, *Subsidies in International Trade* (Washington, D.C.: Institute for International Economics, 1984).

2. Raymond F. Mikesell and Marle G. Farah, "U.S. Export Competitiveness in Manufactures in Third-World Markets," in Center for Strategic and International Studies (CSIS), *World Trade Competition: Western Countries and Third-World Markets* (New York: Praeger, 1981), pp. 45–170. The data were drawn from the period 1970–1978. Conditions during the subsequent

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This article has three purposes. The first is to provide an historical account of the Export Credit "Arrangement" negotiated under the auspices of the Organization for Economic Cooperation and Development (OECD). This international "regime," created in 1975 and repeatedly strengthened since then, consists of a set of rules restricting one of the most widely employed instruments of state export promotion: subsidized trade finance.[3]

The second purpose of this article is to propose a theoretical explanation for the formation, maintenance, and success of this regime. The OECD Arrangement has flourished under conditions that appear inhospitable to international economic cooperation. The period from 1975 to 1985 was one of economic hardship and declining American predominance in both goods and capital markets. Moreover, the Arrangement was formed outside the established framework of the General Agreement on Trade and Tariffs (GATT), and hence did not benefit from a preexisting, highly developed institutional milieu. Finally, it restricts government aid to particularly vulnerable industries: those with high fixed costs and perennial surplus capacity. Under these conditions, the success of the Arrangement is surprising.[4] The explanation proposed here emphasizes three factors: the structure of government institutions, the relative power of states, and the functional value of information.

The third purpose of this article is to demonstrate the advantages of a certain general approach to the explanation of international cooperation. The approach is based on a conception of international cooperation as a multistage process, each stage of which may be explained by a separate theory. Although employing more than one theory involves a loss of parsimony, there are compelling reasons—empirical, logical, and methodological—for conceding this disadvantage in order to avoid monocausal explanation. The

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decade may have varied from this pattern. On the deepening links between trade and finance, see Harald B. Malmgren, "Changing Forms of Competition and World Trade Rules," in CSIS, *World Trade Competition*, pp. 425 and 427ff.

3. For literature reviews on international regimes, see Stephan Haggard and Beth Simmons, "Theories of International Regimes," *International Organization* 41 (Summer 1987), pp. 491–517; and Stephen Krasner, ed., *International Regimes* (Ithaca, N.Y.: Cornell University Press, 1983), from which the common definition of a regime is drawn: it is a set of "principles, norms, rules, and decision-making procedures around which actor expectations converge in a given issue-area" (p. 1).

4. Peter Cowhey and Edward Long, "Testing Theories of Regime Change: Hegemonic Decline or Surplus Capacity?" *International Organization* 37 (Spring 1983), pp. 157–85. On the importance of an "extended period of prosperity, associated with liberal policies," see Robert O. Keohane, "The World Political Economy and the Crisis of Embedded Liberalism," in John H. Goldthorpe, ed., *Order and Conflict in Contemporary Capitalism: Studies in the Political Economy of Western European Nations* (Oxford: Clarendon Press, 1984), p. 16. On hegemony, see Stephen Krasner, "State Power and the Structure of International Trade," *World Politics* 28 (April 1976), pp. 317–47; and Robert O. Keohane, *After Hegemony: Collaboration and Discord in the World Political Economy* (Princeton, N.J.: Princeton University Press, 1985). On the importance of preexisting institutions, such as GATT, see Vinod Aggarwal, *Liberal Protectionism: The International Politics of Organized Textile Trade* (Berkeley: University of California Press, 1985).

empirical reason is quite simply that no single theory of cooperation has been confirmed over more than a few cases, if even that.[5]

The logical reason for eschewing monocausal explanation is that existing theories of international cooperation do not in fact explain precisely the same phenomenon. International cooperation is not a discrete dependent variable; it is a bundle of interrelated dependent variables. At the broadest level of generalization, theories of international cooperation can be divided into three categories, each of which accounts for a different aspect of cooperation: (1) theories that explain state preferences for cooperation, (2) theories that explain the outcomes of interstate bargaining, and (3) theories that explain compliance with institutional norms. These three dependent variables—preferences, bargaining outcomes, and compliance—can usefully be viewed as stages in a logical, and often temporal, process. In a given round of a negotiation, states first define their interests, then bargain to an agreement, and finally decide whether to comply with it. A different theory may be used to explain the observed outcomes at each stage.

The methodological corollary of these empirical and theoretical arguments is that theories which explain different aspects of cooperation should not be tested against one another as monocausal explanations. Nor is it necessarily proper to combine theories, as in a multivariate regression model, by measuring how much of the variance in "cooperation" each can explain. Instead, the dependent variable, cooperation, must itself be disaggregated. Models of cooperation should be built, and tested, in stages, with each stage (potentially) explained by a different theory. To ignore this corollary and test the ability of single theories to predict cooperation is to assume implicitly that there is no variance in other stages of the process except the one being tested. Not only is this, as we have just seen, a dubious assumption on *a priori* grounds, but it is likely to generate false-positive and false-negative correlations. Given the inevitable empirical imprecision of social scientific explanation, we would not know whether the success or failure of a monocausal test is due to the influence of that variable or to incorrectly specified assumptions about one of the other stages.[6]

5. For example, nearly every test of the most widely cited theory of regimes, hegemonic stability theory, has failed to confirm it. For a literature review, see Haggard and Simmons, "Theories of International Regimes," p. 500.

6. Here I draw on Alexander Wendt's critique of methodologically individualist theories, found in "The Agent-Structure Problem in International Relations Theory," *International Organization* 41 (Summer 1987), p. 344. The same point is made by Timothy J. McKeown in "The Limits of Structural Theories of Commercial Policy," *International Organization* 40 (Winter 1986), pp. 43–55. This analytical approach should not be reified: the stages are not always entirely independent; thus, this approach is not theoretically neutral. By ordering the stages of cooperation in this way, for example, it is implicitly assumed that state interests are determined independently of the processes of bargaining and compliance themselves. Among the implications of this weak rationality assumption is the exclusion of some theorizing about the phenomenon of learning, that is, about changes in preferences through feedback from strategic interaction. (Note, however, that the first stage involves the explanation of prestrategic preferences, not interests, which may take the strategic situation into account.) The model also

In the next two sections, I present a description of government-supported trade finance and a brief history of the OECD Arrangement that regulates it. In the third section, I use a three-stage model of international cooperation to explain the emergence and stability of this regime. In accordance with the approach described above, the three stages of cooperation are (1) the formation of state preferences for cooperation, (2) the outcome of interstate bargaining, and (3) compliance with the resulting institutional rules. A separate theory explains outcomes at each stage. An institutional theory of state preferences is employed in the first stage, a power-bargaining theory in the second, and a functional theory of regimes in the third.

Trade finance as an international issue

An export credit is a form of trade finance—a loan issued by a government or private bank to finance exports. An export credit may be extended to a domestic exporter or a foreign importer; in either case, credits generally allow the final purchaser to defer payment. Export credits are the financial lubricant that keeps the international trade system going. In each OECD country, a public export credit agency functions as a public or semipublic bank, borrowing from the treasury or public capital markets and using the funds to finance exports. All OECD governments also extend or guarantee long-term export credits (those with a term-to-maturity of over five years) to allow purchasers, particularly those in the newly industrialized countries (NICs), to defer payment for very expensive, sometimes multibillion dollar, capital goods. These goods typically include commercial aircraft, industrial plants, transportation systems, and mining equipment.[7] It is these long-term credits that concern us here.

The worldwide sum of capital lent in this way is substantial. In the early 1980s, over one-third of OECD exports received some long-term financing, of which 5 to 55 percent, depending on the country, was supported by governments.[8] Most credits support exports from OECD countries to less developed countries (LDCs). It is now common for LDCs to explicitly link trade and finance on major development projects. When private bids, foreign aid, and government export credits are evaluated as a package, even modest

excludes feedback, in the form of rational expectations, from compliance to bargaining. Those interested in learning or rational expectations theory may wish to order the stages of cooperation differently.

7. For outlines of national trade finance systems, see OECD, *The Export Credit Financing Systems in OECD Member Countries*, 3d ed. (Paris: OECD, 1987); Syed Sajjadur Rahman, *The Competitiveness of Canada's Officially Supported Export Financing System: Detailed Findings* (Ottawa: Conference Board of Canada, 1985); and David Bowen, Dominic Mills, and Martin Knight, *Guide to Export Finance* (London: Euromoney Publications, 1986).

8. Export-Import Bank, *Report to the U.S. Congress on Export Credit Competition . . .* (mimeograph, 1980–1982).

government credit subsidies can be decisive.[9] In 1982, officially supported or guaranteed medium- and long-term export credit programs accounted for roughly 12 percent of net financial flows to LDCs.[10] In the late 1970s, the Export-Import Bank of the United States (Eximbank), not one of the more active agencies, committed "more long term maturities [to the LDCs] than all U.S. commercial banks combined, and three times as many as all nonbank U.S. financial institutions."[11]

The political issue raised by export credits stems from the fact that many governments subsidize them in order to promote exports. Official support may take the form of guarantees and insurance for bank loans ("pure cover") or direct government finance, such as direct loans, interest rate subsidies, and public refinancing. Government-supported export credits are usually offered at rates below those that would be charged on the market for similar loans, if such loans are available at all. A modest implicit subsidy is contained in most export credits, since the national credit agency is a nonprofit organization with access to capital at government rates. In some cases, however, credit agencies go further and subsidize interest rates directly. These credits, offered at interest rates below the rate at which agencies borrow funds from the treasury, are those commonly termed "subsidized" export credits.[12] These are the domain of the OECD Arrangement analyzed here.

The twentieth century has witnessed a trend towards greater government involvement in export finance. Government export insurance and finance first appeared in 1919, when the British government founded the Export Credit Guarantee Department (ECGD) to extend short-term cash advances to firms exporting to risky Eastern European markets. Within a decade, private export credit insurance agencies had been founded in France, Spain, and Italy. Among the trading blocs of the 1930s, as E. H. Carr observed at the time, subsidized export finance was a pernicious yet widely employed method of acquiring political influence.[13] In the 1950s, guarantees were in-

9. For a fascinating case study of bargaining between exporting nations and the Mexican government on a billion-dollar project, see Philip A. Wellons, "Banks and the Export Credit Wars: Mixed Credits in the Sinestra Financing," in Rita M. Rodriguez, ed., *The Export-Import Bank at Fifty: The International Environment and the Institution's Role* (Lexington, Mass.: Lexington Books, 1987), pp. 167–203.

10. Philip A. Wellons, *Passing the Buck: Banks, Government and Third World Debt* (Cambridge, Mass.: Harvard Business School Press, 1987), p. 93. This figure understates the importance of trade finance by excluding short-term and private credits, as well as credits for military exports. The importance of trade finance in North–South capital flows is increasing. See Eduard Brau et al., *Export Credits: Developments and Prospects* (Washington, D.C.: World Bank Working Paper, July 1986).

11. Richard Feinberg, *Subsidizing Success: The Export-Import Bank in the U.S. Economy* (Cambridge: Cambridge University Press, 1982), p. 48. The data are drawn from the late 1970s; since the advent of the debt crisis, these ratios may have changed.

12. Economists disagree whether subsidized export credits create or offset distortions in capital or goods markets. For a discussion of these issues, see Jonathan Eaton, "Credit Policy and International Competition," in Paul R. Krugman, ed., *Strategic Trade Policy and the New International Economics* (Cambridge, Mass.: MIT Press, 1986).

13. See E. H. Carr, *The Twenty Years' Crisis: 1919–1939* (New York: Harper & Row, 1939), pp. 127–29.

troduced by European credit agencies, and as competition between exporters stiffened during the 1960s, long-term government financing made its debut, followed by subsidies.[14]

In the wake of the 1973 oil shock, factors such as rising interest rates, the internationalization of banking, and heightened competition over LDC export markets drove the level of subsidies up in nearly all OECD countries; many governments deliberately used financing to mount export drives.[15] Even governments that found direct subsidies distasteful were forced by the competition to offer below-market rates. As Rita Rodriguez, director of Eximbank, has written, "To the extent that the subsidized interest rates offered by foreign governments represented the result of a deliberate industrial policy, Exim's reactions to their initiatives had the effect of an unwitting U.S. industrial policy."[16] In 1981, subsidies granted by OECD nations totaled an estimated $7 billion.[17]

Since 1975, the provision of subsidized export finance has been regulated by an international agreement, negotiated at the OECD in Paris, known first as the "Consensus" or "Gentlemen's Agreement" and subsequently as the "Arrangement." The Arrangement, which has been revised repeatedly, restricts the use of subsidized trade finance in three ways. First, it places limits on the conditions—the interest rate, term-to-maturity, down payment, and repayment schedules—under which credits may be granted. Second, it adjusts these conditions automatically to changes in domestic capital markets and international exchange rates. Third, it provides for mandatory, although limited, exchanges of information on credit practices. These three functions of the agreement are (in the bureaucratic parlance of export finance agencies) commonly referred to as *discipline, automaticity,* and *transparency*. By 1985, the Arrangement had helped to reduce the public subsidy component of export credits to less than $1 billion and placed strict limits on various nonmarket transactions.[18]

The institutionalization of international trade finance

International cooperation to manage export credit policy began in 1934. In that year, four public and private export credit institutions met to form the

14. Export Credit Guarantee Department, *A History of ECGD 1919–1979* (London: ECGD, 1979).

15. Wellons, *Passing the Buck,* pp. 58–59.

16. Rita M. Rodriguez, "Exim's Mission and Accomplishments: 1934–84," in Rodriguez, *Export-Import Bank,* p. 5.

17. Statement of Marc E. Leland, Assistant Secretary of the Treasury for International Affairs, before the Committee on Ways and Means, U.S. House of Representatives (mimeograph, 2 November 1981). See also Heywood Fleissig and Catherine Hill, *The Benefits and Costs of Official Export Credit Programs of Industrialized Countries: An Analysis* (Washington, D.C.: World Bank Staff Working Paper no. 659, 1984).

18. Unpublished OECD statistics, May 1987.

Union of Insurers for the Control of International Credits, more commonly known as the Berne Union after the Swiss city where it is legally domiciled, but it has not met since 1939.[19] The founders of the Berne Union sought to reduce commercial risk by exchanging reliable information on foreign buyers, a function it still performs today. By 1986, total membership included forty agencies, representing thirty-two countries.

In the late 1950s, increasing competition between Europe and North America in the provision of long-term credits to third markets led to demands on the Berne Union "to broaden its scope from exchanges of credit information to the establishment and maintenance of discipline in the terms of credit for international trade."[20] The pressure came in large part from France and Britain, both of which had been forced to implement extensive programs of trade finance in order to defend their decreasingly protected and exclusive colonial markets against American exports backed by low-interest, long-term credits extended by Eximbank.

For almost two decades, however, no agreement was reached. Since the jurisdiction of the Berne Union does not extend to long-term credits, which are handled in many countries by a different agency than the one handling short-term credits and insurance, the issue was discussed during the 1950s at the Organization for European Economic Cooperation (OEEC). When the OEEC became the OECD in 1960, the issue was transferred to a GATT working group on export subsidies, which had been discussing the implementation of Article XVI(4) of GATT. This article, which had been signed but not yet implemented, prohibited direct export subsidies, except on primary products. Seeking to eliminate subsidized credits, the GATT working group placed them within the category of direct export subsidies, thereby prohibiting all credits at an interest rate below that at which the agency borrowed the funds. This ban on all credits resulting in a "net cost of money to governments" was almost universally ignored, however, in part because the proposed standard was unrealistically strict and in part because GATT dispute-resolution procedures were considered too slow to enforce restrictions on lumpy and rapidly negotiated private transactions such as export credits.

In 1963, at the instigation of various treasury ministries, who were the primary advocates of reform but were not lead negotiators at the Berne

19. The history recounted here draws on John Ray, "The OECD 'Consensus' on Export Credits," *The World Economy* 9 (September 1986), pp. 295–310; ECGD, *A History of ECGD;* John L. Moore, Jr., "Export Credit Arrangements," in Seymour Rubin and Gary Clyde Hufbauer, eds., *Emerging Standards of International Trade and Investment* (Totowa, N.J.: Rowman & Alanheld, 1983), pp. 139–74; Joan Pearce, *Subsidized Export Credit* (London: Royal Institute of International Affairs, 1980); Hufbauer and Erb, *Subsidies;* and Axel Wallen, "Export Credit Subsidization and the Consensus Arrangement," *Aussenwirtschaft,* September 1984. On the Berne Union, see Donald A. Ward, "The Management of International Trade Risks: The Role of the Berne Union," *The Geneva Papers on Risk and Insurance* 11 (October 1986), pp. 246–48.

20. Moore, "Export Credit Arrangements," p. 141.

Union or at GATT, the OECD reconsidered the question of export credits.[21] The OECD Trade Committee established a Group on Export Credits and Credit Guarantees (ECG), which has since met semiannually to consider export finance issues. The ECG had two aims: "to negotiate better procedures for the exchange of information on offers, and to reduce export credit competition."[22]

Creating a regime

Between 1963 and 1975, international limitations on subsidies were blocked by the United States, which (mindful of its own traditionally low domestic interest rates) contended that "credit terms were an element of competition comparable to cheaper labor or higher productivity."[23] In 1972, however, the OECD group reached an agreement that mandated prompt exchanges of information on demand regarding long-term credits under consideration to LDCs and that also imposed *ex post facto* reporting requirements. The United States refused to sign a stronger agreement that was supported by most other nations and that provided for mandatory prior consultation.

A turning point was reached in 1973, not in the official OECD forum, but in the corridors of the annual International Monetary Fund (IMF) Board of Governors meeting in Nairobi, Kenya. Fearing (correctly, as it turned out) that the oil crisis would exacerbate balance-of-payments pressures and provoke an export credit war, the U.S. Treasury Department, backed by West Germany, abruptly assumed the leadership of OECD efforts to regulate export finance. At the Nairobi meeting, ministers from the G-5 nations began discussions on limiting export credit competition. These negotiations continued in an *ad hoc* fashion at IMF, OECD, and G-5 summit meetings between 1973 and 1976. At first, the major industrialized nations informally pledged to refrain from increases in subsidization. An "Understanding on Export Credits for Ground Satellite Stations" was signed in July 1974. This was followed in May 1975 by "standstill" agreements, pertaining to civilian airliners and nuclear power plants, in which the parties promised to maintain their "normal" interest rates and repayment terms as of 1975. In the spring of 1976, the seven summit countries reached a secret, nonbinding set of guidelines, referred to at the time as the "Consensus," or "Gentlemen's

21. Interview with John E. Ray, International Secretariat of the OECD, July 1987.

22. Moore, "Export Credit Arrangements," p. 144, who cites Pearce, *Subsidized Export Credit*. The Berne Union remains active in certain specific areas, such as East–West trade and sectoral agreements on electronic machines and some agricultural products.

23. The quotation is from Pearce, *Subsidized Export Credit*, pp. 43–44. See also Moore, "Export Credit Arrangements," pp. 144–50. A special working group (Working Party no. 6) was formed to find ways to limit subsidization in the shipbuilding industry. In the late 1960s, the OECD Understanding on Credits for Ships was reached between Europe and Japan. This sectoral agreement, although negotiated without the participation of the United States, which neither imports nor exports ships, served as a prototype for future agreements. On the shipbuilding agreement, see Wallen, "Export Credit Subsidization," p. 261.

Agreement,'' stipulating minimum down payments and interest rates and maximum duration of credits. Nations were permitted to derogate from the agreement, but prior consultation was required.[24] Eximbank quickly implemented the guidelines. When other G-5 nations failed to follow the American lead, Eximbank signaled its good faith by raising interest rates above the Consensus minimums. By June 1977, all members of the OECD except Australia and New Zealand had issued unilateral implementing declarations, although actual implementation remained uneven.

In 1978, the OECD group extended and formalized the Consensus in a document called the ''Arrangement on Guidelines for Officially Supported Export Credits.'' The Arrangement prescribed minimum interest rates of 7 to 8 percent, a minimum down payment of 15 percent, standardized repayment schedules, common reporting procedures, prior notification for derogation, and maximum terms of repayment of 8.5 years for OECD nations and ten years for LDCs. The standstill agreement on aerospace exports was formalized in the ''Commonline'' agreement.

At the time, the Arrangement was widely interpreted as a compromise between the French interest in rules limiting the duration of credits and the American interest in rules limiting interest rate subsidies. But the agreement also favored countries, such as France, with high interest rates and high levels of trade with LDCs, because it set minimum interest rates in *nominal* terms and because it established a lower rate for exports to LDCs.

The 1978 Arrangement succeeded in stabilizing international competition, but at rates that remained well below market rates. Thus, subsidies were not eliminated. Moreover, the new international rules almost immediately provoked countermeasures. Nations attempting to circumvent the Arrangement were aided by two important omissions: the Arrangement ignored export credits tied to foreign aid (''tied-aid credits''), and it neglected to take into account interest rate differentials either over time or between countries.[25]

The most controversial method of circumventing the Arrangement was through the use of tied-aid credits. Introduced by the French in the late

24. The three European G-5 nations lacked the legal right to negotiate, that right being reserved for the European Commission by Article 113 of the Treaty of Rome (the Common Commercial Policy). The Consensus thus took the form of a series of unilateral declarations. Between 1975 and 1978, the European Commission and the French government fought for competence over the issue. The European Court of Justice eventually found for the commission.

25. Tied-aid credits, also referred to as ''mixed'' credits, are export credits linked to development aid. The amount of aid in a package is termed the ''grant element.'' It is calculated by estimating ''the amount of capital that would need to be invested on commercial terms to yield the same stream of repayments as the loan in question. The more concessional the loan, the smaller is the corresponding amount of hypothetical capital, and the larger is the difference between them. It is this difference, usually expressed as a percentage of the loan, that is the grant element.'' Thus, the lower the grant element, the closer the terms are to market terms. See Pearce, *Subsidized Export Credit,* p. 23n; and "The Use of Tied-Aid Credits," *OECD Internal Document* TD/Consensus/81.13.

1970s and later used extensively by the British and Japanese, tied-aid credits enabled exporting countries to offer more attractive terms while remaining within the letter of the OECD guidelines. Between 1978 and 1983, there was a substantial increase in the number of export credits disbursed with relatively small grants of aid attached, suggesting that development aid was being used to increase the competitiveness of export financing rather than to channel assistance optimally. This suspicion was confirmed by the fact that tied-aid credits were directed increasingly towards the NICs, which were the most frequent purchasers of expensive capital goods, rather than towards the LDCs most deserving of aid.[26]

The second omission in the 1978 Arrangement lay in its failure to compensate for cross-national interest-rate differentials and changes in interest rates over time. Uniform minimum interest rates were a crude instrument that afforded some nations an extra competitive advantage even if they remained within the terms of the Arrangement. For example, countries with high nominal interest rates could lend in their own currency at low real rates.[27] Moreover, since the minimum interest rates applied only to credits extended by credit agencies, not to private credits guaranteed by governments, "low interest countries, such as Switzerland, Germany, and Japan, [could] guarantee private export credits in their respective currencies at interest rates below the OECD Arrangement floors without breaching the agreement."[28] The OECD negotiators were slow to react to rising interest rates. As interest rates skyrocketed in the late 1970s, the Consensus may indeed have worked to *increase* subsidies by establishing a common expectation of low interest rates. By 1980, the negative spread facing Eximbank—the difference between the rate at which the U.S. Treasury Department lent funds to Eximbank and the rate at which credits were offered—rose to 495 basis points (4.95 percentage points), as shown in Figure 1.

Although spreads elsewhere were greater, reaching 736 and 870 points for Britain and France, respectively, Eximbank felt relatively more pressure than some other nations, owing to the statutory requirement that its operations be self-financing. Eximbank, projecting losses in 1982 and forced to seek higher borrowing limits from Congress, took "the unprecedented step of refusing to declare a dividend, in order to demonstrate its own increasingly poor financial position."[29] Simultaneously, however, Congress increased the

26. Penelope Hartland-Thunberg and Morris F. Crawford, *Government Support for Exports: A Second-Best Alternative* (Lexington, Mass.: Lexington Books, 1982), pp. 67–69; and Feinberg, *Subsidizing Success,* p. 63.

27. Patrick A. Messerlin, "Export Credit Mercantilism à la Française," *The World Economy* 9 (December 1986), pp. 387–88. At the time, most credits were extended in dollars, which partially counteracted these distortions.

28. The quotation is from Martin Knight, "In the Fight over Export Credit Financing, Few Hands Are Quite Clean," *Euromoney,* September 1981. For internal governmental concerns, see U.S. Department of Treasury Policy Review Paper, "USG Initiatives to Strengthen International Export Credit Agreements: Review and Recommendations," March 1979, p. 5.

29. Rodriguez, "Exim's Mission," p. 6.

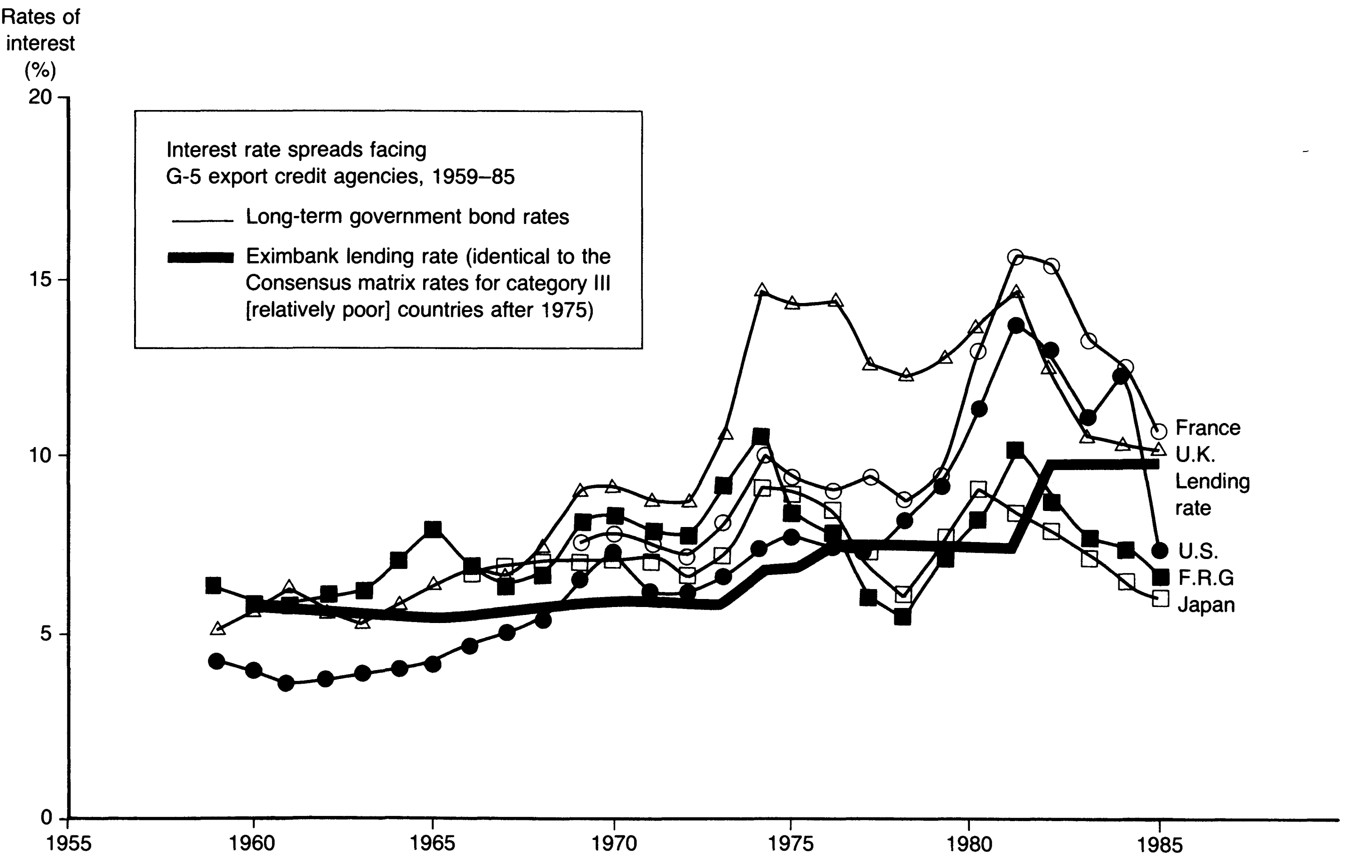

FIGURE 1. *Domestic interest rates and prevailing export credit rates for the G-5 countries, 1959–85*

Sources: International Monetary Fund (IMF), *International Statistics Yearbook, 1987,* country tables, line 61; and John Ray, "The 'OECD Consensus' on Export Credits," *The World Economy* 9 (September 1986).

demands on Eximbank by instructing it to take into account "adverse effects on industries" in deciding whether or not to offer financial support.

Expanding the regime

Despite rising interest rates, which increased costs for all OECD governments, the negotiations stalled for a half-decade following the signing of the 1978 Arrangement. The United States continued to press for a transition to market principles, but action on major issues, such as tied-aid credits and interest-rate differentials, was blocked by the European Community (EC) and Japan. Although the EC had eliminated subsidized credits in its internal market, France (backed by Italy and Belgium) exercised its veto right within the EC, blocking attempts to extend this principle to external trade.[30] Japan, which enjoyed relatively low domestic interest rates, was unwilling to agree to higher minimum rates, since the existing floor already obligated its export credit agencies to charge a premium on official credits. At the same time, France and Japan refused to accept limits on tied-aid credits. A number of EC members, including Germany, Great Britain, and the small European democracies, supported American initiatives at the EC meeting in Brussels (albeit often passively); however, at the OECD meeting in Paris, only non-EC members, such as Sweden, Australia, and Canada, spoke out publicly in favor of market principles.

Between 1978 and 1982, a few steps were taken, but further negotiations towards a comprehensive agreement were widely deemed futile.[31] Congressional and presidential reluctance to increase Eximbank borrowing limits meant that American threats to intensify competition by matching interest-rate subsidies were not taken seriously by the French. Moreover, retaliatory subsidies threatened to erode the progress already achieved. As John D. Lange, Jr., Acting Deputy Assistant Secretary of the Treasury, explained before Congress, "Our competitors would be content to go on playing this

30. By 1978, the EC had reasserted its jurisdiction over the issue. The crucial decisions were taken not at the OECD, but in Brussels, where France, Italy, and Belgium were pitted against West Germany, the Netherlands, Denmark, and, usually, the United Kingdom. Since the Japanese could most likely be persuaded to go along with any transatlantic agreement, efforts of the United States were aimed at influencing the "game within a game" inside the EC. I am grateful to Dan Pearson for suggesting this metaphor.

31. At the recommendation of an OECD commission led by Axel Wallen, the Swedish chairman of the ECG who had been instrumental in avoiding a breakdown of the 1978 negotiations, minimum interest rates were increased in November 1981 and June 1982. Special provisions were enacted to allow low-interest-rate countries, such as Japan and Germany, to charge lower interest rates. The sectoral understanding on commercial aircraft was tightened in September 1981. See Report of the U.S. Department of Treasury, *International Export Credit Negotiations (1981–1982)* (mimeograph, 16 September 1982), p. 2. But at the time, even Wallen remained pessimistic about further progress. See Axel Wallen and John M. Duff, Jr., "The Outlook for Official Export Credits," in Gary Clyde Hufbauer, ed., *The International Framework for Money and Banking in the 1980s* (Washington, D.C.: Georgetown University Press, 1981), pp. 475–81.

subsidy game indefinitely, since export subsidies are a well-accepted practice for many of them."[32]

This deadlock was broken when Eximbank (along with the Canadian Export Development Corporation) exploited a new threat: it began to extend extremely long term credits with repayment periods of up to twenty-five years.[33] All loans with a maturity of over ten years had been banned under the 1978 Arrangement. Extending repayment periods, like interest-rate subsidies, increases the attractiveness of financing. Importers, who evaluate financing in terms of its present value, prefer long-term credits, which allow them to discount the loan over a longer period and are generally believed to shift the risk to the lender.

The value of long-term loans as a power resource stems from the greater depth of North American capital markets. While American and Canadian markets can easily accommodate the ten- or twenty-year bond issues necessary to back trade finance on those terms, European markets for long-term bonds are extremely thin. Whatever supply exists is exhausted by state enterprises and public utilities.[34] Thus, European credit agencies are asymmetrically vulnerable to competition over terms-to-maturity. The introduction of loans with repayment periods of up to twenty-five years, which was targeted at French competition in Mexico, Argentina, Tunisia, and the Ivory Coast, greatly increased the French government's direct costs of continued subsidization but resulted in little immediate cost to Eximbank. Any attempt to match American terms with interest-rate subsidies or with direct government loans would have proved prohibitively expensive, while any attempt to raise funds abroad would have involved an unacceptable level of exchange-rate risk.

In short, by linking subsidies to repayment periods, the United States transformed an unfavorable bargaining position into one of strength. Faced with this threat and fearful of being outvoted in Brussels by other EC states who wanted to avoid a credit war over long-term loans, France yielded. In exchange for its concession, the French government took the best deal it could get, which reportedly involved a favorable EC decision *vis-à-vis* Germany on credits for the sale of French nuclear power plants to China.[35]

In 1983, less than a year after the French concessions in Brussels, an agreement tightening the Arrangement was signed at the OECD. The new

32. Statement of John D. Lange, Jr., before the Committee on Foreign Affairs, U.S. House of Representatives, *U.S. Treasury Document R-2502* (mimeograph, 16 January 1984), p. 3.

33. The strategy is set forth in U.S. Department of Treasury Policy Review Paper, "USG Initiatives," pp. 6–8 and Table 3, p. 2. The possibility of using long-term credits as a threat is also mentioned in Wallen and Duff, "Outlook," pp. 480–81.

34. On the depth of New York capital markets, see Knight, "Fight over Export Credit"; and Pearce, *Subsidized Export Credit,* p. 44.

35. U.S. Department of Treasury, *International Export Credit Negotiations,* p. 10; and interviews with officials of the EC, OECD, and U.S. Department of Treasury, July and August 1987.

agreement raised minimum interest rates once again, mandated an automatic semiannual adjustment of minimum rates for low-interest-rate countries, provided for the negotiated adjustment of rates for high-interest-rate countries, increased minimum rates, and reclassified a number of countries into more restrictive categories.[36] Most important, the agreement also achieved greater discipline and transparency in the use of tied-aid credit. It rendered tied-aid credit more expensive by mandating that at least 20 percent of the credit be given in the form of aid, and it reduced the comparative advantage to be gained through such credits by stipulating that competitors be informed of tied-aid credit deals at least twenty days in advance.

Attention then shifted temporarily to negotiations in two sectors excluded from the general agreement, commercial aircraft and nuclear power plants, both of which had been following a similar trajectory.[37] After the 1978 Commonline aircraft agreement, Boeing and other American firms complained of predatory export financing by European countries on behalf of the Airbus consortium.[38] The Europeans successfully resisted American demands for further reform, both in GATT and at the OECD. After the United States threatened once more to issue very long term loans, pressure was put on the French in the EC, and an international agreement was reached in July 1985. The negotiators set maximum terms-to-maturity at twelve years, pegged minimum interest rates to official bond rates, and prohibited tied-aid credits outright, along with various other forms of official support.[39] A similar agreement governing nuclear power plants was reached in 1984.

Stabilizing the regime

The 1983 agreement reduced to negligible levels the negative spreads between Eximbank's new lending rate and the treasury rates at which it was borrowing, although the same cannot be said of all high-interest-rate countries. Like the 1978 Arrangement, however, the 1983 revision resolved certain problems only to exacerbate others. The use of tied-aid credits continued, with some countries excusing failures to give prior notification of derogations by denying (implausibly) that they were informed in advance. Moreover, the interest rate minimums in the Arrangement did not yet reflect market rates in individual countries. At the semiannual OECD meetings,

36. For a more detailed summary of the provisions of the 1983 agreement, see Hufbauer and Erb, *Subsidies*, pp. 74–75.

37. For a discussion of the aircraft agreement, see Keith Hayward, *International Collaboration in Civil Aerospace* (New York: St. Martin's Press, 1986), pp. 157–92 passim.

38. The Airbus was the only exception made by West Germany to its policy of nonsubsidization. See Knight, "Fight over Export Credit."

39. Minimum down payments (15 percent) and the maximum portion of the total price to be covered (62.5 percent) were carried over from the Commonline agreement. Quid pro quos, for example those involving grants of landing rights to purchasers, were banned. On the negotiations, see Hayward, *International Collaboration*, p. 187.

U.S. Treasury Department officials continued to press for an international export credit regime grounded more firmly in market principles: higher minimum rates, greater differentiation between currencies, automaticity for high-interest-rate countries, and a total ban on subsidized credits for trade between industrialized nations. As before, however, further reform was judged impossible.[40]

Despite the prevailing pessimism, the high officials in the EC Commission seized the initiative. The Commission pushed for market-based reform, using aggressive agenda-setting tactics, such as tabling proposals "for discussion" at the full OECD working group without the full support of the member states.[41] At first, the French strongly opposed any further agreement; however, by 1985, the new French government had imposed austerity measures and was cutting back export credit subsidies on its own. This, along with an aggressive American program of targeting mixed credits to counter French offers, provided an opportunity for modest reforms, which were formalized at the April 1985 OECD Ministerial. The minimum grant element for tied-aid credits was raised from 20 to 25 percent. A twenty-day advance notice was made mandatory for offers of grant aid between 25 and 50 percent, and face-to-face consultations were required in cases of tight competition between offers.[42]

After 1985, the French continued to be slightly more favorably disposed towards the position of the United States and the EC Commission on minimum interest rates. On tied-aid credits, however, France opposed higher grant elements, drawing the line at 25 percent. But the French government did seek reform in the way the grant element was calculated, which up to that time had disadvantaged high-interest-rate nations.[43] This in turn engendered some opposition in low-interest-rate countries, such as Japan, Germany, and the Netherlands. These cross-cutting demands presented U.S. negotiators with an opportunity to play high- and low-interest-rate countries against one another. To expedite an agreement, the Economic Policy Council, chaired by Treasury Secretary James Baker, recommended the creation of a $300 million "war chest" for "offensive" credits aimed at nations impeding the negotiations.[44] Shortly after President Reagan had announced his support for the war chest, the member states gave the EC Commission

40. Interviews with EC officials, Brussels, July and August 1987.

41. Interviews with OECD officials, Paris, July 1987.

42. David M. Cheney, "The OECD Export Credits Agreement," *Finance and Development* 22 (September 1985), p. 36.

43. By assuming a reference rate of 10 percent, the official OECD calculations overestimated the percentage of aid in a tied-aid credit issued by a nation which, like France, had interest rates higher than 10 percent. See footnote 25.

44. Dan Pearson points out that the administration's request to Congress for a $300 million "war chest" was designed by the Reagan administration to head off congressional pressure for a $1 billion "war chest," as well as to pressure the French. Only a few months previously, the Eximbank chairperson had testified before Congress *against* a war chest. Personal communication, 18 May 1988.

TABLE 1. *Agreements*

	1969–74 Agreements	*1976 Consensus*	*1978 Arrangement*	*1983 Arrangement*	*1985 Arrangement*	*1987 Arrangement*
Discipline	—	Informal.	Formal.	Formal.	Formal.	Formal.
Interest rates	—	Minimum of 7–8%.	Same.	Minimum of 10–12%.	Same.	Same; subsidies banned in OECD and in East–West trade.
Term to maturity	—	Maximum of 8.5–10 years.	Same.	Same.	Same.	Same.
Tied-aid	—	—	—	Ban on credits with grants of less than 20%.	Ban on credits with grants of less than 25%.	Ban on credits with grants of less than 35%; more restrictive method of calculating the grant.

Automaticity	—	—	Subject to periodic renegotiation.	Special rates for low-interest-rate countries; other rates tied to basket of floating rates and adjusted semiannually.	Same.	Calculation of grant element based on floating rates.
Transparency	Exchange of information on demand and mandatory *ex post facto* reporting.	Same.	Same; prior notification required for grant elements of less than 15%.	Same; twenty-day prior notification on credits with grants of 25–50%.	Same; option for face-to-face negotiations if offers are close.	Same.
Other sectors	Agreements on ships and satellite ground stations.	"Standstill" agreement on aircraft and nuclear plants.	"Commonline" agreement on aircraft, but without limits on interest rates.	For aircraft and nuclear plants, set maturities, set interest rates, and prohibited tied-aid.	Same.	Aircraft agreement extended to smaller passenger jets.

a negotiating mandate. A few months after the new fund had been used to target a few tied-aid credit offers against European and Japanese markets, both agreed to a new package of reforms.

At the end of the day, France traded support for higher minimum grant elements in exchange for EC and American support for changes in the way grant elements are calculated. The new 1987 agreement raised minimum grant elements to 35 percent, revised the method of calculation, prohibited subsidies on all credits to industrialized countries (now including the Soviet Union), and raised interest rates on loans to the NICs to market levels. A similar agreement on aircraft credits was soon signed.

The OECD Arrangement, as revised in 1983, 1985, and 1987 (see Table 1), has successfully institutionalized trade finance within a strong international regulatory regime. The trade finance regime has a broad scope, has remained dedicated to a consistent set of goals for over a decade, has adapted to a wide range of challenges, and enjoys compliance by its members.[45] The scope of the Arrangement now extends to all relevant civilian industrial sectors and all relevant countries.[46] The Arrangement has maintained a coherent set of institutional rules over a relatively long period, adapting successfully to various attempts to circumvent its intent. The total value of subsidies offered by OECD countries has declined tenfold since the late 1970s. Finally, according to credit agency officials, noncompliance is extremely rare. From the free-market point of view championed by the United States, the Arrangement, with its complex calculations of minimums and grant elements, is a second-best solution, but it is one which in Eximbank's official view has effectively limited export credit subsidization.[47] As one distinguished analyst stated, "There is broad agreement that the revisions to the Arrangement have accomplished their main objective, namely, to neutralize official export credit as a competitive element in capital goods exports."[48]

45. Definitive measures of the "strength" of regimes have yet to be developed. Here the following four measures are used: scope, adaptability, coherence, and compliance. For some suggestive measures of institutionalization, from which these four elements are drawn, see Samuel Huntington, *Political Order in Changing Societies* (New Haven, Conn.: Yale University Press, 1968), pp. 13–17 and 22–24; and Haggard and Simmons, "Theories of International Regimes," pp. 496–98.

46. In recent years, even the NICs, which are not members of OECD, have formally or (more often) informally complied with the minimum interest rate provisions. Interviews with U.S. Treasury Department officials, Washington, D.C., April 1987. The OECD Arrangement does not cover agricultural or military exports. These exclusions are consistent with the institutional explanation presented later in this paper, since these credits are administered by the Departments of Agriculture and Defense, respectively.

47. Interviews with Export-Import Bank officials, 1988. See also Export-Import Bank, *Report to the U.S. Congress on Export Credit Competition and the Export-Import Bank of the United States for the Period January 1, 1986, through December 31, 1986* (mimeograph, June 1987), pp. 9, 41, and 49–50.

48. Pearce, *Subsidized Export Credit,* pp. 51 and 68; Joan Pearce, "Developments in the Financing of Industrial Projects since 1982" (mimeograph, July 1985), p. 11. Indeed, some export credit agencies now feel that "the present system no longer responds adequately to exporters' needs." See "Consensus Changes," *Euromoney Trade Finance Report,* May 1987, p. 3.

The OECD Arrangement and theories of international cooperation

How can the formation and success of the OECD export credit regime be explained? In accordance with the model suggested earlier, international cooperation is best analyzed as a process composed of three stages: (1) the formation of state preferences for cooperation, (2) the outcome of interstate bargaining, and (3) compliance with the resulting institutional rules. In the case of the OECD Arrangement, each stage is most satisfyingly explained by a separate theory: cross-national variance in the capacity of state institutions accounts for state preferences, the relative power of states accounts for bargaining outcomes, and the functional value of information accounts for compliance.

State preferences: institutional costs

The first stage in the process of cooperation is the formation of state preferences. A theory of state preferences must account for variations in the preference for cooperation across countries and across time.[49] Analysis should begin with the negotiating positions of the major countries. Between 1973 and 1986, each major government maintained a consistent negotiating position at the OECD. France, backed at times by Italy and Belgium, opposed limits on subsidies and joined Japan in resisting limits on tied-aid credits. The United States was the strongest advocate of a market-based system in which credit agencies would provide, at most, loan guarantees. Germany, Canada, and most of the smaller nations passively supported the American position. Although its own policies were heavily interventionist, Britain, too, backed limits on subsidies. During this period, only one significant change in a national negotiating position took place: in 1974, the United States shifted from opposition to strong support for reform.[50]

49. Preferences must remain clearly distinguished from interests, which incorporate strategic calculations. Although preferences cannot be observed directly, the initial negotiating positions, internal documents, and interviews often provide evidence about them. In the case of the OECD trade finance negotiations, there is little disagreement among participants and observers about the nature of national preferences.

50. Some have argued that there was a shift in preferences in France and Britain in the mid-1980s. With rising government budget deficits, trade finance reform became a prominent domestic issue in 1984 and 1985. But in neither France nor Britain did this debate fundamentally alter the negotiating preferences of the government. In Britain, the debate did not touch on the desirability of subsidies, which the British government had consistently opposed, but simply on the question of whether subsidies ought to be used to retaliate against foreign subsidies. See I. C. R. Byatt, "Byatt Report on Subsidies to British Export Credits," *The World Economy* 7 (June 1984), and the ensuing exchange in the same journal (September 1984), especially p. 345. The persistence of support for export credits in France is illustrated by the fact that the volume of exports supported by credits remains much higher in France than in all other OECD countries. Only in September 1985 did the French government announce cuts in export credit subsidies, but French support for tied-aid credits remained strong. On French policy, see Messerlin, "Export Credit Mercantilism," pp. 385–408; and the special issue entitled "Dossier financement export," *Moniteur du commerce international,* 22 December 1986.

Behind these negotiating positions lie state preferences. In economic terms, each OECD government can be seen as optimizing exports under a budget constraint. All seek to increase exports of capital goods, but they differ in the extent to which they are willing to allocate government funds for export promotion. France, Italy, and Japan tolerate subsidies as long as they result in increased exports, while Germany, the United States, and, to a slightly lesser extent, Great Britain prefer a strong regime limiting subsidies. In game-theoretical terms, the U.S. government (along with its supporters) was playing "assurance": it preferred elimination of subsidies (CC) to all the alternatives. France, on the other hand, was playing "prisoner's dilemma": it preferred unilateral subsidization (DC) to the elimination of subsidies.

How can this pattern of preferences be explained? In recent years, a number of theories have been advanced to explain cross-national or temporal differences in state support for free trade and other liberalizing international economic reforms. In this article, three variables prominent in recent literature will be considered: ideas (liberal ideology), interests (competitiveness in goods markets), and institutions (domestic institutional capacity). Ideas and interests are commonly cited as explanations for export credit policies, but institutions provide the most satisfying explanation of preferences.

Liberal *ideology* is often used to account for the free trade policies of the United States and for the more mercantilist policies of some of its competitors.[51] In this case, however, liberal ideology can be called into question as a causal factor on both empirical and theoretical grounds. Empirically, ideology can account for the distribution of interests across countries (if we assume that France and Japan are ideologically illiberal), but it cannot explain the sudden shift in the American position in 1974. Moreover, the empirical predictions derived from ideologies are more imprecise than they may initially appear. For example, it is striking that the U.S. government was able to justify both its initial opposition to reform and its subsequent advocacy of it in terms of liberal ideology.

The claim that liberal ideology explains state preferences has theoretical weaknesses as well, for recent studies suggest that ideology is best understood in the context of the institutions that nurture it.[52] John Ruggie has characterized the ideology of the postwar international political economy as "embedded liberalism."[53] This suggestive metaphor aptly captures the ambivalent nature of the postwar international system and the differing conceptions of an ideal trading system found within it, but it begs the question of how we are to tell in any given case whether liberalism or welfarism will

51. See Judith Goldstein, "Ideas, Institutions and American Trade Policy," *International Organization* 42 (Winter 1988), pp. 179–218.

52. Even the strongest advocates of the power of ideas stress the role of institutions. See Judith Goldstein, "The Political Economy of Trade: Institutions of Protection," *American Political Science Review* 80 (March 1986), pp. 161–84.

53. John Ruggie, "International Regimes, Transactions and Change: Embedded Liberalism in the Postwar Economic Order," in Krasner, *International Regimes*, pp. 195–232.

prevail. In order to explain variance in preferences more fully, Karl Polanyi (whose work inspired the phrase "embedded liberalism") quite properly directs us to examine the national and supranational institutions in which norms are embedded.[54]

It is equally unsatisfying to account for state preferences as a direct function of commercial *interests,* understood as the relative comparative advantage of respective capital goods industries. In each exporting country, the banks, exporters, and governments—perceiving an interest in stimulating exports by reducing credit risk—face strong incentives to form alliances against similar groups in other exporting nations. The interest of a given nation in restricting export credit subsidies might be seen as a function of its competitive advantage in the production of capital goods. In this view, exporting nations with relatively uncompetitive capital goods industries would rely heavily on exports to LDCs and, accordingly, would favor subsidies.[55]

But market position does not appear to correlate with preferences for liberalization. For example, the French aerospace industry has been as competitive as those of its partners in the Airbus consortium, and the French nuclear industry has competed on even terms with that of Germany for years; yet France favored subsidies in these two areas, while Germany opposed them.[56] An even more striking anomaly for any explanation based on market position has been British policy. Britain supported the Arrangement, despite the fact that its market position closely resembled that of France: large deficits with other G-5 nations and surpluses with the LDCs.[57]

The shortcomings of explanations based on liberal ideology and commercial interests direct us towards the *institutions* that administer and oversee trade finance. Export credit agencies can be thought of as nonprofit banks, sensitive to their bottom line. The hypothesis advanced here is that governments supported the OECD Arrangement when the subsidization required to maintain competitiveness outstripped their institutional capacity to pay.

In purely economic terms, the "costs" incurred by credit agencies are a function of the spread between domestic interest rates and prevailing international rates for export credits. But market gains and losses alone do not

54. Karl Polanyi, *The Great Transformation: The Political and Economic Origins of Our Times* (Boston: Beacon Press, 1944), chap. 12.

55. See Feinberg, *Subsidizing Success,* pp. 136–37; Wellons, *Passing the Buck,* pp. 23 and 58–63; and Messerlin, "Export Credit Mercantilism," pp. 386–87. After considering regional percentages of exports and overall trade balances, Wellons settles on regional trade balances as the best indicator of state interests. Messerlin argues that the export subsidies, in contrast to tariffs, allow the French to increase their penetration of foreign markets while keeping their own borders open for vital imports of capital goods.

56. In the late 1970s, the French and German nuclear industries held nearly equal shares of the world market, with the Germans weakening. Both nations appeared to be outcompeting the United States. See William Walker and Mans Lönnroth, *Nuclear Power Struggles: Industrial Competition and Proliferation Control* (London: Allen & Unwin, 1983), pp. 34 and 43–44.

57. It is important to keep in mind, however, that these institutions may themselves reflect *historical* market positions and ideologies.

drive policy, because each national credit agency has a different tolerance for such costs. Although export credit agencies of advanced industrial countries share similar functions, they do not enjoy the same political mandates or institutional capacities.[58] Government decision-makers perceive institutional costs in terms of the enduring state capacity for subsidization at their disposal. These institutional capacities are structural: they endure for long periods of time, vary systematically across nations, and are integrally connected with broader national credit systems.[59] Thus, the costs of export credit subsidization must be viewed from a bureaucratic perspective, which takes into account the resources available to the agency. This relationship between the costs of providing credit and the available resources may be termed the "institutional cost" of export credit policy. From the point of view of a credit agency, the important institutional cost of export credit subsidization is a function of the difference between the subsidies required to offer competitive credits and the institutional capacity to provide those subsidies.

In this regard, a distinction can be made between nations with semiprivate export credit agencies, which are obliged to avoid losses, and those with state-administered and -funded systems, in which credit agencies are required to grant firms financing at internationally competitive rates and receive subsidies with which to do so. From an institutional perspective, trade finance is best seen as an issue that pits trade bureaucracies, which tend to favor subsidies, against financial bureaucracies, which tend to oppose them. In nations with strict spending constraints, such as Germany, the United States, and Canada, it is usually the liberals within the treasury whose view on the OECD Arrangement has prevailed, while in nations where the credit agency is subsidized, such as France, the dominant view appears to be that of the spending agencies (see Table 2).[60]

The self-sustaining nature of Eximbank's mandate differentiates American export credit policy sharply from that of some other advanced industrial societies, where agencies can choose from among a much wider range of interventionist policy options. In France, export credit agencies enjoy much more liberal public funding. French export credits are offered under an "entitlement" system in which firms have a right to receive competitive

58. For some earlier efforts in this direction, see Wellons, *Passing the Buck,* pp. 25ff., 49–50, and 64, who ultimately rejects the approach; and J. Andrew Spindler, *The Politics of Institutional Credit: Private Finance and Foreign Policy in Germany and Japan* (Washington, D.C.: The Brookings Institution, 1984).

59. For similar arguments, see G. John Ikenberry, "The Irony of State Strength: Comparative Responses to the Oil Shocks in the 1970s," *International Organization* 40 (Winter 1986), pp. 105–36; and Peter J. Katzenstein, ed., *Between Power and Plenty: Foreign Economic Policies of Advanced Industrial States* (Madison: University of Wisconsin Press, 1978).

60. For example, on the French Commission des Garanties, the dominant players have traditionally been the "spending" agencies (the Direction des Relations Economiques Extérieurs and the credit agency BFCE), rather than the "paying" agencies (Tresor and the insurance agency COFACE). See Messerlin, "Export Credit Mercantilism," pp. 406–7.

TABLE 2. *A comparison of national export credit systems*

Country	*Credit agency or rediscount facility*	*Percentage of exports covered (1978; by value)*	*Tied-aid credits (1978–83)*
United States	Export-Import Bank	5.1%	*Ad hoc,* to effect negotiations
Canada	Export Development Corporation	n.a.	Matching only
Germany	Kreditanstalt für Wiederaufbau/Bundesbank	10.5%	Matching only
United Kingdom	Export Credit Guarantee Department	52.1%	Special matching fund
Japan	Japan Export-Import Bank	32.6%	Moderate
France	Banque Française du Commerce Extérieur/Banque du France	38.7%	Extensive

Sources. Joan Pearce, *Subsidized Export Credit* (London: Royal Institute of International Affairs, 1980); and U.S. Treasury Reports (1976–1985).

credits at the lowest possible interest rates, regardless of the actions of other governments. Budgetary costs are not limited by statute, and shortfalls are made up directly from government revenues. Thus, "virtually all medium- and long-term export [credits] are eligible for either rediscount or direct financing support of 85 percent of the contract value."[61] In 1981, as a result, 68 percent of French export credits were subsidized.[62] In the United States, by contrast, Eximbank is a semiprivate agency with strict limits on outstanding commitments and a mandate to avoid losses. Eximbank enjoys tax-exempt status and can borrow at the same rates as other government agencies, but it receives no direct government subsidy. It is Eximbank policy to offer a direct or rediscounted loan only to match credits offered by foreign governments. Thus, while all export agencies must offer competitive rates, Eximbank has fewer resources with which to do so.

In the late 1970s, when long-term government bond rates (the rates at which export agencies borrow) rose far above prevailing export credit lending rates, each OECD export credit agency, with the exception of the Swiss,

61. Wellons, *Passing the Buck,* p. 94. Italy, which often allied itself with France in EC debates, has a similar system, but few budget resources. See Rinaldo Ossola, ed., *The Role of Export Credits in Italy's Foreign Trade* (Naples: Isveimer Bulletin no. 3, January 1978).

62. Messerlin, "Export Credit Mercantilism," p. 405; and Richard E. Feinberg and Stuart K. Tucker, "Export Credits in U.S. Trade, Development and Industrial Policy," in Rodriguez, *Export-Import Bank,* p. 135.

faced financial losses. Countries responded in different ways—some by supporting the OECD Arrangement and others by opposing it.

These variant national responses were not a simple function of the economic costs imposed on each credit agency. Instead, governments calculated the institutional costs and acted accordingly. France, for example, for which the economic cost of intervention was the greatest (since it had the highest domestic interest rates for most of this period), remained a supporter of subsidies. While France increased subsidies, in the United States high interest rates created a situation in which Eximbank's legislatively mandated goals—to provide competitive export finance and to avoid losses—became incompatible. Internationally negotiated limits on subsidies offered the only solution.[63] Accordingly, rising interest rates led the United States to support the OECD Arrangement. American opposition to negotiations before 1974 can be explained by the low institutional costs stemming from the competitiveness of U.S. domestic interest rates. Since interest rates on American bonds were the world's lowest, Eximbank could borrow at market rates, charge an internationally competitive rate on export credits (at that time around 6 percent), and still turn a profit. Throughout the 1950s and 1960s, Eximbank maintained a 2 percent positive spread between lending rates and long-term bond rates. In the late 1960s and early 1970s, this spread began to shrink, thus raising the institutional cost of providing competitive export financing. Monetary instability led to increases in American interest rates, in both absolute and relative terms.[64]

The concept of institutional cost allows a distinction to be made between policy, which may reflect strategic calculations, and preferences, which are prestrategic and, according to the argument above, reflect structural capabilities. The case of Britain illustrates the importance of this distinction. Beginning in 1972, Britain built up a highly subsidized export finance system. Since Britain had extremely high domestic interest rates and was competing head to head in many sectors and markets with France, some subsidization was deemed necessary. But British policy was retaliatory, directed at matching French and Japanese offers. A conservative treasury remained firmly in control of negotiating policy. Its aim was to provide "export credit at levels of interest based not upon domestic interest rates but upon those charged

63. See the interview with John L. Moore, Jr., president of Export-Import Bank, in Richard Fry, "New Policies at Eximbank," *The Banker* 129 (August 1979), p. 75; and U.S. General Accounting Office, *To Be Self-Sufficient or Competitive? Eximbank Needs Congressional Funding* (Washington, D.C.: GPO, 1981).

64. The timing of this shift also calls into question the claim that the American push for market rates stemmed from concerns about subsidized trade with the Eastern bloc. This aspect did not in fact become an issue until the negotiations preceding the 1983 revision of the Arrangement. See Daniel F. Kohler and Peter J. Reuter, *Honor among Nations: Enforcing the "Gentlemen's Agreement" on Export Credits* (Santa Monica, Calif.: Rand Study N-2536-USDP, December 1986).

by trading partners.''[65] Despite its increases in subsidies, the British government continued to support the OECD Arrangement.

Britain's case suggests that the institutional mandates of credit agencies do not exist in a vacuum, but are a reflection of the nature of the broader domestic financial system. In his study of industrial adjustment policy, John Zysman has distinguished between national credit systems in which the price of credit is administered by the state (France and Japan) and those in which the price is administered by credit markets or large banks (United States, Great Britain, and West Germany).[66] Here, Zysman's model is extended to export finance policies: countries with publicly administered credit systems tend to have state-subsidized export credit policies, while countries with privately managed systems tend to favor market-based export credit policies.

Interstate bargaining: the hegemonic stability theory revisited

Interstate bargaining is the second stage in the process of cooperation, during which a pattern of preferences is transformed into a political outcome. In the case of export credits, this outcome was the formation and extension of a regime. The explanation advanced here is a power-bargaining explanation, similar to that at the heart of hegemonic stability theory. However, before examining that theory, which assumes that the international system is essentially anarchic and that a single dominant power is required to reach a common bargaining outcome, it is useful to consider an alternative theory of bargaining.

Institutions and cooperation. The functional theory of regimes, advanced by Robert Keohane, holds that regimes facilitate cooperation by reducing the costs of ''legitimate transactions,'' by designating certain actors as competent to negotiate, by facilitating issue linkages, and by providing information that mitigates the uncertainty under which agreements must be made and kept. Above all, regimes facilitate cooperation by generating expectations of reciprocal behavior.[67] In GATT, for example, the norms of multilateralism and the breadth of the agenda have permitted a wide range of interconnected agreements.

Although the functional theory of regimes was designed primarily as an explanation of regime change, two predictions about regime formation can be drawn from it.[68] First, the functional theory predicts that new regimes

65. See Ninth Report from the Expenditure Committee, Session 1976–77 (London: HMSO, 1977), cited in Pearce, *Subsidized Export Credit,* p. 10.

66. John Zysman, *Governments, Markets, and Growth: Financial Systems and the Politics of International Change* (Ithaca, N.Y.: Cornell University Press, 1983).

67. Keohane, *After Hegemony,* chap. 5.

68. See Roger K. Smith, ''Explaining the Non-Proliferation Regime: Anomalies for International Relations Theory,'' *International Organization* 41 (Spring 1987), p. 276; and Aggarwal, *Liberal Protectionism.*

will be nested within and shaped by preexisting regimes. Second, it predicts that new regimes will be formed by exploiting potential issue linkages. The most interesting empirical question raised by functional theory is not whether institutions are useful (or even essential) for cooperation, as assuredly they are. Instead, the key question is whether the existence of institutions or the need to create them alters bargaining outcomes. For if institutions can be cheaply built or altered, then nations will create them *ad hoc* as they are necessary to facilitate cooperation, and they will have no independent effect on patterns of cooperation. Functional theorists must demonstrate that the cost of building or reforming regimes is high enough so that once established, they shape the short-term cost-benefit calculations of states.

In the case of the Arrangement, however, the norms and rules of the OECD, under whose aegis the regime functions, seem to have had little effect on the negotiations. At various times, the issue was negotiated at G-5 (later G-7) summit meetings, IMF meetings, GATT, the Berne Union, and the OECD. The OECD became the institutional home of the regime largely because—unlike GATT, whose institutional design actually threatened to impede cooperation in this area—it offered a neutral forum. The OECD contributed neither a set of metanorms nor opportunities for issue linkage, but simply a location for treasury and credit agency officials to continue what they were already doing. Treasury officials form a small, closely knit international community. The choice of the OECD as a forum did not exclude nonfinancial government agencies, for in most countries, such ministries had never enjoyed authority over export credits. Nor did it provide opportunities for issue linkage. Thus, it seems fair to conclude that functional theory does not help to explain bargaining outcomes in this area. The OECD Arrangement remains to this day an *ad hoc* institution, existing in an anarchic environment outside "the context of other regimes."[69]

Power-bargaining models and hegemonic stability theory. Hegemonic stability theory holds that the international distribution of power determines the outcomes of international bargaining and, with them, levels of international cooperation. Regimes are viewed as public goods that facilitate cooperation. To overcome the free-rider problem, which is common to many social institutions, a single hegemon must wield the power to coerce or entice other nations to collaborate. In the strongest version of the theory, the existence of a hegemon is treated as a *sufficient* condition for the formation (and maintenance) of international regimes. In weaker versions, hegemony is seen only as a *necessary* condition; the hegemon must also have an independent interest in creating a regime.[70]

69. Keohane, *After Hegemony,* p. 100.

70. For an argument that the strong form of hegemonic stability theory is thus misspecified, see Duncan Snidal, "The Limits of Hegemonic Stability Theory," *International Organization* 39 (Autumn 1985), pp. 579–614. The weak form is set forth in Charles Kindleberger, *The World in Depression* (Berkeley: University of California Press, 1973).

In the case of the Arrangement, the historical record strongly supports the view that the United States lent decisive support to liberalization efforts, as the hegemonic stability theory would predict. American initiatives and threats, backed at several crucial junctures by the dominant position of the United States in credit markets, led to the formation and extension of the OECD Arrangement. European calls for reform in the 1960s had little effect, but America's sudden interest in eliminating subsidies, beginning in 1974, appears to be the catalyst that sparked serious negotiations.

After 1974, American officials, under presidential administrations of both parties, persistently called for the elimination of subsidies. As long as foreigners continued to subsidize credits, Eximbank loans were "targeted where the competition is greatest."[71] As more countries developed tied-aid credit facilities, the benefits of subsidization for each country diminished. Nevertheless, the French government persevered, confident that it possessed "deeper pockets" than other OECD states, including the United States. Agreements were possible in 1978, 1983, and 1985 because the United States threatened to use a unique power resource, grounded in the greater depth of North American capital markets, which permitted it to extend very long term loans. The French agreed to the Arrangement of 1978 in large part to restrict the use of such loans. Breakthroughs in the negotiations in 1983 and 1987 followed explicit American threats of retaliation. Such threats were highly credible. The U.S. "war chest" of $300 million authorized in 1986, for example, was roughly equal to the annual French expenditure on mixed credits and, in contrast to the tied-aid credit funds of some other nations, was targeted specifically at French markets.[72] The evidence strongly suggests that the formation of the trade regime resulted from an exercise of coercive power by the United States. France and the United States engaged in a simple power-bargaining game, and France lost.

Game theory offers a useful heuristic device for reconstructing the strategies and conflicts of interest underlying the power-bargaining game. In game-theoretical terms, the U.S. government was playing "assurance": it preferred elimination of subsidies (CC) to all the alternatives. France, on the other hand, was playing "prisoner's dilemma": it preferred unilateral subsidization (DC) to the elimination of subsidies. Between 1974 and 1976, during the period of the "Gentlemen's Agreement," negotiations merely coordinated policy, with cooperation emerging from unilateral declarations. Strategic interaction was limited to the signaling of intent. No threats were issued, and a relatively harmonious situation appears to have existed. The agreement in 1978, which banned credits with terms-to-maturity over ten years and placed modest limits on interest-rate subsidies, marked the end

71. U.S. Department of Treasury, *International Export Credit Negotiations*, p. 1; and Lange, "Congressional Testimony," 1984.

72. Messerlin, "Export Credit Mercantilism," p. 391; and Export-Import Bank, *1986 Report to the U.S. Congress*, p. 16.

of a common interest in negotiation. Indeed, the agreement was possible only because the United States and the EC had divergent expectations and thus ascribed different meanings to it. The United States saw it as a first step towards the reduction of export subsidization, while the EC, under the influence of France, did not intend to encourage further reform.[73]

By 1979, the United States and France had thus reached a negotiating impasse; without new threats or linkages, no further agreement on interest-rate subsidies or tied-aid credit was possible. This was true even though there were a small number of players and the game was iterated—factors that would have been expected to promote cooperation if both actors had been facing a "prisoner's dilemma." But the preferences on interest-rate subsidies were asymmetrical. As explained above, the United States was playing "assurance," while France was playing "prisoner's dilemma." As long as American threats to match French interest-rate subsidies were not credible, the French continued to exploit the situation. Since the Eximbank, like some other countries, faced structural limitations on its ability to subsidize, the French suspected that the United States might tolerate French subsidies without retaliation. Some American officials shared this view. Only the extension of long-term credits, and later a special congressional allocation for a "war chest," created a credible U.S. threat. At this point, France capitulated.

With the essential elements of the game simple and the role of tactical linkage self-evident, there is little need here for the more subtle analysis afforded by game theory. U.S. threats transformed a deadlock into a more tractable pattern of interests. As Harrison Wagner has pointed out, this is the most parsimonious game-theoretical hypothesis to explain the emergence of cooperation.[74]

Lessons for testing hegemonic stability theory. The history of the OECD Arrangement demonstrates the dangers of using hegemony as a monocausal explanation and testing it by seeking temporal correlations.[75] Most tests of hegemonic stability theory have sought correlations between issue-specific concentrations of power within an issue-area and the formation of regimes. Yet in the case of the OECD Arrangement, there is no such correlation, despite evidence that it was in fact a single power with dominant financial

73. Wallen, "Export Credit Subsidization," p. 263.

74. Harrison Wagner, "The Theory of Games and the Problem of International Cooperation," *American Political Science Review* 77 (June 1983), pp. 330–46.

75. For a correlative test, see, for example, Krasner, "State Power." For a review, see Haggard and Simmons, "Theories of International Regimes," pp. 500–504. For a previous "process-tracing" test of hegemonic stability theory, which I follow closely, see Timothy J. McKeown, "Hegemonic Stability Theory and 19th-Century Tariff Levels in Europe," *International Organization* 37 (Winter 1983), pp. 73–92. McKeown uses process-tracing to uncover a "false-positive" correlation, while in this study it is used to uncover a "false-negative."

resources that provided the public good. The United States undoubtedly wielded less financial power in the late 1970s and early 1980s, when the export credit regime was formed, than previously.

The divergence between the correlational test results and the historical record can be accounted for by incorrect assumptions about state interests, embedded in a test of hegemony as a monocausal variable. Monocausal tests of the hegemonic stability theory most often assume that the hegemon favors liberal policies, while less powerful nations desire to defect.[76] In this case, the correlational test fails because it assumes actor preferences rather than observing them. In the case of export credits, real-world preferences diverged from those often assumed in two ways, thus modifying the exercise of hegemonic power. First, the United States did not require a dominant power position in order to achieve its goals. The relatively large amount of consensus at the level of underlying preferences reduced the need for coercion or enticement by the hegemon. The negotiations more closely resembled bilateral bargaining, with other states exercising little influence. The key variable remained American hegemony, since the smaller states neither exercised much leverage over France nor coordinated their actions with the United States. But their tacit support decisively eased the task facing the United States.

The second reason why it is important to observe and explain preferences is that the correlational test would involve unwarranted assumptions about the interests of the hegemon. The United States did not show an interest in negotiating an export finance agreement until 1974, when it assumed leadership of the negotiations. Ironically, the impetus for American leadership was related not to the hegemonic position of the United States, but to its decline. While the persistence of American power in one aspect of international finance (long-term bonds) facilitated the formation of the OECD trade finance regime, it was the simultaneous decline of confidence in American financial markets, expressed as eroding confidence in the American dollar and rising relative interest rates, that gave the United States the impetus to seek an international regime.[77] A monocausal explanation would overlook the effects of declining hegemony on U.S. interests. By limiting the domain of hegemonic stability theory to bargaining outcomes, a more precise test is possible, one which, in this case, would support the theory. In short, this case suggests that the results of correlative tests of hegemonic stability theory may have understated its empirical validity.

76. For a critique of this assumption, see Snidal, "Limits." An important exception to the generalization about hegemonic theory testing is David Lake, "International Economic Structures and American Foreign Economic Policy, 1887–1934," *World Politics* 35 (July 1983), pp. 517–34, who presents an elegant and powerful defense of monocausal hegemonic stability theory.

77. On the relation between the U.S. world role and domestic financial and monetary policy, see David Calleo, *The Imperious Economy* (Cambridge, Mass.: Harvard University Press, 1982).

Compliance: cartel stability and functional theory

The third stage in the process of cooperation, once preferences have been determined and bargains have been reached, is compliance. In order for cooperation under the OECD Arrangement to ensue, the basic political compromise between France and the United States had to be embedded in an institution that ensured compliance. The functional theory of regimes, with its emphasis on information, provides the best account of this process.

The creation of an institutional framework to ensure compliance was not a trivial task. The difficulty arose from the fact that the OECD Arrangement is in essence a cartel designed to restrict political economic competition among credit agencies. Microeconomic theory suggests that cartels are often unstable and their maintenance difficult and costly.[78] Potential threats to cartel stability include the high cost of monitoring compliance and sanctioning violators.[79] In the context of the OECD Arrangement, cartel theory raises the following question: Despite difficult monitoring and sanctioning problems, why do actors accept regime norms with remarkably few derogations or claims of cheating? As the "functional theory of regimes" would predict, the answer to this question lies in the transparency provisions of the regime, that is, in the role of the regime as an "information-providing entity."[80]

Like the relatively ineffective GATT prohibition on domestic subsidies, the OECD Arrangement is a self-help regime. Because the goods traded with long-term export financing are large and lumpy and because information is incomplete, the threat of future retaliation provides only an imperfect incentive for compliance in any single case. Significantly, it is also a sanction that few governments have had to invoke, since a more efficient sanction against a government that violates the Arrangement is simply for a competitor to match the offer. In order to do this, however, the competitor must have advance information about deals in progress—information that nations are hesitant to share. Unlike tariff policy, which is nondiscretionary and public, the formulation of an export credit offer involves discreet (sometimes even

78. On the OECD regime as a cartel, see Kohler and Reuter, *Honor among Nations,* p. 17. It is important to remember that the cartel is directed against both LDCs and domestic exporting firms. According to a recent World Bank study, exporting firms and importing nations benefit equally from subsidization. Fleissig and Hill, *Changing Nature of Export Credit Finance,* p. 153. On the economics of the interaction between firms and governments and the way in which international agreements can shift the initiative and the welfare gains from firms to governments, see Calum M. Carmichael, "The Control of Export Credit Subsidies and Its Welfare Consequences," *Journal of International Economics* 23 (August 1987), pp. 1–20.

79. D. K. Osborne contends that members of a cartel face a "prisoner's dilemma." If certain problems can be resolved, he argues, cartels are not inherently unstable, as has often been argued. "Cartel Problems," *American Economic Review* 66 (December 1976), pp. 835–44. For a reconsideration of Osborne's argument, see Edward J. Green and Robert H. Porter, "Noncooperative Collusion under Imperfect Price Information," *Econometrica* 52 (January 1984), pp. 87–101.

80. Keohane, *After Hegemony,* p. 101.

shady) relations between the exporting community and foreign purchasers. A general rule requiring all export credit offers to be transmitted to other credit agencies well in advance might betray proprietary secrets. There would be a strong temptation for credit agencies to leak the information to their domestic exporters, who could then enter the market. Since many LDCs do not evaluate competing offers on the basis of price alone and since the market position of many firms rests in part on traditional relationships with foreign governments, such a rule would threaten the established practices of some exporting firms.

Faced with the need to protect proprietary information while allowing each country to monitor the regime, the OECD negotiators constructed a system whereby governments may address precise questions to one another about financing offered for specific projects. Responses need only be given at the level of specificity at which they are posed.[81] This procedure prevents leaks of information about deals unless enough knowledge is already available to allow competing governments to formulate a precise question. Since Eximbank and other national credit agencies lack the resources to monitor all contracts under consideration, this information must come from the private sector. Thus, unless information about the deal is already known in the market or competing exporters have been approached by the buyer, governments will not be obligated to divulge details of deals in progress. Twenty-day notice must be given only if there has been a violation of Arrangement terms or if tied-aid credits with an exceptionally high grant element are involved, whereupon governments representing competing exporters may demand face-to-face consultations with their foreign counterparts.

Yet such a system seems to invite deliberate misinformation. As is often the case with international cartels, such as the Organization of Petroleum Exporting Countries (OPEC), each nation appears to have an incentive to act as a free rider, withholding information about the true terms of deals in progress. This incentive is strengthened by the high value of each project. While most tariff and subsidy conflicts involve ongoing, relatively homogeneous trade in small items, the goods for which credits are provided tend to be lumpy and expensive. Thus, the "shadow of the future"—the importance that governments attach to their future reputation for honesty—is low, particularly from the point of view of a single exporting firm. In the minds of policymakers, export credit competition tends to become an all-or-nothing, zero-sum conflict for a single multimillion-dollar sale. Under these conditions, why don't countries such as France, which opposes limits on subsidies, withhold or deliberately misstate information rather than provide the up-to-the-minute information that would allow competitors to monitor and sanction violations? Why are there almost no complaints about violations of the Arrangement's transparency provisions?

81. Interviews with U.S. and OECD officials, 1986–87. See also Wellons, *Passing the Buck,* pp. 37–38, and "Bankers and the Export Credit Wars."

One answer is that reliable information is itself a highly valued commodity among credit agencies, because it protects exporting nations from exploitation by buyers. Export credit agencies competing for a given contract in a third market face a monopsonist. Without communication between members of the cartel, the monopsonist can force down the terms each credit agency offers by deliberately exaggerating the competitiveness of the terms offered by its rivals. Treasury and credit agency officials in OECD governments insist that attempts to exploit exporters in this way are common and offer anecdotes to support their point. In a recent case, Canada offered a subsidized credit to a major African nation and called for a face-to-face consultation with the Netherlands, claiming that the Dutch had already offered a tied-aid credit to Kenya in violation of the Arrangement, a charge denied by the Dutch. When pressed to substantiate their accusation, the Canadians produced a letter from the Dutch ambassador which indeed proposed an illegal credit. It was later discovered, however, that the letter was a clever forgery, pasted together by the buyer government from previous (and legitimate) Dutch offers and designed to provoke the Canadian credit agency into extending an illegal credit.[82]

A system of information exchange on demand (as well as recognized minimum interest rates) protects exporters against precisely this sort of deception and exploitation. Once exchanges of information are established, a nation that fails to deliver timely, accurate information runs the risk of not receiving it. Moreover, any exporter that contemplates conspiring with a foreign importer to circumvent the Arrangement must consider that the buyer, as a monopsonist, has an incentive to seek an even better deal by revealing the offer to competing exporters. As two analysts of the Arrangement have observed, "Any derogation is likely to be disclosed to at least one other member of the agreement, which reduces the expected reward to derogation. In this sense, . . . the agreement is self-enforcing."[83]

Advocates of the functional theory of regimes contend that "the informational function of regimes is the most important of all" and suggest that regimes will be most valuable in cases in which information is unequally or asymmetrically distributed.[84] This is certainly true of the transparency provisions of the OECD regime, and transparency is in this case a precondition for discipline. Detailed transparency provisions are the oldest and most important part of the regime, dating back to the Berne Union in the 1950s. The foundations of the current information-sharing system were laid in 1972, well before broad liberalizing reform had reached the agenda.[85] But these

82. Interviews. See also U.S. State Department Telex from Brewster (U.S. Embassy London) to RUEHC/State (Washington, D.C.), 7 February 1978, describing an attempt by the Korean government to use selective information to play the United States and Britain against each other.

83. Kohler and Reuter, *Honor among Nations,* p. 21.

84. Keohane, *After Hegemony,* p. 92.

85. Moore, "Export Credit Arrangements," p. 144.

provisions had unintended consequences. By providing information—which serves both as a selective incentive and as a method of monitoring—the transparency provisions have helped thwart threats to cartel stability.

Conclusion

This article has presented an explanation of regime formation and maintenance based on three variables: the structure of domestic financial institutions, the hegemonic power of the United States, and the functional value of reliable information exchanged within a regime. While these variables and the corresponding theories of cooperation have been considered elsewhere, here they are placed in a new relationship to one another. International cooperation, it is argued, must be disaggregated and viewed as a process with three sequential stages: the formation of state preferences, the outcome of interstate bargaining, and compliance with the resulting institutional rules. Each of these stages must be considered and analyzed in turn.

Some may object that this approach sacrifices too much parsimony.[86] But the sacrifice is only illusory, for there is little empirical support for existing monocausal explanations of international cooperation. Disaggregating the dependent variable and acknowledging that different theories best explain different stages in the process of cooperation allow us to specify theories more precisely and to design more decisive empirical tests. By failing to do this, previous tests have often overlooked important evidence in favor of various theories. Parsimonious and powerful variables, such as hegemonic power and the institutional capacity of states, have been too quickly discounted as factors explaining cooperation. Far from undermining international relations theory, the approach proposed here best allows us to do justice to it.

86. For a defense of parsimony, see David A. Lake, "Power and the Third World: Toward a Realist Political Economy of North–South Relations," *International Studies Quarterly* 31 (June 1987), pp. 217–34.