Notes

- 1. There is a problem for the local-content issue. If Japanese transplants push to add more local content in the U.S., "Americanization" of automobiles adds a risk of CAFE penalties. For example, if Honda Civic reaches the 75 percent local-content level, Civic fall-out of Honda's imports could generate difficulty for Honda's import fleet to meet rising CAFE requirements because of the Civic's high fuel efficiency. However, a domestic Civic could help offset the domestic Accord.
- 2. The change in the U.S. automobile industrial organization had also resulted from surges of imported cars from Japan and other countries. However, it is very hard to differentiate the effects of transplants and imports. Speaking of compact-sized cars, the role of imports has been decreasing in the U.S. market, whereas that of transplants has been increasing. These trends are shown in the make-up of transplant and import car sales for the same models. In 1989 transplants accounted for 59.3, 51.0, 4.1, and 35.8 percent for Accord, Camry, 626, and Legacy respectively. By 1991 transplants increased their shares to 80.9, 72.4, 82.9, and 75.3 percent for the same order in the above. (Sources: Ward's Automotive Yearbook, various issues.)
- 3. The value of 10 percent is arbitrary set. However, there would be only a minor impact on total amount of FDI even if the classifying criterion of 10 percent were changed. This is

- because foreign parents own, on average, 80.2 percent share of their affiliates (Froot, 1991).
- 4. Generally, in a developing country, a larger portion of FDI is greenfield investment, whereas there is an opposite tendency in a developed country. Hence, an amount of FDI is of a relatively high importance for a developing country compared to that of a developed country (U.N., 1992b).
- 5. Also, as a disadvantage of measurement based on assets, any borrowing by foreign firms from either domestic or foreign-based lenders does not qualify as FDI. In such a case, there is no capital flow as FDI and just transfer in the title of corporate assets.
- 6. Ariff defines a relationship between trade and FDI as follows: (a) Trade substituting (where foreign investment goes into import substitution activities aimed at the domestic market);
 - (b) Trade promoting (where foreign investment takes the form of offshore operations producing for the international market);
 - (c) Trade complementing (where foreign investment is directed at providing backup and intra-industry support facilities in the export markets); and
 - (d) Trade diverting (where foreign investment moves in to take advantage of unfilled quotas under preferential arrangements such as the Generalized System of Preference). (1989, pp.358-359)

- 7. The assumptions are as follows:
 - (1) There are two nations, two commodities, and two factors of production (labor and capital).
 - (2) Both nations use the same technology and have constant returns to scale in production.
 - (3) Incomplete specialization in production in both nations.
 - (4) Equal taste in both nations.
 - (5) Perfect competition in both commodities and factor markets.
 - (6) Perfect factor mobility only within each nation.
 - (7) No transportation cost and tariffs (Salvatore, 1990).
- 8. In the Uruguay Round, the General Agreement on Trade in Services (GATS) covers all form of FDI in the services sector.

 GATS does not have an aim of the cooperation of investment at the macro level, but contains multilateral binding rules on FDI in the services sector.
 - Also, in the same round, the Trade Related Investment Measures (TRIMs) has a purpose of achieving multilateral standards in terms of performance requirements, investment incentives, corporate measures, and home-country measures. However, each country has its own interests and no common agreements are established.
- 9. According to Scholes and Wolfson (1988), the U.K. and Japan have "worldwide" taxation systems. Home-country governments collect taxes from subsidiaries abroad after paying taxes to host-country governments. On the other hand, the Netherlands

and Canada have "territorial" corporate taxation, which does not impose a tax on the income of foreign affiliates.

In 1981 U.S. corporate taxation was cut substantially with an introduction of accelerated depreciation. In 1986, tax reform eliminated the special investment incentives.

During 1981 and 86, for the tax consideration alone, the U.K. and Japan were expected to decrease their relative share of FDI in the U.S., compared to that of the Netherlands and Canada, because the U.K. and Japan had not had any tax advantages during the period. Following that period, the situation was anticipated to reverse. However, in practice, the above expectation did not occur in a clear way.

In terms of trade protection, domestic industry tends to ask for trade barriers when foreign firms have special advantages. Therefore, ownership advantages, not protection, are fundamental determinants of FDI.

- 10. Kojima argues that potential gains from FDI based on microeconomic approach will be smaller than that based on macroeconomic approach because of smaller difference in comparative advantage (1985).
- 11. For example, the U.K. had net FDI export of 17, 19, and 3 billions of U.S. dollars in 1987, 88, and 89 respectively. However, the current account deficits were 7, 28, and 33 billions in the same years as above. (Source: IMF, Balance of Payments Statistics Yearbook, 1992, pp.6, 68.)

- 12. Among eleven out of twenty one industrialized countries, whose data on FDI stock are available, the U.S. ranked tenth in terms of growth in inward FDI during 1980 and 1991. Eleven countries include Canada, the U.S., Australia, Belgium-Luxembourg, Finland, Germany, Italy, Netherlands, Norway, Spain, and the U.K.
- 13. Among developed countries, rankings of share of average FDI inflows in gross domestic capital formation are: 1) U.K., 2) Netherlands, 3) Greece, 4) Spain, 5) Australia, 6) Belgium and Luxembourg, 7) New Zealand, 8) U.S. 9) Portugal, 10) France, 11) Sweden, 12) Ireland, 13) Austria, 14) Canada, 15) Italy, 16) Norway, 17) Finland, 18) Denmark, 19) Germany, 20) Japan, 21) South Africa (U.N., 1991).
- 14. See note 13. Low level of inward FDI to Japan is explained by three elements: government's restriction on inward FDI, inefficient approach to Japanese markets by multinational corporations, and competitive advantages of Japanese corporations (U.N., 1992b).
- 15. Fordism, mass production system, contributed to an increase in productivity until the 1970s. However, since the early 70s, productivity has declined due to difficult labor problems, technical problems in reorganizing production, and increasingly weak technology and product development (Mair et al, 1988).
- 16. GM and the Ford had enjoyed the concentration ratio in a range between 60 percent and 80 percent for the entire postwar period until the 1970s (Kwoka, 1984).

- 17. Neoclassical economists attribute loss of productivity of U.S. automobile industry to labor unions, government intervention, and restrictive trade policies of foreigners. For example, U.S. motor vehicle production workers had received much higher compensation than foreign workers. In 1975, U.S. workers received \$9.53 compared to Japan's \$3.56 and Germany's \$7.89. However, institutionalists blame management-dominated firm for the decline in productivity. Management operates corporations for its own right. "Inflated costs and inefficiency may be endemic to the model of management-dominated firms with requestered monopoly profits" (Bolin, 1991, p.464).
 - Also, Katz et al claim that effective linking of labor-management relation practices is the key to achieving superior productivity (1987).
- 18. Government regulation sets standards on three criteria. The Environmental Protection Agency controls air pollution The National Highway Traffic Safety Administration And the secretary of transportation rules safety issues. manages fuel economy concerns. See Crandall et al (1986) in detail. Starting in 1971, federal regulations have incurred additional costs to U.S. car producers. In 1971 an average retail price increase for new cars due to these regulations was 41.24 U.S. dollars (1990 constant). By 1991 total increase had been accumulated to \$2,582 since 1971. (Source: U.S. Bureau of Labor Statistics.)

- 19. During those periods, the Big Three refused to promote quality in accordance with the traditional or collusive way. However, they did not follow the traditional pricing policies in certain years. In 1978 and 80, GM increased its prices in small at the beginning of the model year, but increased them more frequently later. Also, in 1981 Ford and Chrysler hesitated to follow GM's pricing policy (Ramrattan, 1991).
- 20. According to Clark et al, motor vehicle industry ranks the thirteenth in terms of least vulnerability to imports among 318 U.S. manufacturing industries. This result might suggest that the Big Three survived well enough during the challenging years, even under a decline in productivity and tremendously intensified international competition. Footwear, leather, and apparel industries are the most vulnerable according to their research (1990).
- 21. The make-up of imported automobiles was changed dramatically in this period. In 1970, Germany accounted for 59 percent of U.S. imports compared to Japan's 24 percent. By 1980, Japan increased its share to 79 percent whereas Germany's share declined to 13 percent (Tay, 1991).
- 22. Abernathy et al (1983) estimate that production cost advantage for Japanese automobile companies were some \$2,000 per vehicle.
- 23. See Figure 2.
- 24. Japanese transplants have taken the following locational strategy: geographical disperse for greenfield sites due to labor market reasons; and geographical concentration for

- proximity between assembly and supplier firms (Mair et al, 1988).
- 25. Winston and his associates claim that brand loyalty results from manufacturing in the U.S. regardless of U.S. brand or foreign brand. Sources of brand loyalty of U.S. made cars are parts, repair availability, and national prides. Sources of foreign brands are corporate quality control (Winston et al, 1987).

Kwoka presumes that brand loyalty gives a firm a base to practice quality discrimination among the same basic products with multiple quality-variants (1992).

Oppositely Griliches (1991) and Schmalensee (1991) claim that there is no brand loyalty for automobiles and that consumers choose better cars at lower prices.

- 26. Krafcik (1988) and Eads (1987) claim that team systems, by themselves, will accomplish little significant improvement of auto industry productivity.
- 27. GM has applied computer-integrated manufacturing (CIM), computer-aided design (CAD), and computer-enhanced product marketing (Mody and Wheeler, 1990).
- 28. Justman discusses the disparity between long- and short-run demand elasticities. Durable goods have a demand structure in which a short-run price elasticity is greater than long-run one. Consumers react more to an immediate impact of a price change than to desired equilibrium levels of stock holding

- (1987). Chow suggests that the short-run elasticity is twice as great as the long-run one (1960).
- 29. There are two previous studies that use these assumptions with nested logit models. They assume that "makes and models within a class are similar in unobserved factors, such that independence from irrelevant alternatives applies for any pair of makes and models within a class, but not for makes and models in different classes" (Mannering and Train, 1985, p.271). Also, disaggregate/noncompensatory models suggest that the "vehicle size" is the most important characteristics among all alternatives.
- 30. Segmentation is based on Ward's Automotive Yearbook during 1985 and 1990. A class of a vehicle is determined by size, price, and marketing intent. 1992 Ward's Automotive Yearbook changed its method of categorization of cars. Previous issues have segmentations such as subcompact, compact, intermediate, full size, and luxury. But recent versions have those such as small, middle, large, and luxury. Besides, I exclude specialty models in the compact from the estimated demand function because transplants do not produce those types in the U.S.
- 31. For example, Honda places major emphasis on sales of Accord in the strategy of operations in the United States. The company had succeeded in establishing the Accord as the number-one car in terms of sales in the U.S. for a couple of years. Also,

- Fuji President, Isamu Kawai stated his company's concentration on Legacy production in the U.S. operation (Johnson, 1991).
- 32. In simultaneous equations, dependent and independent variables are jointly determined. In the case of demand function of automobiles, for example, the car price and units sold affect each other under the assumption of simultaneity. However, this problem would occur in the long-run not in the short-run. Ignoring simultaneity will make estimates and forecasts biased and inconsistent. Furthermore, tests of hypothesis on parameters will be invalid (Ramanathan, 1992).
- 33. This drawback might lead to a bias for automakers who carry out those incentive programs often. The Big Three have carried out incentive programs, sometimes for a yearly long. The Big Three announced incentive programs on many 92 models from the start of those models.
- 34. In Hartmann's domestic sales equation, second quarter dummy (DQ2) and fourth quarter dummy (DQ4) are included. Both of them have a statistical significance at the level of 0.05 and a positive effect on domestic car sales. See Appendix A.
- 35. Only CCI and INCOME are seasonally adjusted data.
- 36. Rubin tests index of consumer confidence published by both the Michigan Survey Research Center and the Conference Board.

 The author concludes that the Conference Board index performs better perhaps because it reflects consumer's sentiment in the less distant future (1983).

37. As theoretical and statistical requirements, the parameter values must be correct signs in terms of economic theory, and significant in terms of statistics. The equations as a whole must be in a good fit and not have serial correlation (Hartmann, 1983).

As possible additional variables to be fit in the model, previous researchers suggest some type of lagged dependent variable (See section C under review of previous studies in the Chapter IV). I tested Koyck lag for auto sales. However, if I put this variable in the model, I could not check on serial correlation, because the value has a negative value under a square root for the Durbin-h test.

I also tested cross-prices and lagged variable for new car prices, but the result did not meet theoretical and statistical requirements. The latter might result from the fact that people are more concerned with current prices rather than past prices.

- 38. D.W. is the Durbin-Watson Statistic.
- 39. L.M. is the result of the Lagrange Multiplier Test on the fourth order of serial correlation. Ramanathan insists that investigators apply both the D.W. Test and the L.M. Test to reinforce conclusions. However, if the two tests give contradictory results, there is no obvious way to choose one of them (1992).
- 40. The result is opposite to Mannering's findings. He suggests that "consumers tend to over-value interest rates relative to

their true worth...Domestic manufacturers can reap greater benefits from interest rate over-valuation than can their Japanese competitors" (1987). However, he warns the 'exposure' notion of interest rate incentive program, which might be a current situation. In other words, consumers have become more knowledgeable about interest rates on the auto loans, and do not over-value them.

- 41. Inferior goods are purchased in smaller amounts when income rises. Consumers would purchase less compact-sized cars and more bigger-sized automobiles with an increase in income. However, the income elasticities of demand for Japanese compact cars are always positive and significant (0.01). This fact indicates that consumers do not see an inferiority in Japanese compact automobiles comparing to bigger-sized cars. This point of view needs to be studied more in the future.
- 42. The attitudinal index such as CCI depends largely upon income. Therefore, the index is expected to move along with the income. Also, if both of the CCI and the income are included in the same equation, those variables might be insignificant due to the similar characteristics in them. See Dyck (1987).
- 43. USITC's valuation is based on Toder's estimation. Toder (1978) estimated that the price elasticity of demand for Japanese cars is in a range between '-1.5' and '-2.5'. Also, Stone (1977) estimated it at '-2.66'. However, both the Toder and Stone estimates are for the price elasticity of demand for Japanese "imported" cars in the U.S.

44. Chow (1957) estimated the price elasticity of U.S. cars at '1.20', and Levinsohn (1988), at '-0.82'. On the other hand,
Lee and Matsuya (1982) estimated that of Japanese imports at '2.55'. For more on demand functions for automobiles, see
Richardson's collections (1978, 1988, etc) of selected
mathematical models relating to automobiles.

Bibliography

- Abernathy, William, Kim Clark, and Alan Kantrow. 1983. <u>Industrial</u>
 Renaissance. New York: Basic Books.
- Aharoni, Yair. 1966. <u>The Foreign Investment Decision Process</u>.

 Boston: Harvard University Graduate School of Business
 Administration.
- Ariff, Mohamed. 1989. TRIMs a North-South Divide or a Non-Issue?

 World Economy (September): 347-360.
- Bas, Ed. 1985. Torrid Production Pace Characterized 1984. Ward's
 Automotive Yearbook: 57-91.
- Berkovec, James, and John Rust. 1985. A Nested Logit Model of Automobile Holdings for One Vehicle Households. <u>Transportation</u>
 Research 19B, no. 4: 275-285.
- Bhagwati, Jagdish. 1982. Shifting Comparative Advantage,
 Protectionist Demands, and Policy Response. In Jagdish
 Bhagwati, ed., Import Competition and Response, National
 Bureau of Economic Research, 153-195. Chicago: University of
 Chicago Press.
- Bolin, Meb. 1991. An Institutionist Perspective on Declining

 American Productivity: American Automobile Industry. <u>Journal</u>

 of Economic Issues 25, no.2: 459-465.
- Buckley, Peter, and Mark Casson. 1976. <u>The Future of Multinational Enterprise</u>. London: Macmillan.
- Caves, Richard. 1971. International Corporations: The Industrial Economics of Foreign Investment. <u>Economica</u> 38, no.49: 1-27.

- Charles River Associates. 1980. The Demand for Electric Automobiles. Report Prepared for the Electric Power Research Institute under Research Project # 1145-1.
- Chase Econometrics Associates. 1974. The Effect of Tax and Regulatory Alternatives on Car Sales and Gasoline Consumption.

 NTIS Report No. PG-234622.
- Chow, Gregory. 1960. Statistical Demand Functions for Automobiles and their Use for Forecasting. In Arnold Harberger, ed.,

 The Demand for Durable Goods, 149-78. Chicago: University of Chicago Press.
- Chow, Gregory. 1957. <u>Demand for Automobiles in the United States</u>.

 Amsterdam. North Holland Publishing Company.
- Clark, Don, David Kaserman, and John Mayo. 1990. Barriers to Trade and the Import Vulnerability of U.S. Manufacturing Industries. The Journal of Industrial Economics 38, no.4 (June): 433-447.
- Crandall, Robert, Howard Gruenspecht, Theodore Keeler, and Lester

 Lave. 1986. Regulating the Automobile. Washington, DC: The

 Brookings Institutions.
- Dunning, John. 1988. The Eclectic Paradigm of International Production: A Restatement and Some Possible Extensions.

 Journal of International Business Studies 19, no.1: 1-31.
- Dyck, Harold. 1987. The role of Expectations on Automobile Demand. <u>Transportation Research</u> 21b, no.4 (August): 331-337.

- Ead, George. 1987. Afterword. In Harry Katz, Thomas Kochan, and Jeffrey Keefe, Industrial Relations and Productivity in the U.S. Automobile Industry, 720-725, <u>Brookings Papers on</u> Economic Activity 3.
- The Economist. 1988. The American Car Industry's Own Goals. (February 6): 69.
- Ferris, Deebe. 1992. Big Three Post Record Financial Losses:

 Major Executive Changes Follow. Ward's Automotive Yearbook:

 13-22.
- Frantz, Douglas. 1988. Roles of Working Women, Minorities Pose Challenge. Los Angeles Times (July 13): 1, 15.
- Freedman, Audrey and David Bauer. 1983. <u>Japanese Investment in the United States: An Opinion Survey of Elected Officials</u>.

 New York: The Conference Board, Inc.
- Freenstra, Robert. 1988. Quality Change under Trade Restraints:

 Theory and Evidence from Japanese Autos. Quarterly Journal of
 Economics 103: 131-146.
- Friedlaender, Ann, Clifford Winston, and Kung Wang. 1984. Costs,

 Technology, and Productivity in the U.S. Automobile Industry.

 Bell Journal of Economics 14: 1-20.
- Froot, Kenneth. 1991. <u>Japanese Foreign Direct Investment</u>.

 Cambridge, MA: National Bureau of Economic Research.
- Graham, Edward, and Paul Krugman. 1991. <u>Foreign Direct Investment</u>

 <u>in the United States</u>. Washington, DC: Institute for

 International Economics.

- Griliches, Zui. 1991. Afterword. In Fred Mannering and Clifford Winston, Brand Loyalty and the Decline of American Automobile Firms, 104-107, <u>Brookings Papers on Economic Activity</u>.
- Hartmann, John. 1983. <u>Automobile Demand Forecasting Model</u>.

 Washington, DC: U.S. Department of Commerce.
- Hocherman, Irit, Joseph Prashker, and Moshe Ben-Akiva. 1982.

 <u>Estimation and Use of Dynamic Transaction Models of Automobile</u>

 <u>Ownership</u>. Paper presented at Transportation Research Board

 Annual Meeting. Washington, DC.
- Hymer, Stephen. 1976. <u>The International Operations of National</u>
 <u>Firms</u>. Cambridge, MA: MIT Press.
- Johnson, Richard. 1991. Fuji President Seeks SIA Profit: Local Content, Output to Rise. <u>Automotive News</u> (2 December): 16.
- Julius, DeAnne. 1991. Foreign Direct Investment: The Neglected

 Twin of Trade. Occasional Paper 33. Washington, DC: Group

 of Thirty.
- Justman, Moshe. 1987. An Extension of Lerner's Monopoly Index for Markets with a Disparity between Long- and Short-Run Demand Elasticities. Economic Inquiry 25, no.4: 681-694.
- Katz, Harry, Thomas Kochan, and Jeffrey Keefe. 1987. Industrial Relations and Productivity in the U.S. Automobile Industry.

 Brookings Papers on Economic Activity 3: 685-716.
- Kojima, Kiyoshi. 1985. <u>Nihon No kaigai Chokusetsu Toshi (Japanese</u>

 <u>Foreign Direct Investment)</u>. Tokyo: Bunshindo.

- Kojima, Kiyoshi. 1973. A Macroeconomic Approach to Foreign Direct Investment. <u>Hitotsubashi Journal of Economics</u> 14, no.1 (June): 1-21.
- Krafcik, John. 1988. <u>Comparative Analysis of Performance</u>

 <u>Indicators at World Auto Assembly Plants</u>. Massachusetts

 Institute of Technology.
- Kwoka, John Jr. 1992. Market Segmentation by Price-Quality Schedules: Some Evidence from Automobiles. The Journal of Business 65, no.4: 615-628.
- Kwoka, John Jr. 1984. Market Power and Market Change in the U.S. Automobile Industry. <u>The Journal of Industrial Economics</u> 32, no.4 (June): 509-520.
- Law, Christopher. 1991. Motor Vehicle Manufacturing: The Representative Industry. In Christopher M. Law, ed., Restructuring the Global Automobile Industry, 1-18. New York: Routledge.
- Lee, Byung, and Hideaki Matsuya. 1982. Demand for Japanese Passenger Cars in the United States. The Review of Black Political Economy 11, no.4 (summer): 455-464.
- Levinsohn, J. 1988. Empirics of Taxes on Differentiated Products:

 the Case of Tariffs in the U.S. Automobile Industry. In
 Robert Baldwin, ed., <u>Trade Policy Issues and Empirical</u>
 Analysis. Chicago: University of Chicago Press.

- Mair, Andrew, Richard Florida, and Martin Kenney. 1988. The New Geography of Automobile Production: Japanese Transplants in North America. <u>Economic Geography</u> (October): 352-373.
- Mannering, Fred, and Clifford Winston. 1991. Brand Loyalty and the Decline of American Automobile Firms. Brookings Papers on Economic Activity: 67-114.
- Mannering, Fred. 1987. Analysis of the Impact of Interest Rates

 on Automobile Demand. University Park, PA: Pennsylvania

 State University.
- Mannering, Fred, and Kenneth Train. 1985. Recent Directions in Automobile Demand Modeling. <u>Transportation Research</u> 19b, no.4: 265-274.
- Mannering, Fred, and Clifford Winston. 1983. <u>Dynamic Models of Household Vehicle Ownership and Utilization: An Empirical Analysis</u>. Working Paper. Department of Economics, MIT.
- Mody, Ashoka, and David Wheeler. 1990. <u>Automation and World</u>

 <u>Competition</u>. London: The Macmillan Press Ltd.
- Murtaugh, Michael, and Hugh Gladwin. 1980. A Hierarchical Decision-Process Model for Forecasting Automobile Type-Choice.

 <u>Transportation Research</u> 14a, no.5-6 (October-December): 337-348.
- Ramanathan, Ramu. 1992. <u>Introductory Econometrics With</u>

 Applications. Orlando: Harcourt Brace Jovanovich, Inc.
- Ramrattan, Lall. 1991. The Impact of Imports on Price Competition in the Automobile Industry. The American Economicst 35, no.2: 60-66.

- Recker, Wilfred, and Thomas Golob. 1978. A Non-Compensatory Model of Transportation Behavior Based on Sequential Consideration of Attitudes. General motors Research Publication GMR-2621.
- Rehder, Robert. 1989. Japanese Transplants: In search of a Balanced and Broader Perspective. The Columbia Journal of World Business 24, no.4 (winter): 17-28.
- Rehder, Robert, and Marta Smith. 1986. Kaizen and the Art of Labor Relation. <u>Personal Journal</u> (December): 83-93.
- Reich, Simon. 1989. Roads to Follow: Regulating Direct Foreign Investment. <u>International Organization</u> 43, no.4, (Autumn): 543-584.
- Richardson, Barbara. 1988. <u>An Inventory of Selected</u>

 <u>Mathematical Models Relating to the Motor Vehicle</u>

 <u>Transpotation System and Associated Literature</u>. Sixth

 Supplement. Ann Arbor: Richardson Associates, Inc.
- Richardson, Barbara. 1978. <u>An Inventory of Selected Mathematical Models Relating to the Motor Vehicle Transportation System</u>. Ann Arbor: Policy Analysis Division, Highway Safety Research Institutes, University of Michigan.
- Rubenstein, James. 1991. The Impact of Japanese Investment in the United States. In Christopher Law, ed., Restructuring the Global Automobile Industry, 114-142. New York: Routledge.
- Rubin, Laura. 1983. <u>Domestic Automobile Demand</u>. Working Paper Series 29. Washington, DC: Board of Governors of the Federal Reserve System.

- Salvatore, Dominick. 1990. <u>International Economics</u>. New York:

 Macmillan Publishing Company.
- Schmalensee, Richard. 1991. Afterword. In Fred Mannering and Clifford Winston, Brand Loyalty and the Decline of American Automobile Firms, 104-107, <u>Brookings Papers on Economic Activity</u>.
- Scholes, Myron, and Mark Wolfson. 1988. <u>The Effects of Changes in Tax Laws on Corporate Reorganization Activity</u>. Stanford:
 Stanford University.
- Scholl, Russel, Raymond Mataloni, and Steve Bezirganian. 1992.

 The International Investment Position of the United States in

 1991. Survey of Current Business (June): 46-59.
- Shimada, Haruo. 1989. Japanese Management of Auto Production in the United States: An Overview of 'Humanware Technology'. In Kozo Yamamura, ed., <u>Japanese Investment in the United States:</u>
 Should We Be Concerned?, 183-205. Seattle: Society for Japanese Studies.
- Smitka, Michael. 1991. <u>Competitive Ties: Subcontracting in the</u>

 <u>Japanese Automotive Industry</u>. New York: Columbia University

 Press.
- Stone, Joe. 1977. Price Elasticities and the Effects of Trade
 Liberalization for the United States, the European Economic
 Community and Japan. <u>Dissertation</u>. Michigan State
 University.

- Tay, Richard, and Patrick McKarthy. 1991. Demand Oriented Policies for Improving Market Share in the U.S. Automobile Industry. <u>International Journal of Transport Economics</u> 18, no.2: 151-166.
- Thompson, Arthur Jr. 1989. <u>Economics of the Firm: Theory and Practice</u>. New Jersey: Prentice Hall.
- Toder, Eric. 1978. <u>Trade Policy and the U.S. Automobile</u>

 <u>Industry</u>. New York: Praeger.
- Train, Kenneth. 1986. Qualitative Choice Analysis: Theory,

 Econometrics, and an Application to Automobile Demand.

 Cambridge, MA: MIT Press.
- Train, Kenneth, and Lohrer M. 1983. <u>Vehicle Ownership and Usage:</u>

 <u>An Integrated System of Disaggregate Demand Models</u>. Paper

 Presented at the Transportation Research Board Annual

 Meetings. Washington, DC.
- United Nations Centre on Transnational Corporations. 1992a. <u>The Determinants of Foreign Direct Investment: A Survey of the Evidence.</u> New York: United Nations.
- United Nations Centre on Transnational Corporations. 1992b.

 Transnational Corporations as Engines of Growth. New York:

 United Nations.
- United Nations Center on Transnational Corporation. 1991. <u>World</u>

 <u>Investment Report: The Triad in Foreign Direct Investment.</u>

 New York: United Nations.

- United States General Accounting Office. 1988. <u>Foreign Investment: Growing Japanese Presence in U.S. Auto Industry</u>

 (GAO/NSIAD-88-111, March). Washington, DC: Government Printing Office.
- United States International Trade Commission. 1985. A Review of

 Recent Development in the U.S. Automobile Industry Including

 an Assessment of the Japanese Voluntary Restraint Agreements.

 Washington, DC: USITC Publication.
- Vernon, Raymond. 1974. The Location of Economic Activity. In

 John Dunning, ed., <u>Economic Analysis and the Multinational</u>

 <u>Enterprise</u>, 89-114. London: George Allen & Unwin.
- Wharton Econometric Forecasting Associates, Inc. 1977. An

 Analysis of the Automobile Market Modeling the Long-Run

 Determinants of the Demand for Automobiles, 1,2,3.

 Prepared for the U.S. Department of Transportation,

 Transportation Systems Center. Cambridge, MA.
- White, Lawrence. 1971. <u>The Automobile Industry Since 1945</u>.

 Cambridge, MA: Harvard University Press.
- Winston, Clifford, and Associates. 1987. <u>Blind Intersection?:</u>

 <u>Policy and the Automobile Industry</u>. Washington, DC: The

 Brookings Institution.
- Winston, Clifford, and Fred Mannering. 1984. Consumer Demand for Automobile Safety. American Economic Review 74(2): 316-319.

Wong, Kar-Yiu. 1989. The Japanese Challenge: Japanese Direct Investment in the United States. In Kozo Yamamura, ed.,

<u>Japanese Investment in the United States: Should We Be</u>

<u>Concerned?</u>, 63-96. Seattle: Society for Japanese Studies.