



Congressional Research Service The Library of Congress

Wasnington, D.C. 20540

NORTHERN KENTUCKY UNIVERSITY LIBRARY 06:

THE GENERAL MOTORS-TOYOTA JOINT VENTURE AND ITS COMPETITIVE IMPLICATIONS

COMPLIMENTS OF Gene Snyder

Gwenell L. Bass Analyst in Corporate Finance and Industrial Organization Economics Division July 13, 1983

> **GOVERNMENT DOCUMENTS** COLLECTION

.

ABSTRACT

This paper examines the proposed General Motors-Toyota joint venture from an economic point of view. It provides an overview of the venture and the financial status of the companies involved. The report reviews the economics of joint ventures by focusing on their implications for market competition. It also reviews the legislative history of mergers and joint ventures with special emphasis on aspects of the law that are directed at reducing market concentration. Statistical measures of market concentration are applied in assessing the competitive implications of the proposed venture. Finally, the paper looks at potential employment effects.

THE GENERAL MOTORS-TOYOTA JOINT VENTURE AGREEMENT AND ITS COMPETITIVE IMPLICATIONS

I. INTRODUCTION AND SUMMARY FINDINGS

Since 1973 the rising price for gasoline and for American-made autos, combined with periods of recession have significantly altered the U.S. automobile market. In addition, the inroads made by foreign car manufacturers in U.S. and world auto markets have caused problems for U.S. automakers. The level of retail unit sales has swung from boom to bust. There has been a pronounced shift in preferences away from large cars to smaller, more fuel-efficient ones, and the overall demand for new automobiles-has slowed noticeably.

During the last six years, the share of small cars in the total U.S. market (based on unit sales volume) has increased dramatically from 48.7 percent in 1976 to 64.6 percent in 1982. By contrast, retail sales of intermediate and full-sized (excluding luxury) automobiles dropped from 46.7 percent of total auto sales in 1976 to 31.5 percent in 1982.

In the early years of this transition, the U.S. auto industry was illequipped to meet the increase in demand for fuel-efficient cars. Domestic producers have since downsized their cars and introduced models with frontwheel drive enhancing their ability to compete with foreign manufacturers in meeting this demand. The success of the domestic industry's response to this change in consumer demand is crucial to the industry's future growth. However, survey research has indicated that in recent years consumer resistance to high purchase prices of cars, especially subcompacts has been a substantial deterrent to domestic auto sales. In exploring ways of meeting the serious foreign competition especially in the small car market, as well as trimming the high cost of production and, in turn, the purchase price of their automobiles, domestic manufacturers have considered a number of alternative production techniques and business arrangements. One such arrangement is the proposed General Motors-Toyota joint venture.

This paper examines the proposed General Motors-Toyota joint venture from an economic point of view. Section II provides an overview of the venture and the financial status of the companies involved. Section III reviews the economics of joint ventures by focusing on their implications for market competition. It also briefly reviews the legislative history of U.S. law regulating mergers and joint ventures with special emphasis on aspects of the law that are directed at reducing market concentration. Section IV applies statistical measures of market concentration in assessing the competitive implications of the proposed venture. Section V looks at the potential employment effects, while Section VI offers a few summary observations.

The general conclusions of this paper are as follows:

- . Both GM and Toyota stand to gain substantially from the proposed joint venture. Through the GM connection, Toyota would acquire almost instant access to the U.S. market free from import quotas (or voluntary export restraints). For its part, GM will obtain entry into a modern front wheel-drive facility in the the highly competitive subcompact field, in which it has, to date, failed to compete successfully.
- . The employment effects anticipated by the parties to the venture indicate that the plant probably will be highly automated and used to produce parts that can be done using mass production methods for final assembly. GM officials have estimated that the venture will provide approximately 3,000 jobs at the Fremont plant and an additional 9,000 indirectly in supplying industries placing the total employment effects at 12,000 persons.
- . On the negative side of the ledger, the results provide evidence that the proposed venture "generates findings of threshold antitrust risk." An application of statistical measures of concentration shows that the

venture could be viewed as providing the potential for a reduction of competition in the subcompact market with associated adverse effects on consumer welfare. The Federal Trade Commission is examining the competitive effects of the joint venture and will render a decision in September.

II. THE PROPOSED GM-TOYOTA JOINT VENTURE

On February 14, 1983, General Motors announced that it had reached an agreement with Toyota Motor Corporation to form a joint venture. The agreement calls for the establishment of a jointly-owned company to build front-wheel drive subcompact cars starting with the 1985 model year which begins in late 1984.

Under the 12-year agreement, GM and Toyota will name an equal number of directors to the new company's board of directors. Under terms worked out between the two companies, Toyota will name the President and Chief Executive Officer of the new entity. Each company will contribute \$150 million in assets to the venture and each will own 50 percent of the new firm's stock. GM will contribute its closed Fremont, California, assembly plant and \$20 million in cash while Toyota will contribute \$150 million in cash. 1/

GM officials estimate that the venture will provide approximately 3,000 jobs at the Fremont plant and will create an additional 9,000 at support facilities. 2/ The new unit, which will have the capacity for building between 200,000 and 300,000 cars annually, will market these cars through Chevrolet dealers in the United States.

The new GM-Toyota car will have 50 percent "foreign content." This means that one-half the value added in the production of automobiles including the production of engines and transmissions will originate in Japan, and the remainder will originate in the United States.

^{1/} General Motors Press Release, February 14, 1983.

^{2/} General Motors' officials assume that for each job created in the auto industry three more are created in the economy at large. This estimate is high. Industry analysts place the figure at 2 - 2.5 indirect jobs for each job in the auto industry.

General Motors is currently engaged in the production and sale of motor vehicles, related parts and accessories throughout the world. The company is the second largest industrial corporation in the United States measured by both total sales and assets. In 1982, GM reported a net income of \$963 million on sales of 560 billion. During the same year, it sold 3.5 million cars in the United States, including 537,000 subcompacts. As the number one auto manufacturer in the United States, it produced 3.1 million cars during 1982 comprising 62 percent of the domestic market. GM is also the leading world motor vehicle manufacturer with 17 percent of total world production during 1982.

As an international motor vehicle manufacturer, GM has equity interests in a number of foreign automotive companies, including ownership of 34 percent of Isuzu Motors, Ltd. and 5 percent of Suzuki Motor Company, both Japanese automobile manufacturers. Beginning in 1985, GM plans to buy at least 200,000 subcompact cars per year from Isuzu Motors. These cars, referred to as the R-body, will be sold by the Chevrolet and Pontiac Divisions. The 200,000 target figure is equivalent to the number of cars that GM and Toyota plan to build as a result of the joint venture. At about the same time GM will buy 90,000 Suzuki K-body minicars per year for sale by Chevrolet. Isuzu formerly supplied GM with the Buick Opel.

The Toyota Motor Corporation, the other party to the joint venture, is also engaged in the production and sale of motor vehicles, related parts and accessories with sales made throughout the world. Toyota is a Japanese based corporation. In 1982, the company earned \$555 million on sales of \$15 billion. Toyota is the third largest motor vehicle producer worldwide. The car-maker produced 8.6 percent of world auto production in 1982. Since 1975, it has led foreign automobile sales in the United States. The company is ranked fourth in terms of

total passenger cars sold in the United States and third in sales of subcompact cars. In 1982, Toyota sold 530,000 passenger cars in the United States including 337,000 subcompacts.

Both GM and Toyota stand to gain substantially from the joint venture. In terms of general trade relations, Toyota's involvement could help ease the growing friction between the United States and Japan. Currently, Japan is running large trade and current-account surpluses, and the resulting anti-Japanese sentiments are of concern to its leaders. Protectionist measures aimed at Japan have forced it to curtail its exports of certain products, including automobiles. Japan voluntarily restricts its exports of passenger cars to the United States, Canada, Germany and England. Bills before the U.S. Congress would limit Japan's access to the American market even more. For example, proposed U.S. domestic content legislation (H.R. 1234 and S. 707, 98th Congress) would require that cars and trucks sold in large quantities in the United States contain a certain percentage of American parts and labor. As a penalty for not meeting the required ratios, automakers would face import quotas on both finished vehicles and parts.

Unlike Toyota's two leading Japanese competitors, Honda and Nissan, that have both set up overseas operations, Toyota has had only limited experience in building plants outside of Japan, although it is building a plant in Taiwan and has a facility in California to produce pickup truck beds. Through the GM connection, Toyota would also acquire almost instant access to the U.S. market free from import quotas (or voluntary export restraints). And it gains access to this market at a much lower price than that paid by Honda and Nissan, which invested considerably more to establish their own U.S. assembly plants.

For its part, GM should obtain a modern front-wheel drive vehicle in the highly competitive subcompact field, in which it has, to date, failed

to compete successfully. GM's only entries in the subcompact field have been the aging rear-drive Chevrolet Chevette/Pontiac 1000 model and the front-drive J-body cars, which have turned in a disappointing sales performance. It is expected that with the benefit of Japanese parts, management and production techniques, Chevrolet may be able to offer the GM-Toyota car at a more competitive price than the J-body cars.

III. JOINT VENTURES AND LEGISLATIVE HISTORY

A joint venture can be defined as the creation of a jointly owned business enterprise by two or more corporations. 3/ It provides a means by which resources can be pooled and risks shared, thus making possible the completion of projects which would not have otherwise been undertaken. By their very nature, joint ventures result in an exchange of information among participants that helps reduce risk and uncertainty. If part of the information exchanged relates to future plans or price expectations, then a large measure of the uncertainty surrounding expected rival's reactions is removed. Furthermore the fact that competitors are brought into such close contact with each other raises distinct anticompetitive possibilities.

The most obvious argument against joint ventures is the large number of interfirm contacts necessitated by such associations. These contacts create an interdependent environment which may produce an anticompetitive effect not necessarily evident at the micro-level. For example, interdependency may encourage leading producers to pursue a tacit policy of joint profit maximization that approximates actions based on actual collusion or conscious parallelism.

^{3/} Irwin M. Stelzer, Joint Ventures--A Form of Merger, Selected Antitrust Cases: Landmark Decisions, Illinois:1972 pp. 226 -246.

In appraising the probable negative competitive impact of joint ventures Professor Mead, in his classical piece, lists three economic concerns: $\frac{4}{2}$

- 1. Competition among horizontally related firms may be restrained because the sharing of information lessens the competitive drive between firms.
- 2. If there is a vertical relationship between the parent firms, a market foreclosure issue may arise from preferential treatment of the new entity.
- 3. When two or more firms engage in a joint venture, there is a net gain of one new semi-independent firm in the industry entered but perhaps at the expense of precluding entry by one or more of the parents separately. Further, potential competition due to future expansion into products and markets served by a partner may be precluded out of an interest in preserving a harmonious parental relationship.

Mead also offers four economic justifications for joint ventures. 5/

- 1. A joint venture may be the best means for obtaining entry into an industry or geographic market where capital requirements are excessively high.
- 2. A joint venture spreads the risk among the partners thus helping to reduce a major barrier to entry.
- 3. A joint venture may permit the new firms interested in performing a given function to join together and not only safeguard whatever legitimate economic interest is involved but may do so efficiently as well.
- 4. A joint venture may be justified where a large investment is expected to produce important external economies that accrue indiscriminately to firms in a given industry, rather than primarily to the investing firm.

In the Penn-Olin case, the first joint venture case which the Supreme Court examined under Section 7 of the Clayton Act, Justice Clark suggested

5/ Ibid.

^{4/} Walter Mead, The Competitive Significance of Joint Ventures, The Antitrust Bulletin, Fall 1967, Vol. XII, pp. 819-849.

that the following criteria be taken into account when assessing the probability of a substantial lessening of competition: 6/

- 1. The number and power of the competitors in the relevant market
- 2. The background of their growth
- 3. The power of the joint venturers
- 4. The relationship of their lines of commerce
- 5. The competition existing between them and the power of each in dealing with the competitors of the other
- 6. The setting in which the joint venture was created
- 7. The reasons and necessities for its existence
- 8. The joint venture's line of commerce and the relationship thereof to that of its parents
- 9. The adaptability of its line of commerce to noncompetitive practices
- 10. The potential power of the joint venture in the relevant market
- 11. An appraisal of what the competition in the relevant market would have been if one of the joint venturers had entered alone
- 12. The effect, in the event of this (# 11) occurrence, of the other joint venturer's potential competition
- 13. And other factors as might indicate potential risk.

According to the Justice Department's November 1980 Antitrust Guide Concerning Research Joint Ventures, the Antitrust Division's first consideration in analyzing the effect on competition of a joint venture is the competitive relationship of the firms engaging in the project. Evaluation of the competitive relationship

^{6/} United States v. Penn-Olin Chemical Co., 378 U. S. 158 (1964). (See page 9 for a description of Section 7 of the Clayton Act.) The courts considered as a critical factor in determining anticompetitive effect whether the parent firms would have entered the relevant market if they had not decided to form the joint venture.

between firms engaging in joint research generally involves an application of Section 1 of the Sherman Act 7/ and Section 7 of the Clayton Act. 8/

Section 1 of the Sherman Act provides in part that:

Every contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade or commerce among the several States, or with foreign nations, is hereby declared illegal.

Section 1 requires the existence of two or more persons, since a contract, combination, or conspiracy must be formed as a prerequisite to a finding of illegality. Agreements between competitors to fix prices, allocate geographic markets, or boycott third parties are practices condemned as per se illegal by this section of the Sherman Act. 9/

Section 7 of the Clayton Act, as amended by the Celler-Kefauver Antimerger Act, provides in pertiment part that: $\underline{10}/$

No corporation engaged in commerce shall acquire, directly or indirectly, the whole or any part of the stock or other share capital and no corporation subject to the jurisdiction of the Federal Trade Commission shall acquire the whole or any part of the assets of another corporation engaged also in commerce, where, in any line of commerce in any section of the country, the effect of such acquisition may be substantially to lessen competition, or to tend to create a monopoly.

The provisions of the Clayton Act apply to specific types of business conduct that may only "tend to create a monopoly," as opposed to the accomplished monopolization or monopoly as forbidden by the Sherman Act. The standard of illegality for the sorts of conduct named in the Clayton Act extends beyond

- 7/ 26 Stat. 209 (1890); 15 U.S.C., Sec. 1.
- 8/ 38 Stat. 731 (1950); 64 Stat, 1125; 15 U.S.C. Sec. 18.

9/ Eugene M. Singer, Antitrust Economics: Selected Legal Cases and Economic Models. New Jersey, Prentice-Hall, Inc., 1968. p. 9.

10/ 38 Stat. 731 (1914), 64 Stat. 1125 (1950); 15 U.S.C. Sec. 18.

a tendency to create a monopoly, to include also a tendency to substantially lessen competition. <u>11</u>/ In other words, the Clayton Act was intended to prohibit in their incipiency, acts which if accomplished, would be violative of the Sherman Act. The Celler-Kefauver Act amendment broadened this section to cover mergers accomplished both through asset purchases as well as through the stock purchases prohibited in the original Section 7.

The original intent of Section 7 of the Clayton Act (as amended by the Celler-Kefauver Act) was to arrest <u>incipient</u> threats of reduced competition which were not ordinarily addressed under the provisions of the Sherman Act. Under the Clayton Act actual restraints of trade need not be demonstrated. The requirements of the amendment are satisfied when a "tendency towards monopoly" or the "reasonable likehood" of a substantial lessening of competition in the relevant market is demonstrated. 12/

IV. COMPETITIVE EFFECTS OF THE PROPOSED GM-TOYOTA JOINT VENTURE

In light of the legal stipulations outlined above, it is useful to consider the proposed GM-Toyota joint venture under the guidelines of Section 7 of the Clayton Act. The Act requires that the relevant line of commerce (product market) and geographic market be defined. The line of commerce (market) germane to this paper is the production and sale of automobiles. Since the proposed GM-Toyota joint venture limits the agreement to the production of subcompact cars, the line of commerce is limited to this category (submarket).

12/ Stelzer, op. cit., pp. 237-238.

^{11/} Joe 5. Bain, Industrial Organization. New York, John Wiley & Sons, Inc., 1968. p. 563.

General Motors is a U.S. automobile manufacturer, and Toyota is a Japanese auto maker. Both of these firms produce and sell cars on the world market. However, the joint venture under discussion only relates to auto production in a U.S. plant; thus the relevant geographic market is considered to be the United States.

To clarify the important economic relationships which may be identified in joint ventures, together with their competitive consequences, it is necessary to provide a means for systematically classifying joint venture structures. The GM-Toyota proposed undertaking may be termed a pure horizontal joint venture since the companies are horizontally related. This form of merger or joint venture occurs when firms for the same business are combined. As stated above, the two companies involved produce the same or similar products (automobiles and related parts) for the same market. This union allows the parent companies to expand their operations in an existing product market and reduces risk to a degree that is not immediately achievable in the absence of this agreement.

Professor Mead in his analysis of joint ventures makes <u>two</u> points that are very much applicable to the GM-Toyota (the parent companies) proposed joint venture and which shed a great deal of light on the probable anti-competitive implications. He indicates that: 13/

...We must distinguish innocent expansion from expansion which involves hazards to competition. When one firm expands its facilities in another geographic market by building a new plant and perhaps creating a subsidiary firm, and if no unfair methods of competition are involved, such expansion is not normally subject to antitrust prosecution. A hazard to competition arises, however, when a second firm is involved as a parent in the joint venture. The marriage between two or more firms for the purpose of engaging in a joint venture introduces the possibility of harmony rather than competition between the parents. Harmony between

^{13/} Mead, op. cit. pp. 826-832.

one parent and its horizontal expansion is to be expected and does not constitute a net additional problem for competition. The involvement of a second parent raises two competitive issues: (1) probable cooperation among the parents, and (2) probable cooperation between a second parent and the joint venture...

Given the profit incentive... we would not expect either of the parent firms to behave like a competitor with respect to its offspring....

Where the parent firms have a community of interest between them it is necessary for them to meet together and cooperate in the management of their joint operation. Where the joint venture is in a horizontal relationship to the parent firms, important dimensions of competition such as price and non-price competition, as well as levels of output and geographical markets to be served must be decided upon...

A pure horizontal joint venture raises a <u>third</u> anticompetitive issue--a loss in potential competition from the joint venture. 14/

Once the joint venture has been consummated, then entry by either parent separately in direct competition with the interests of either joint venture or the other parent is probably precluded. Competition with the joint venture is unlikely since any such parental entrant would be competing with its own profit share. Competition with another parent may be precluded by the need for cooperation among the parents arising out of the joint ownership situation.

In a recent analysis of the antitrust implications of joint ventures Joseph Brodley, renowned Professor of Law at Boston University, finds that agreements similar in nature to the horizontal arrangement proposed by GM and Toyota can have very significant adverse effects on competition. He states: 15/

... Of all joint ventures the horizontal is inherently the most anticompetitive, because it involves the formation of a joint venture in markets in which the parents operate... a horizontal joint venture raises threshold antitrust concern when (1) the joint venture enters a concentrated market, in which (2) the parents are actual or imminent competitors having a substantial market share. The proposed standard would not generate findings of threshold antitrust risk when the participants have little or no power to affect price or output, because it requires that they have a <u>substantial market share of a concentrated market</u>. (Emphasis Added.)

15/ Joseph Brodley, "Joint Ventures and Antitrust Policy," Harvard Law Review 95:7 May 1982, 1524 - 1589.

<u>14</u>/ Ibid.

For Brodley, a substantial market share comprises at least 15 percent of the market. He suggests three statistical measures for defining a concentrated market: (1) a four-firm concentration ratio of 75 percent; <u>16</u>/ (2) a two-firm concentration ratio of 40 percent; and (3) a Herfindahl threshold index of 1300. 17/

Using these statistical definitions, Table 1 lists market share data for domestic passenger car sales in 1982. In the relevant line of commerce (subcompact cars) GM is ranked number one and Toyota is third. GM holds a substantial market share with 21.7 percent of the subcompact market. Toyota's market share of 13.7 percent falls slightly below Brodley's threshold definition of a "substantial market share."

An application of Brodley's measures of market concentration is found in Table 2. Currently the subcompact portion of the automobile industry has a fourfirm concentration ratio of 66.0 percent, a two-firm concentration ratio of 39.2 percent and a Herfindahl index of 1355. Based upon these figures the subcompact portion of the auto industry would not be considered a highly concentrated market using Brodley's four and two-firm concentration ratios. However, the Herfindahl index for this market indicates some degree of concentration.

¹⁶/ A four-firm concentration ratio gives the percentage of the market base held by the top four firms.

¹⁷/ The Herfindahl index is a measure of concentration that takes account both of the number of firms in an industry and of the size inequality among the firms. It is defined as $\sum [(x(i)/X)(x(i)/X)]$ where x(i) is the size of firm i in terms of sales or any other market market base and X is the total size of the industry, the market base held by all firms. Alternatively, the Herfindahl index is the sum of the squares of the size of each firm in an industry, where firm size is expressed as percentage of the industry; that is, the sum of the squares of the market share of each firm relative to the overall size of the industry.

Manufacturers All Cars 1/ Subcompacts 2/ General Motors 44.1 21.7 Ford 16.8 17.5 Chrysler 10.0 7.1 Toyota 6.7 13.7 Nissan 5.9 9.7 Honda 4.6 13.1 Volkswagen 2.1 5.8 Mazda 2.0 2.2 Subaru 1.8 5.8 AMC - 1.3 1.5 Others 4.7 1.9

TABLE 1. Market Share Data for Domestic Passenger Cars Sales 1982

1/ Automotive News 1982.

2/ Memorandum on Behalf of the Chrysler Corporation Concerning the Proposed General Motors-Toyota Joint Venture.

If we assume that the joint venture is the same as a merger, we can extend the above analysis to measure the impact of the proposed GM-Toyota joint venture on the subcompact car market. The resulting effects are listed in Table 2. If the joint venture materializes, the four-firm concentration ratio rises from 66.0 percent to 75.7 percent, the two-firm concentration ratio rises from 39.2 percent to 52.9 percent, and the Herfindahl index goes from 1355 to 1954. Using Brodley's criteria the proposed joint venture would "generate findings of threshold antitrust risk" <u>18</u>/ leading to a reduction of competition in the subcompact market and possible ill effects on the consumer.

Furthermore, in 1981, the Department of Justice developed merger guidelines in which a Herfindanl index of 1800 was set as a threshold that was indicative of a highly concentrated market. In addition, the Department of Justice has established a threshold for "likely enforcement." The threshold occurs when the change in the Herfindahl index exceeds 100 points as a result of a merger. The change in the Herfindahl index as a result of the GM-Toyota venture exceeds this limit.

If the venture results in tacit coordination in matters extending beyond the joint venture and the two parents cease competing with each other, then the relevant line of commerce for antitrust consideration would have to include the production and sale of all passenger cars and related parts; In such a case, the GM-Toyota venture would have even greater anticompetitive effects. Using Brodley's criteria to classify a "substantial market share in a concentrated market" it is shown in Table 1 that General Motors, the auto leader, holds a

18/ Brodley, op. cit. p. 1553.

	All Cars		Subcompact		
	Before	After	Before	After	_
4-Firm Concentration Ratio	77.6	83.5	66.0	75.7	
2-Firm Concentration Ratio	60.9	67.6	39.2	52.9	
Herfindahl Index	2463	3054	1355	1954	

TABLE 2. Selected Measures of Market Concentration "Before "and "After" the GM-Toyota Joint Venture

Source: Calculated by author.

substantial share of the sales of passenger cars and it is indicated in Table 2 that a highly concentrated market does exist. The joint venture would only lead to a further exacerbation of that difficulty. The two companies have, however, tried to minimize this danger by limiting the scope of the venture.

V. EMPLOYMENT EFFECTS OF THE PROPOSED JOINT VENTURE

GM officials have indicated that the proposed joint venture with Toyota will generate 3,000 new jobs (man years) in the venture itself. Since the venture is to produce 200,000 - 300,000 vehicles per year, this implies that between 60 and 100 cars will be assembled annually for each worker employed. The officials also assume that the arrangement will create an additional 9,000 jobs indirectly in supplying industries, placing the total employment effects at 12,000 jobs.

On the basis of input-output analysis these employment projections, although perhaps somewhat overstated, may not be far out of line. An earlier CRS study found that for a net increase in demand of \$10 billion in the automobile industry, a grand total of 588.5 thousand jobs (direct and indirect) would be created. <u>19/</u> This amounts to a net injection of \$16,992 for each job created by the industry. Using this ratio at a price of \$5,000 per subcompact, an average of 3.4 cars would be required to generate one job economy-wide.

It is generally assumed that for each direct job created in the subcompact automobile industry 2.3 indirect jobs are created in supplying industries. Hence, as a rule of thumb each autoworker has the potential for producing 11 to 14

^{19/} Gwenell L. Bass, An Inter-Industry Analysis of the Sensitivity of Industrial Output and Employment to Changes in the Demand for Automobiles, CRS Report No. 83-40 E, February 24, 1983.

cars annually in the current U.S. auto industry. The average of 60 to 100 cars per year planned for each worker in the joint venture indicates that the plant probably will be highly automated used to produce parts that can be done using mass production methods and for final assembly. Manpower/output ratios are highly dependent upon productivity especially as it is improved by technology. It is probable all automakers are moving toward building highly automated plants.

Some observers have indicated that the subcompact planned for the joint venture will supplant the Chevrolet Chevette and eliminate the jobs involved in building that car. The Chevette is currently being built in Wilmington, Delaware. The plant employs approximately 4,700 workers. In addition to the Chevette, the Delaware plant produces the Pontiac 1000, Pontiac's version of the Chevette, and the Acadian, the Canadian version of the Chevette. The Chevette was also produced at a plant in Georgia but because of weak demand that plant has been idle since September 1982. If, indeed, the GM-Toyota car replaces the Chevrolet Chevette, then the workers at the Fremont plant in California will replace the Wilmington, Delaware workers and there would be no net gain in employment. In either case the Chevette is likely to be phased out over the next few years.

GM officially closed its idle Fremont plant. As indicated earlier the chief executive and most of the top management will come from Toyota Motor Co. This arrangement allows the joint venture to qualify as a new company under National Labor Relations Board rules forcing the United Auto Workers (UAW) to negotiate a new contractural agreement with the new plant.

The absence of a UAW contract at the Fremont plant does not necessarily mean the Union has no bargaining power with GM. On the contrary, union officals still have the option to strike at other GM plants.

While it has been reported that GM and Toyota are prepared to pay UAW wage rates at the assembly plant for the new small car, the companies plan to ask for substantial concessions on work rules and benefits. The companies say that unless they can work out an agreement that sharply reduces the labor cost differential between American and Japanese cars, the joint venture will be called off. 20/

Perhaps the most sensitive issue in the labor talks will involve seniority. To hold down costs, GM and Toyota are either seeking to avoid paying workers on the basis of their full benefits under the previous GM contract or are hiring the workers who have accrued the least benefits. But the rank and file are pushing the union leaders to demand that the joint venture rehire workers strictly according to seniority. 21/

VI. CONCLUSIONS

Both GM and Toyota stand to gain substantially from the proposed joint venture. Toyota's involvement should help ease trade friction between the United States and Japan. For its part, GM should be able to offer a new subcompact car at a more competitive price than similar domestic models because of the application of Japanese management and production techniques and procurement of Japanese parts.

A high degree of concentration exists within the automobile industry. The industry could become somewhat more concentrated as a result of the venture. Although, GM and Toyota have attempted to remain within the the antitrust guidelines established for joint ventures, the competitive effects of the venture are being reviewed by the Federal Trade Commission which will render a decision by September 1983.

^{20/ &}quot;Bumpy Road Ahead: GM-Toyota Venture Stirs Major Antitrust and Labor Problems," Wall Street Journal, June 10, 1983, pp. 1, 18.

<u>21</u>/ Ibid.