The Voluntary Export Restraint:
Bad Medicine for a Sick Patient
by Joshua Yount

Introduction
When former General Motors chairman Charles "Engine Charlie" Wilson told Congress in 1952, "...what is good for the country is good for General Motors, and what is good for General Motors is good for the country" (Greenwald 45), he articulated the attitudes the American auto companies had about the economic and social relationship between the United States and its automobile industry. That was true in 1952, but since then American interests and those of its car manufacturers, have diverged significantly because of the auto makers’ single minded devotion to high short run profits and their inability to change quickly enough to meet a dynamic consumer demand. Nowhere is this more evident than in an analysis of the rise of Japanese car makers in the U.S. auto market, especially with respect to the Voluntary Export Restraint (VER). After U.S. auto makers missed the compact car boat in the 1970’s, they came to the government on their hands and knees pointing to their balance sheets, uttering "Engine Charlie’s" immortal words and begged for protection from competition. Still, they hadn’t learned their lesson. After they got the VER, U.S. car makers grabbed the quick cash and only belatedly, with selective models, did they try to catch up with the Japanese. In the end, American auto makers and consumers paid, and are still paying the price of the consequences of the car companies’ flawed approach to an automobile market. No longer engrossed in the tail fin, the approach is one based on dynamic efficiency, international competition, and high consumer expectations.

History
The late 1960’s and 70’s were not only a time of unprecedented political and social change, marking the loss of innocence for the baby boom generation, but also served as a time of change in international economics. Nowhere was that more evident than in the automobile industry. Starting in the late 1960’s and continuing through the entire decade of the 70’s, the Japanese made serious inroads into the American automobile market by producing small, fuel efficient cars with an emphasis on quality. The initial success of Japanese producers in the U.S. automobile market rested on four factors, cited by Robert Crandall: the rise in oil prices created by the OPEC cartel’s restriction of petroleum supply, the introduction of new federal safety and emissions regulations, the overall superior quality and longevity of Japanese cars, and the major cost advantages held by Japanese auto makers. First, the two oil shocks of the 70’s greatly inflated the price of gasoline, and in the land of "fuel efficient" cars like the Cadillac El Dorado and the Ford Thunderbird, the rise in the price of gasoline had a major effect.
on American consumer income. The Japanese producers of the small, fuel efficient cars suddenly found themselves on the leading edge of consumer demand. Second, not only did American companies find themselves lagging behind in car styling, but because of new federal regulations, U.S. car makers were also lacking in safety and emissions control improvements, totaling approximately $1000 a car. Third, Japanese cars had superior quality and needed fewer repairs. In fact, they were rated three to four times better than the cars the big three were producing in 1981. Finally, the reason most cited by experts and non-experts, and the most difficult to overcome for U.S. auto companies, was Japan’s substantial and significant cost advantage due to lower comparative wages, greater productivity, smaller inventories, and a devalued yen matched with a strong dollar (8-11).

These four factors proved disastrous for the American auto industry, which lost 10% of its market share in just five years to the Japanese (Collyns and Dunaway 152). The bad times came to a head in 1980 when all four auto makers posted combined losses of $4.2 billion, Chrysler was bailed out by the government, and American Motors was bought by Renault (Pomfret 57). In addition, there was a 39% unemployment rate in the American auto industry and among its suppliers (McGowan and Vaughan 416). In response, both Ford and the United Auto Workers filed petitions with the government requesting assistance. The U.S. International Trade Commission ruled that the U.S. car makers’ inability to meet the consumer demand for small fuel efficient cars was the primary cause of their demise, not Japanese car makers. So instead of trade restrictions the Carter administration proposed an industry aid package. Trade restrictions were not far off, though. When Ronald Reagan took office, his administration launched the Economic Recovery Program (ERP), which enhanced Carter’s aid package by providing tax relief, relaxing regulations, and pressuring the Japanese into proposing a Voluntary Export Restraint of 1.68 billion cars per year (McGowan and Vaughan 416-17). Reagan hoped that these supposedly temporary measures would bolster domestic auto makers’ sales, providing them with time to catch up with Japan on down-sizing, re-styling, fuel efficiency, quality, and productivity (Crandall 12). By following these steps, the expectation was that U.S. auto makers would recapture their lost market share and the U.S. economy would be able to regain 300,000 lost auto worker jobs (Pomfret 57).

The Reagan administration continued to request the quota through March of 1985, with an increase to 1.85 million cars per year in 1984. Then, because of the reassurance of the U.S. auto industry and the record profits posted by domestic producers, the U.S. did not request a continuation of the VER. Nevertheless, Japan’s Ministry of International Trade and Industry (MITI) took the voluntary aspect of the agreement to heart and continued the quota system after raising the limit to 2.3 million cars per year (Omichi 49-50). MITI claimed to be continuing the VER to prevent anti-import feelings in the U.S. and thus continued the VER at
2.3 million cars per year until 1992 when the quota was cut back to 1.65 million as the U.S. auto industry once again faced hard times (Johnson 1). The effects of this most recent cut in the quota have yet to be registered, but reliable predictions can be made from the observed effects on Japanese producers, U.S. producers, and U.S. consumers in the first ten years of the U.S.-Japan Voluntary Export Restraint.

**Effects on Japanese Producers**

It seems evident that the Voluntary Export Restraint has been beneficial to Japan if only because of MITI’s insistence on maintaining the quota past 1985 when the U.S. stopped requesting its continuation. The reasons for MITI’s continuation of the quota lie in the effects it has had on Japanese auto makers, some intended, many not. The first and most noticeable, as well as predicted effect of the VER on Japanese automobile exports, was the sudden and marked increase in price, $2825 per car in 1984 alone (Collyns and Dunaway 162-5, 169). Dardis and Lin argue that the price increase can be attributed to the reduction in supply the quotas forced on Japanese auto makers (278-9)(Fig 1). After the VER was instituted the supply curve became SES’ with P3 as the new higher price and Q3 as the new lower quantity. However, the rise in price due to a restriction in supply, known as the pure price effect, was not the only change in the automobile market, though. Another important factor affecting consumer choice and the prices of Japanese cars was the fundamental change in the types of cars sold by Japanese auto makers. The Japanese moved upscale to produce higher quality, more expensive cars because they could no longer sell as many cheap small cars as they wished in the U.S. (Dardis and Lin 278). In fact, Robert Feenestra estimates that Japanese cars improved quality-wise by 30% between 1980 and 1985 (143). The upscale shift in product mix again alters the supply curve (Fig 3). The greater production costs of higher quality cars shifts the supply curve out to S’ES’, with EF representing the cost of higher quality, (P2-P1), known as the quality effect, section c, leaving section a, (P3- P2), to represent the pure price effect. Although the higher prices reduced sales by 1.5 million cars in 1984 (Q1- Q3), the increase in price more than compensated for the loss in revenue due to the loss in sales; producers gained sections a and c, and lost section b (Dardis and Lin 279-80). The exact amounts of these gains depend on the assumptions about the reactions of U.S. producers, who also raised price and improved quality. If the pure price effect is assumed to be equal between the producers of the two nations, then Japanese producers gained $1.00 billion in 1984. On the other hand, if the quality effect was equal, then they gained $5.21 billion! (Collyns and Dunaway 166-9) (Table 1 p.13). The likely result lies somewhere in between the two extremes, but the attractiveness of the quotas for Japanese auto makers is certainly evident.
Besides price increases and quality improvement, the VER affected Japanese producers in many ways. Since the VER caused Japanese car prices to increase more than U.S. prices, price competition was no longer as viable a competitive strategy as it was prior to the VER. Consequently the Japanese turned to non-price sales efforts to maintain market share. Quality improvement was one important step. No longer solely producers of econo-boxes, Lexuses and Acuras began to roll off Japanese auto makers’ production lines ("Goals" 69). The second important non-price sales effort was advertising. After the VER was instituted in 1981, Japanese auto companies’ advertising expenditures increased significantly in order to facilitate product differentiation by promoting new, higher quality models, and to increase brand admiration by fighting anti-import fever. Who can forget people jumping up and down about Toyotas, singing, "I love what you do for me, Toyota!"? These two steps kept Japanese companies from losing their entire market share and proved to make them stronger competitors in the long run.

In addition to the strengthening effects on Japanese car makers of increased profits, quality, product differentiation, and brand admiration, Richard Pomfret describes two precedents set by the VER that greatly benefited the Japanese. The first was the trend that the VER set toward instituting anti-free trade trade agreements, subsequently followed by much of Europe and Canada. Because these VERs limited the supply of cars that could be exported, the profits that could be made exporting cars were squeezed (58-9). If the equation \((P_{ex} - c - s - t)q_{ex}\) equals the profits from exporting, \(\pi_{ex}\), profits will not be able to grow significantly because the quota fixes \(q_{ex}\). This opens up foreign direct investment as a more profitable option, where \((P_{fdi} - c)q_{fdi} - P_{fdi}\) equals profits \(\pi_{fdi}\) (Martin 339-42). Cars built in the country they are sold in are not subject to a quota, therefore, profits...
can grow. Aided by the small MES of Japanese auto plants, the Japanese set up shop in America through joint ventures in places like Freemont, California and Bloomington, Illinois, and alone in places like Marysville, Ohio and Smyrna, Tennessee (Omichi 50; Rice 22). This proved to be a very wise move because it helped spread risk for when the dollar weakened, as it did in 1985, and provided producers with a quota-free place to build cars (Martin 339-42; Berger 61). The most helpful effect of the VER for Japanese producers was the de facto approval of a Japanese automobile producer cartel, by letting them limit quantity and drive up price, the same way OPEC drove up oil prices in the 70's. The big problem for the U.S. was that it couldn't complain of the anti-competitive nature of MITI's setting of a quota and allocating market shares because the U.S. was the one who suggested the quota in the first place (Pomfret 58). These precedents are the lasting legacy of the VER and in the long run may be the VER's greatest cost to both the American auto industry and the U.S. economy.

Although the VER was primarily instituted to make U.S. car manufacturers stronger, it was also hoped that, in turn, Japanese producers would be hurt. Yet besides an initial 7.5% drop in market share, that was subsequently recovered, Japanese auto makers were not hurt at all. In fact, increased profits, improved quality, greater brand admiration, foreign direct investment, and a legal cartel seem to be the true effects on Japanese car companies of the same Voluntary Export Restraint that was supposed to save the American auto industry.

Effects on U.S. Producers

As with Japanese producers, the U.S. auto makers believed the VER to be beneficial because they felt that the VER compensated for the tax and currency advantages held by the Japanese, thus allowing American car companies to be competitive (Callahan and Williams 40; Iacocca 227-30; Fisher 21-3). Because the supply of Japanese cars was limited, their price rose significantly (figs 1 & 2), (table 1). In turn, this caused the demand for U.S. automobiles, a substitute, to rise, ultimately raising the price of American cars (Dardis and Lin 282-4) (fig 3). The attractiveness of this policy can be seen by looking at the increase in revenue that results when demand shifts to D', price rises to p2, and quantity increases to q2, causing revenue to increase from p10q1B to p20q2A. In 1984, these market alterations caused domestic car prices to rise $1,187, and assuming equal pure price effects, $4.93 billion in transfers from consumers to producers occurred, versus $1.27 billion in transfers assuming equal quality effects (Collyns and Dunaway 166-9) (table 2 p.13).

Because domestic producers raised price less than the Japanese, their market share rose 6.75% in 1984, to leave U.S. produced car sales unaffected in the face of the industry wide decline in sales due to the across the board price hikes by all producers (Coughlin and Wood 39). Although sales did not change,
profits reached record levels for all U.S. car makers, totaling $9.8 billion in 1984, for three primary reasons (Omichi 50). First, and most importantly, prices jumped $1,187 per car, which alone would have substantially increased profits. Second, and counter to the aims of the VER, automakers employed less labor per automobile because of the introduction of robots and automation into auto plants (Dardis and Lin 289). Third, the labor that U.S. auto makers did employ came cheaper than it did before, because each of the big three secured wage and benefits concessions from its workers (Crandall 13).

Although retooling and reducing the number of workers necessary to build a car represent positive long run steps taken by American car manufacturers, for them it was a case of too little too late. For example, it was at least ten years before U.S. auto companies could offer up even a few truly competitive car models. Rather than investing more of their short run profits to quickly catch up with the Japanese on productivity, quality, and styling, auto executives purchased financial, aircraft, and computer companies, wrote books, headed monument restoration commissions, and gave themselves hefty bonuses for earning profits from a restrictive trade agreement. While American auto companies and their executives hid behind the VER counting their money, as the 80’s went on, Japan and other nations improved their competitiveness and started to gain market share from the big three once again. For non-quota countries such as South Korea, the VER provided its car companies, like Hyundai, with an opportunity to sneak into the low end of the market and emulate Japan’s low price strategies of the 1970’s (Pomfret 58; Berger 61). For Japan, strategies such as foreign direct investment and

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increased sales efforts allowed them to whittle away at domestic producer market share. Overall it seems that the VER, in contradiction to what it originally intended to bring about, resulted in encouraging increased competition from abroad, while fostering foot dragging and complacency in Detroit.

**Effects on U.S. Consumers**

Both Japanese and American automobile manufacturers received benefits and absorbed costs from the Voluntary Export Restraint to greater and lesser degrees, but one group was fortunate enough to endure only one kind of result; that group being consumers and that result being monumental costs. The most obvious cost to consumers lies in the rise in price of both Japanese and American cars, totaling $1,649 per car in 1984, considering pure price and quality effects (Collyns and Dunaway 161 3,166-9) (table 3 p.13). The per car cost translates into both transfers to producers and deadweight loss (fig 4) as prices rise from $p_1$ to $p_2$ because of the VER’s reduction in consumer surplus. Section a represents a transfer from consumers to

![Figure 4](image.png)

**Costs to U.S. consumers**

The graph shows the cost to U.S. consumers with the price $p_1$ to $p_2$. Section a represents a transfer from consumers to producers, which only considering pure price effects equaled $5.47 billion in 1984, and Section b represents the deadweight
loss, which under the same assumption, equaled $130 million in that year (Collyns and Dunaway 166-9). Many people, such as "free trader" Lee Iacocca, would justify these costs by saying that even if it didn’t create jobs, the VER saved jobs, for a while at least. Crandall and others estimate that the VER saved between 40,000 and 75,000 jobs, at a cost of nearly $160,000 per job per year (Crandall 16; Coughlin and Wood 39). Although this may be far below Mr. Iacocca’s hefty salary, it would be an extraordinarily large paycheck for an auto worker. The VER surely must have seemed to be a fairly simple answer to the U.S. auto industry’s woes back in 1981. Unfortunately for U.S. consumers no one was looking out for the woes this policy would inflict on them. Consequently, they paid the price.

Conclusion

In 1991 when President George Bush led a trade negotiation mission to Japan, bringing with him the heads of the big three U.S. auto makers, the true folly of the Voluntary Export Restraint became apparent. The U.S. auto makers, once again feeling the squeeze of a weak economy and competition from abroad, made a lot of noise about unfair competition and domestic content percentages. Their behavior stems from two possible causes: first, that U.S. auto makers pulled their favorite scapegoat out of the closet as they usually do when business turns sour, and second that the U.S. still lags behind Japan in productivity, styling, and quality. The true cause is probably a little of both, but since it seems that the U.S., after ten years of the VER, has not caught up with the Japanese, it would follow the VER has failed to achieve its objectives. In fact, if the effects on Japanese producers and consumers are considered, the VER failed miserably, leaving behind as its legacy a fiercely competitive Japanese automobile cartel, a complacent, excuse making American auto industry, and scores of consumers stung by artificially high car prices. The fact that the VER did not help the U.S. auto industry in the long run points to another reason for its existence. As Dardis and Lin suggest, the Voluntary Export Restraint was, and always will be a political measure enacted to placate workers and producers, not an economic solution to a deep-seeded problem of gross mismanagement and inability to meet consumer demand (290-1).

Works Cited


Callahan, Joseph M. and Douglas Williams. "VRA Point Counterpoint: A Healthy Dose of Restraint... Or a Liberal


