The Costs of a Protectionist Cure
by Michael F. Bryan and Owen F. Humage

In recent years, many ailing U.S. industries have blamed their ill health on foreign competition and have sought a cure in limiting the flow of imports. While proponents of protectionist legislation argue that trade restrictions are necessary to protect U.S. jobs, economic theory indicates that protectionism may secure jobs at a substantial cost to consumers and economic efficiency. In capitalism, unlike in medicine, isolating the patient can cause the disease to spread. The Japanese Voluntary Export Restraint (VER) program, which restricts exports of Japanese cars to the United States, provides a useful example of such a costly cure.

The Auto Industry's Malaise
Until the mid-1970s, sales of intermediate and full-sized cars dominated the U.S. auto market. Confronted with rapidly rising gasoline prices and economic recession, August 1979. The Japanese also altered their automobile preferences in favor of more economical, fuel-efficient models. By 1980, subcompacts represented the largest share of the U.S. new-car market—42 percent compared to 28 percent in 1975 and 12 percent in 1965. Foreign producers, especially the Japanese, had an apparent advantage in the production of small, fuel-efficient cars and gained a substantial share of the U.S. new-car market during the 1970s. The Japanese share of the new-car market rose from 6 percent in 1972 to 12 percent in 1978. As the decade closed, domestic new-car sales contracted, falling 29 percent between 1978 and 1980. Sales of new Japanese cars, however, continued to expand, increasing slightly to 21 percent of the market by 1980.

As declining domestic car sales idled U.S. labor and capped the United Auto Workers (UAW) and some of the large domestic car producers aggressively sought protection from their foreign competitors, especially the Japanese auto-makers. In June 1980, the UAW petitioned the International Trade Commission (ITC), alleging that imports were a substantial cause of serious injury to the domestic industry and seeking both higher tariffs and quantity restrictions against car imports. Ford Motor Company filed a similar petition in August 1980. The ITC, however, rejected the petitions. Failing to enlist the ITC's support, lobbyists aimed their efforts more directly toward the Japanese government.

Both the Carter and the Reagan administrations advocated legislation that would give the Japanese government a say in the pricing of new cars to the United States. Japan's initial agreement to limit car exports extended from April 1981 through March 1984; in November 1983, the Japanese government extended the agreement through March 1985. During its first three years, the agreement limited Japanese car exports to the United States to 1.68 million units, contrasting with sales of 1.91 million units in 1980 and 1.75 million units in 1983. Under the current fourth-year extension of the program, the limitations on Japanese new-car exports have increased to 1.85 million units.

VER Side Effects
By limiting the flow of new Japanese cars into the United States, the VER program creates an artificial scarcity that drives up new-car prices. As the prices of new Japanese cars rise, some potential buyers will purchase new domestic cars, used imported cars, or used cars, thus placing upward pressure on the prices of these vehicles. Because of the VERs, consumers now purchase fewer cars in total.


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Japanese car and any closely sub-
from US. car buyers to domestic
and foreign producers of new cars.
from US. consumers to US. car
surplus consists of two important
refer to it as a reduction in
mists can measure this loss and
manufacturers does not represent
and foregone consum-
part of the
functions and foregone consum-
States could incur a loss if the prices
increase Japanese car sales by 1.3 percent.
We found that real permanent income is the pri-
ary determinant of new-car sales and that sales of new Japa-
ese cars rise with car operating
characteristics such as transporta-
tion in Japanese car sales will not
unrestricted aspects of the prod-
uct in an attempt to maintain their
profits. When measuring the effects of the VER pro-
one should exclude price increases attributable solely to quality
improvements, as these do not reflect consumers' economic
well-being.

Cost of the Treatment
We constructed an econometric
model of the U.S. market for new
Japanese cars to measure the price
effect and quality improvements of the program. In building the model, we
wanted to incorporate the role of
new-car dealers and inventories in
the market clearing process. VERs restrict imports, but sales can be accommodated from inventories
over the near term. The existence
of inventories dampens the effects
of VER-induced price rises because
take direct relative to dealers'
desired inventory positions, dealers
reach a new equilibrium.
While it is inappropriate to measure the effects of VERs using transac-
sions (or retail) price data, such
data are readily available for market-
price changes resulting from these
price increases due to VERs. Con-
sequently, we estimated transac-
tion prices using wholesale prices
and a dealer price markup that
were adjusted for changes in the
market's supply conditions. We also adjusted prices
for upgrading new-car options.
This approach of using quarterly data from 1976 through
1983. In many ways, our results were
similar to previous studies of the
car market. We found that
real permanent income is the pri-
ary determinant of new-car sales and that sales of new Japa-
ese cars rise with car operating
costs, comfort, and aesthetic quali-
ties. In limiting imports, the VERs
restrict the amount of transpor-
tation that Japanese producers can sell in the United States, but not
the amounts of output they would to at (comfort and aesthetic appeal) that
their cars can provide. Foreign pro-
ducers will tend to upgrade their
unrestricted aspects of the produ-
tects to decrease unit Japa-
ese car prices by 1 percent.
This elasticity estimate is a crucial
link between the quota and its abil-
ty to transfer sales to the U.S. na-
turally.
We next simulated the model
under a set of assumptions that we
believe to be consistent with no
price change. First, we priced the quality
measures, we approximated the
income transfers and losses asso-
ciated with VERs. In simulating the
model simulation results, two
caveats need be emphasized. First,
our empirical analysis, like most
options-adjusted price increases reflected dealers' markups ($956), compared with an options-
adjusted price increase of only
$158. As a result, unit sales fell
299,000 units between 1983:1 and
1984:1.

The total three-year loss in con-
sumers' surplus resulting from the
VER-induce increase in Japa-
ese new-car prices was approxi-
mately $37 million. Most of this
loss occurred in 1983, when the pro-
gram was most binding on the U.S.
market. Of this total amount,
$23 million was transferred to
producers and dealers of Japanese
cars who continued to buy Japanese
imported cars at higher prices. Approximate 80 percent of this income transfer accrued to
U.S. dealers of Japanese cars and
Japanese car costs. 

Domestic Content Legislation

The VER program increased US. car

<table>
<thead>
<tr>
<th>Year</th>
<th>Japanese Price Increase, millions of dollars</th>
<th>U.S. Production Increase, units</th>
<th>U.S. Employment Loss, millions of dollars</th>
<th>Total Wealth Loss, millions of dollars</th>
</tr>
</thead>
<tbody>
<tr>
<td>1981</td>
<td>21.6</td>
<td>50.1</td>
<td>1,204.6</td>
<td>51,407</td>
</tr>
<tr>
<td>1982</td>
<td>21.6</td>
<td>10.7</td>
<td>166.4</td>
<td>2,192</td>
</tr>
<tr>
<td>1983</td>
<td>21.6</td>
<td>166.4</td>
<td>2,206.4</td>
<td>51,603</td>
</tr>
</tbody>
</table>

NOTE: The years correspond to the VER periods,
begining in the second quarter of the current
year and running through the first quarter of the
second year.

The VER program increased US. car

States, however, continued to hamper domestic sales. As noted, VER users actually purchased from 8.9 million units in the year preceding the VERs to 38.3 million units in the first year of the program. Because the U.S. market failed to grow over the period, Japanese car purchases fell 299,000 units between 1983:1 and 1984:1.

The quota figures cited do not include certain cars and light trucks (that is, some feebate-eligible vehicles) that, when included, raise the limita-
tions to 2,760,000 units per year for the 1981-83 period and 1.5 million units currently.

3. Although Japanese producers earn more rev-
ues from U.S. sales than they do from sales
to the United States, the net effect on revenue is
how sensitive U.S. consumers are to price
increases on Japanese cars.

4. We use the term quality rather loosely, refer-
ring to any of the physical characteristics of
the automobile.

5. See, for example, Michael P. Bryan, "Issues in
Domestic Content Legislation and the U.S. Auto
Industry," Stated Federal Reserve Bank of Cleveland,
March 7, 1983.

6. U.S. Congress, House of Representatives,
Subcommittee on Trade, "Way and Means.
Domestic Content Legislation and the U.S. Auto