Accelerated Vehicle Retirement Programs in Japan and South Korea: Background for Congress

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Summary

In 2009, the United States, Japan, and South Korea, like many industrial countries, initiated accelerated vehicle retirement (AVR) programs. Vehicles manufactured by Japanese and South Korean companies and made both domestically and abroad were top performers in the U.S. AVR program, also known as the “cash for clunkers” program. However, few U.S.-made vehicles were sold in comparable programs in these two countries, leading to questions about the disparity.

The United States program began in June 2009, when President Obama signed the Consumer Assistance to Recycle and Save (CARS) Act, providing $3 billion to fund a rebate program for consumers who bought certain new, higher mileage vehicles. More than 677,000 new vehicles were purchased through the program. Of these, more than 115,000 were imported from Japan and more than 73,000 from South Korea.

In Japan, an AVR program known as Eco-Car ran from April 2009 until September 2010. In the first iteration of Eco-Car, sales of U.S. and many European cars were not permitted because only vehicles complying with Japan’s “Type Approval” process were eligible. Later, after a protest by the U.S. Trade Representative, the Japanese government modified Eco-Car so that certain U.S. and European vehicles would qualify.

The South Korean government implemented an eight-month program in May 2009 that reduced taxes on new vehicles when a pre-1999 vehicle was turned in. The South Korean program contained no provisions that excluded U.S.-made vehicles, but it did not alter existing South Korean barriers to imported vehicles, which have contributed to the fact that imports occupy only a small share of the Korean market.

Overall, neither Japan nor South Korea imports large numbers of foreign vehicles. The AVR programs do not appear to have changed this pattern. Data on sales of U.S.-made vehicles in the Japanese and South Korea AVR programs have not been released. However, imported motor vehicles accounted for about 4% of total unit sales in both Japan and South Korea in 2009, and the import penetration in both countries declined modestly from 2008. This suggests that the AVR programs reinforced preexisting market conditions in both countries, neither worsening nor improving the competitive position of imported vehicles, including those made in the United States.
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Introduction

In fall 2008 and into the spring of 2009, collapsing credit markets and a slowing economy combined to create the worst market in 30 years for the production and sale of motor vehicles in the United States.¹ U.S. auto production fell by 34% in 2009 compared to 2008 levels. Vehicle sales fell from 13.5 million units in 2008 to only 10.6 million in 2009.²

Concerns over employment levels rose as the recession became more pronounced. The U.S. unemployment rate rose from 5% in April 2008 to a peak of 10.1% in October 2009.³ Auto industry employment had dropped even before the recession: between 2000 and 2008, combined auto assembly and auto parts manufacturing employment had fallen from 1.3 million to 776,000. Employment fell further in 2009, to 666,400, before recovering modestly to 682,000 in August 2010.⁴

To prevent further job losses, some Members of Congress and the Obama Administration sought ways to bolster vehicle sales. One such effort was an accelerated vehicle retirement (AVR) system. In June 2009, the President signed legislation, the Consumer Assistance to Recycle and Save (CARS) Act,⁵ establishing a program to provide rebates to prospective purchasers of certain new vehicles. Known informally as “cash for clunkers,” it provided rebates of up to $4,500 for purchase of a new vehicle, depending on fuel economy and vehicle type of both the new vehicle and vehicle to be disposed of. Congress appropriated $3 billion for the program, which ran from July 24, 2009, until August 25, 2009.

During this period, more than 677,000 vehicles were sold through “cash for clunkers.” Estimates of sales induced by the rebate—sales that otherwise would have occurred later or not at all—ranged from 125,000 to as many as 440,000 units. Motor vehicle sales in August 2009 hit a seasonally adjusted annual rate (SAAR) of 14 million, compared with a 9.5 million rate in the first six months of the year. Domestic as well as foreign-made cars were eligible for the CARS program. The top five models sold were Toyota Corolla, Honda Civic, Toyota Camry, Ford Focus FWD, and Hyundai Elantra.⁶ Of the motor vehicles sold under CARS, the National Highway Traffic Safety Administration (NHTSA) reported that just under half were made in the United States. Another 146,832 came from Canada and Mexico, which have free access to the U.S. market under the North America Free Trade Agreement. Of the total sold from outside North

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¹ For a full discussion of the impact of the recession in 2009 on the auto sector and the federal government response, see CRS Report R41154, The U.S. Motor Vehicle Industry: A Review of Recent Domestic and International Developments, by Bill Canis and Brent D. Yacobucci.

² Sales and production date are from Ward’s, Ward’s Motor Vehicle Facts & Figures, 2010, pp. 3 and 17.


⁵ P.L. 111-32, signed by the president on June 24, 2009.

⁶ Data on CARS were taken from a Report to Congress on CARS Program, by the National Highway Traffic Safety Administration (NHTSA), December 2009. Toyota Corollas and Camrys and Honda Civics are made domestically as well as imported from Japan. Hyundai Elantras are made in South Korea; the Ford Focus is made domestically.
America, more than 115,000 were imported from Japan, more than 73,000 from South Korea, and just over 10,000 from Germany.\(^7\)

For similar reasons, AVR programs were also popular during the recession in other industrial countries, including Germany, France, UK, Japan, South Korea, and China.\(^8\)

This report examines the AVR programs in Japan and South Korea, the second- and fifth-largest auto producing countries, respectively.\(^9\) These are two major auto markets where there has been very little import penetration, compared with U.S. and European markets. Japanese and South Korean automakers were significant beneficiaries of the U.S. CARS program, but few U.S.- or European-origin vehicles are sold in these two countries.

**U.S. Automobile Trade with Japan and South Korea\(^{10}\)**

Japan was the world’s second-largest motor vehicle manufacturer in 2009 and South Korea was the fifth-largest,\(^{11}\) as shown in Figure 1. Japan and South Korea combined produced over 18% of all motor vehicles in the world in 2009: 11.4 million units out of total world production of 60.9 million units.

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\(^{7}\) Ibid.

\(^{8}\) For a description of the “cash for clunkers” programs in major industrial countries, and a discussion of the U.S. CARS program, see CRS Report R40654, *Accelerated Vehicle Retirement for Fuel Economy: “Cash for Clunkers,”* by Brent D. Yacobucci and Bill Canis.


\(^{10}\) This section was written by Michaela Platzer and Bill Canis, both Specialists in Industrial Organization and Business.

\(^{11}\) The top five automakers in 2009: Toyota, GM, Volkswagen, Ford, and Hyundai. International Organization of Automobile Manufacturers (OICA).
Japanese and South Korean automakers export a large part of their domestic production, while facing little competition in their home markets from imported vehicles. South Korea exports over 60% of its motor vehicle production and Japan exports nearly 50%.

In 2009, passenger vehicle imports from all worldwide sources accounted for about 4% of total domestic motor vehicle sales in both South Korea and Japan. Figure 2 shows the levels of import penetration over the past five years, with declines in 2009 because of the worldwide recession. The two markets do not have the same growth patterns with regard to imports, however. Whereas Japan’s auto imports over the past five years have been relatively stable at around 4.5%-5% of unit sales, South Korea’s import market share has grown during the same period from under 3% to a peak of over 5% before the recession.


Notes: OICA data includes cars, light and heavy trucks, and buses.

12 South Korea banned the importation of cars until 1989 (Japanese cars were banned until 1999).
The Japanese and South Korean presence in the United States goes well beyond the vehicles their manufacturers import. U.S. auto manufacturing has been transformed with the investment in new plants and equipment by Japanese and South Korean manufacturers. In 1988, domestic plants owned by the Detroit 3 produced 74% of all motor vehicles sold in the United States. By 2008, the Detroit 3’s share had fallen to about 48%, with the U.S. operations of European and Asian automakers making steady progress in capturing ever larger shares of U.S. consumers’ auto purchases.13

Of all the vehicles sold in the United States in 2009, 26% were imported from outside North America, slightly higher than the level of import penetration 20 years earlier.14 In 2009, Japanese and South Korean automakers imported into the United States just over 2 million vehicles and produced nearly an additional 3 million vehicles at their U.S. plants.15 As discussed later, this

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13 Vehicles manufactured by the Detroit 3 in the United States include parts from Canada and Mexico. Since the passage of the North American Free Trade Agreement (NAFTA), auto manufacturing has become highly integrated between the three countries. Consequently, Canadian and Mexican parts are not counted as imports by most industry analysts.

14 In 1989, U.S. import penetration of vehicles manufactured outside of North America was 22%. CRS calculations based on Ward’s, *Ward's Automotive Yearbook 1990*, “Car, Light-Truck Imports into the U.S.”

15 Asian light vehicle imports represented 74% of all U.S. sales of imported cars and light trucks, and vehicles made in North America by Asian automakers comprised 29% of all U.S. vehicle sales. Ward’s, *Ward's Automotive Yearbook 2010*, “U.S. Light Vehicle Sales by Company and Source.”
strategy of locating much of their production close to their customer base shows the importance of the U.S. market to companies such as Honda, Toyota, and Hyundai-Kia.16

The South Korean Automobile Market

Challenges to U.S. Automakers

The total value of South Korean automotive exports to the United States, including parts, was $8.3 billion in 2009, compared to U.S. exports of similar products to South Korea of $462 million. The United States posted a bilateral deficit in autos and auto parts of $7.9 billion with South Korea in 2009, down from $10.6 billion in the more-robust 2008 car market, but growing over the long term from a deficit of $5.5 billion in 2000. In 2009, three-quarters of the nearly $11 billion U.S. trade deficit with South Korea was attributable to motor vehicles and parts.17

The South Korean passenger vehicle industry produced 3.5 million units in 2009. The largest producer is the Hyundai-Kia Automotive Group, which is entirely Korean owned.18 Other companies producing in South Korea are GM Daewoo, Ssangyong Motor and Renault Samsung.19 One-third of 2009 production, nearly 1.2 million vehicles, was sold in South Korea and the rest was exported. South Korea’s domestic automotive capacity has fallen slightly since topping 4 million cars in 2007,20 but domestic production is down more sharply, falling 6% in 2008 and a further 8% in 2009.21

Although the number of imported cars sold in the South Korean market remains small, import market share has increased in recent years, as shown earlier in Figure 2. In 2004, fewer than 5,000 imported cars were sold, but by 2009 the Korea Automobile Importers and Distributors Association (KAIDA) reported imported car sales of over 60,000.22 Table 1 shows that most of these cars were European or Japanese. Together, European manufacturers accounted for 62% of the sales of imported cars in the South Korean market in 2009 and Japanese manufacturers

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16 By contrast, European manufacturers’ strategy is to build fewer vehicles in the United States and rely more on exports. Automakers from the United Kingdom, France and Germany exported 654,862 vehicles to the United States in 2008, three times as many as they produced here. For a full discussion of the U.S. auto market and the role of Japanese and South Korean automakers, see CRS Report R41154, The U.S. Motor Vehicle Industry: A Review of Recent Domestic and International Developments, by Bill Canis and Brent D. Yacobucci.


18 In 1998, the Hyundai Kia Automotive Group was formed when Hyundai purchased 51% of Kia Motors.


22 Korea Automobile Importers & Distributors Association, Automotive Key Figures, http://www.kaida.co.kr/statistics/home.action?programId=117#.
combined for another 28%. BMW, Mercedes-Benz, and Audi were the top sellers by brand. Lexus, Honda, and Volkswagen also sold several thousand cars each in South Korea.

Only 10% of these imported cars were sold by one of the Detroit 3 automakers. In 2009, Ford and Chrysler, respectively, exported approximately 2,900 and 2,700 vehicles from the United States to South Korea. General Motors mostly sells cars made in South Korea through its South Korean subsidiary. In 2008, GM Daewoo produced nearly 882,000 vehicles, of which 765,000 were exported.

Table 1. Imported Passenger Vehicle Sales in South Korea
By Selected Years, by Manufacturer

<table>
<thead>
<tr>
<th>Year</th>
<th>U.S. Manufacturers: Detroit 3</th>
<th>European Manufacturers</th>
<th>Japanese Manufacturers</th>
<th>Total Import Sales</th>
<th>Total Vehicle Sales In Korea</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Chrysler</td>
<td>Ford</td>
<td>General Motors</td>
<td>Total</td>
<td>789</td>
</tr>
<tr>
<td>1990</td>
<td>0</td>
<td>1,579</td>
<td>40</td>
<td>1,650</td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td>704</td>
<td>328</td>
<td>182</td>
<td>1,238</td>
<td>3,176</td>
</tr>
<tr>
<td>2009</td>
<td>2,717</td>
<td>2,957</td>
<td>466</td>
<td>6,140</td>
<td>37,826</td>
</tr>
</tbody>
</table>

Source: Korea Automobile Importers & Distributors Association. These statistics show the automakers by nationality, but the imports may be built outside of the automakers’ home countries. Data is not available on the sourcing location of these imports.

a. General Motors also manufactures and sells motor vehicles in South Korea through its GM Daewoo operations. These data are only for GM vehicles imported from the United States.

South Korean Autos Sales Abroad and Import Restrictions

South Korea’s auto industry is strategically focused on export sales. Since the beginning of the 21st century, South Korea’s passenger vehicle industry has increased its export capacity significantly. In 2009 it exported 2.2 million vehicles worldwide; projections by the Korea Automobile Manufacturers Association (KAMA) indicate that figure may drop to an estimated 2 million cars in 2010.

At the same time, South Korea’s Hyundai-Kia has substantially increased its vehicle production in the United States. After supplying the U.S. market almost entirely through exports, Hyundai opened its first U.S. automotive manufacturing assembly plant in Montgomery, AL, in 2005. Production reached 250,000 units in 2007, as shown in Table 2, and dropped to 199,200 units in

23 General Motors Corporation and South Korea’s Daewoo Motor Company launched the GM Daewoo Auto & Technology Company, or DAT, on October 17, 2002. GM holds a 72% stake in the South Korean car maker, with the rest of the company controlled by the state run Korea Development Bank (17%), Suzuki (6.8%), and SAIC (6%). GM Daewoo operates five manufacturing facilities in South Korea and one assembly plant in Vietnam.


2009. Kia, in which Hyundai holds a 35% stake,\(^2\) has also begun to manufacture automobiles in the United States. At the end of 2009, the first U.S.-built Kia vehicle rolled off the production line in West Point, GA.\(^2\)

### Table 2. South Korean Passenger Vehicle and Light Truck Exports to and Production in the United States

<table>
<thead>
<tr>
<th>Year</th>
<th>South Korean Light Vehicle Exports to the U.S.</th>
<th>South Korean Light Vehicle Production in the U.S.</th>
<th>% Change in Imports YOY</th>
<th>% Change in U.S. Production YOY</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>860.1</td>
<td>0.0</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>2005</td>
<td>730.5</td>
<td>91.2</td>
<td>-15%</td>
<td>—</td>
</tr>
<tr>
<td>2006</td>
<td>695.1</td>
<td>236.8</td>
<td>-5%</td>
<td>160%</td>
</tr>
<tr>
<td>2007</td>
<td>674.7</td>
<td>250.5</td>
<td>-3%</td>
<td>6%</td>
</tr>
<tr>
<td>2008</td>
<td>615.9</td>
<td>237.0</td>
<td>-9%</td>
<td>-5%</td>
</tr>
<tr>
<td>2009</td>
<td>476.9</td>
<td>199.2</td>
<td>-23%</td>
<td>-16%</td>
</tr>
</tbody>
</table>

*Source: U.S. Department of Commerce, Office of Transportation and Machinery and Automotive News.*

South Korea maintains a number of barriers to motor vehicle imports:

- South Korea maintains a tariff of 8% on passenger vehicles (cars and light trucks) and most automotive parts, and 10% on commercial vehicles (pickup trucks, panel vans, and commercial vehicles).

- South Korea maintains eight different taxes on vehicles, some of which are levied only once while others are annual. At present, South Korea has a steeply ascending vehicle tax schedule, with very high rates on vehicles with larger engine capacities, such as might be exported by U.S. producers. Moreover, the tax system has a “cascade” effect, so that subsequent taxation rates incorporate, for example, the 8% duty paid on an imported vehicle.

- South Korean safety and emissions regulations and certification procedures are costly for low-volume importers; while South Korean-based producers can operate assembly lines specifically for domestic sales or exports, foreign companies have difficulty affording the high unit cost of customizing a small number of vehicles for the South Korean market.\(^2\) It is alleged in a report by the U.S. International Trade Commission (USITC)\(^2\) that South Korea’s safety

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\(^2\) Kia Motors Corporation, Hoover’s, http://www.hoovers.com/company/Kia_Motors_Corporation/cytjci-1-1njg4g.html.


\(^2\) Examples of how specific South Korean automotive standards discourage imports were provided by Stephen J. Collins, President of the Automotive Trade Policy Council, in testimony to the U.S. House of Representatives, Committee on Ways and Means, Subcommittee on Trade, March 20, 2007, pp. 3-5.

regulations and automotive product standards are often administered in a manner that is closed to outsiders and not transparent.

- South Korea has a history of both government-supported and industry anti-import campaigns appealing to national pride to promote domestic vehicles. To address past problems with anti-import campaigns, South Korea has committed that it does not have a policy to discourage the purchase of U.S. goods, including automobiles.

A key issue in U.S.-South Korean relations currently is the pending U.S.-South Korean Free Trade Agreement (KORUS FTA), which lowers motor vehicle tariffs between both countries and addresses many South Korean non-tariff trade barriers. U.S. and South Korean trade officials signed the agreement more than three years ago, on June 30, 2007. Legislatively, the KORUS FTA is at a standstill. The agreement cannot take effect until it is approved by the South Korean National Assembly and both houses of the U.S. Congress. (The KORUS FTA is one of a number of free trade agreements that South Korea has completed or is pursuing, that will cover up to 60% of its trade volume.)

For an analysis of KORUS FTA, see CRS Report R41389, Pending U.S. and EU Free Trade Agreements with South Korea: Possible Implications for Automobile and Other Manufacturing Industries, by Michaela D. Platzer.

The Japanese Automobile Market

Challenges to U.S. Automakers

Japan’s auto market has a low level of import penetration of 5%, as shown in Figure 2. In other major developed countries, the level of import penetration in motor vehicles is much higher. Examples include the United States, where imports account for more than one-quarter of all sales, and Germany, where imports hold more than one-third of auto sales.

Japan is the world’s second-largest producer of motor vehicles and the third-largest market for auto sales after China and the United States. There are nine major Japanese vehicle manufacturers: Toyota, Honda, Nissan, Subaru, Suzuki, Daihatsu, Mazda, Isuzu and Mitsubishi. Only Toyota and Honda are completely independent; the others are partially owned by other companies including Ford, General Motors, Renault, and Fuji Heavy Industries. As vehicle sales in other Asian countries have grown rapidly, sales in Japan have fallen from 40\% of the Asian total in 2004 to 30\% currently, and are forecast to fall to 20\% by 2012.\footnote{Economist Intelligence Unit, “Asia and Australasia Automotive Outlook.”} Unit sales in Japan were 4.6 million in 2009, a decline from the peak of 5.8 million in 2004.\footnote{“New Motor Vehicle Registrations,” The Motor Industry of Japan, Japan Automobile Manufacturers Association (JAMA), p. 8, May 2010.}

As shown in Table 3, sales of imported vehicles in Japan have fallen much more sharply than total sales. Only 178,527 imported vehicles were sold in 2009, 18.6\% fewer than in 2008 and less than half the level of 1996. Of these, 160,904 were cars imported from non-Japanese manufacturers (such as BMW, Hyundai, and Ford) and 17,623 were imports produced by Japanese manufacturers outside of Japan. Japanese sales of cars produced in the United States by the Detroit 3 were 88\% lower in 2009 than in 1996.
Table 3. Imported Vehicle Sales in Japan
By Manufacturer

<table>
<thead>
<tr>
<th>Year</th>
<th>U.S. Manufacturers</th>
<th>European Manufacturers</th>
<th>Japanese Manufacturers</th>
<th>Korean Manufacturers</th>
<th>Total Import Sales</th>
<th>Total Vehicle Sales in Japan</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Detroit 3</td>
<td>General Motors</td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1996</td>
<td>17,404</td>
<td>23,273</td>
<td>32,253</td>
<td>72,930</td>
<td>251,965</td>
<td>102,552</td>
</tr>
<tr>
<td>2000</td>
<td>8,963</td>
<td>8,451</td>
<td>13,991</td>
<td>31,405</td>
<td>219,905</td>
<td>23,303</td>
</tr>
<tr>
<td>2009</td>
<td>3,177</td>
<td>3,049</td>
<td>2,490</td>
<td>8,716</td>
<td>151,183</td>
<td>17,623</td>
</tr>
</tbody>
</table>


**Notes:** Detroit 3 sales include only U.S.-origin vehicles; Japanese sales are vehicles imported from Japanese-owned facilities outside Japan.

Japanese Auto Sales Abroad

Japanese manufacturers’ worldwide exports declined by 46% in 2009 to 3.6 million units, marking the first decline in exports in eight years. Their exports to the United States showed a similar decline as indicated in Table 4.

Japanese automakers have made extensive investments in manufacturing and distribution in many countries, in some cases involving alliances or joint ventures. In North America, Japanese manufacturers produced 2.8 million vehicles in the United States in 2008, compared to about 830,000 vehicles 20 years before. In 2009, which saw the lowest U.S. vehicle production in several decades, Japanese manufacturers were responsible for one-third of total output. Table 4 shows Japanese production in the United States and the corresponding number of U.S. imports. In recent years, new Japanese auto assembly plants have opened in Texas (Toyota) and Indiana (Honda), and Toyota is currently building an assembly plant in Mississippi.

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42 In 2008, Japanese automakers produced 2.8 million cars and light trucks in the United States out of total U.S. production of 8.6 million units.
Table 4. Japanese Passenger Vehicle and Light Truck Exports to and Production in the United States
2005-2009, in thousands of units

<table>
<thead>
<tr>
<th>Year</th>
<th>Japanese Light Vehicle Exports to the U.S.</th>
<th>Japanese Light Vehicle Production in the U.S.</th>
<th>YOY % Change in Imports</th>
<th>YOY % Change in U.S. Production</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>1,661</td>
<td>3,185</td>
<td>-5%</td>
<td>—</td>
</tr>
<tr>
<td>2006</td>
<td>2,229</td>
<td>3,123</td>
<td>+34%</td>
<td>-2%</td>
</tr>
<tr>
<td>2007</td>
<td>2,199</td>
<td>3,247</td>
<td>-1%</td>
<td>+4%</td>
</tr>
<tr>
<td>2008</td>
<td>2,120</td>
<td>2,799</td>
<td>-4%</td>
<td>-14%</td>
</tr>
<tr>
<td>2009</td>
<td>1,230</td>
<td>2,064</td>
<td>-42%</td>
<td>-26%</td>
</tr>
</tbody>
</table>

Source: U.S. Department of Commerce, Office of Transportation and Machinery, and Automotive News.

Car Scrappage Programs

The financial and economic turmoil of 2008 and 2009 prompted governments worldwide to establish economic stimulus packages to support their domestic economies. In 2009, most countries with significant automobile sectors, including the United States, Japan, and South Korea, opted to subsidize their motor vehicle industries with vehicle retirement, or “car scrappage” programs.

The car scrappage programs shared similar features and objectives, with all of them sharing a simple concept: vehicle owners received government subsidies for trading in an old vehicle for a new, more efficient car or truck. The economic rationale behind these programs was straightforward. By encouraging purchases of new vehicles and ensuring the destruction of old ones, governments sought to maintain production and hence employment throughout the extensive motor vehicle manufacturing supply and distribution chain.

South Korea’s Vehicle Retirement Program

The South Korean government implemented a temporary tax incentive program in May 2009 that reduced taxes for automobiles purchased to replace automobiles registered before the end of 1999. The program ran from May 1 to December 31, 2009. An individual who purchased a new car and disposed of an older car was eligible to receive an exemption of 70% of the consumption tax, car acquisition tax, and car registration tax, up to 2.5 million won (approximately US$2,000). The program required the old vehicle to be in the owner’s possession on the date the program was announced. New vehicles could be purchased within two months of scrapping or selling an eligible old vehicle. Additionally, the South Korean government implemented a separate tax

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43 This section was written by Michaela Platzer and Bill Canis, both Specialists in Industrial Organization and Business and Jeanne Grimmett, Legislative Attorney.

44 In the United States, for example, motor vehicle production comprised 2.3% of total output and 6.6% of total manufacturing employment in 2008.

incentive program in July 2009 for buyers of new hybrid cars. It did not require qualified buyers to replace old cars.

South Korea’s car scrappage program helped increase domestic sales in full-year 2009 by 23% over 2008, in a year when sales dropped in most major countries. For example, 2009 auto sales in the United States dropped by over 21%.

During the eight-month period that South Korea’s scrappage program was in effect, nearly 890,000 vehicles were sold, an average of 111,000 per month. This compares with sales of only 68,000 vehicles a month in the same eight-month period in 2008 and 83,000 per month in the more normal non-recession year of 2007. Following the scrappage program, from May through August 2010, average monthly sales declined to about 93,000 per month, indicating the stimulative effect of the government’s auto purchase program.

During the scrappage program, import sales fell to approximately 5,400 vehicle sales per month from 2007 and 2008 levels of 5,700 and 6,500, respectively. Following the scrappage program’s end, however, imports in May-August 2010 rose significantly to an average of 9,600 per month. There does not appear to be a South Korean government report providing greater insight into the vehicle models purchased under the program.

Most South Korean carmakers benefitted from the scrappage program, especially Hyundai-Kia. General Motors’ joint venture in South Korea, GM Daewoo, did not share in the surge, according to news accounts, largely because of its own financing, promotional and pricing issues: “Daewoo all but missed an incentives-led boom in the latter half of 2009.… [Daewoo] managed only a 0.6% improvement. Moreover, none of its cars made the top-ten best seller list. In 2009, the Daewoo brand not only lost its traditional third place in Korea behind Hyundai and Kia, but Samsung … outsold Daewoo.”

Japan’s Vehicle Retirement Program

Japan instituted a vehicle retirement program in June 2009, retroactive to April 10, 2009. It originally applied to all new vehicles that met program requirements sold through March 31, 2010; it was later extended to run through September 2010. This vehicle retirement program, known in Japan as the “Eco-Car” program, consisted of two parts: one was a replacement program, under which a consumer replaced an older passenger car with a new car meeting Japan’s 2010 fuel efficiency standards; the other was a program for purchase without a trade-in, under which the new car had to have (1) fuel efficiency at least 15% higher than Japan’s 2010 fuel efficiency standard and (2) a “4-star” emissions performance rating, meaning emissions levels 75% below 2005 Japanese standards.

47 Ibid.
Under the replacement program, a consumer purchasing a standard car or small car was eligible for a subsidy of ¥250,000 ($2,577, at ¥97 per dollar, the exchange rate when the program was initiated). If the replacement vehicle was a mini-vehicle, the subsidy was ¥125,000 ($1,289). Under the non-replacement program, a consumer purchasing a standard car or small car was eligible for a ¥100,000 ($1,031) subsidy. If the replacement vehicle was a mini-vehicle, the subsidy would have been ¥50,000 ($515).

The original Eco-Car program excluded certain low-volume U.S.- and European-made vehicles that were not certified under Japan’s safety, mileage, and emissions standards. Japan, like many countries in Europe and elsewhere, employs a “type approval” process in which vehicles and their components must be approved by government regulators prior to entering the market. In the United States, by contrast, approval is based on self-certification to government agencies such as the Environmental Protection Agency (for emissions) and the National Highway Traffic Safety Administration (for fuel economy); the government regulator selectively purchases and tests sample vehicles only after the vehicle is on sale.51

Japan and the United States have significant differences in vehicle test procedures. These include such factors as the distance, duration, and vehicle speed at which tests are conducted, as well as whether performance is measured from a cold start or after a warm-up period. There are also differences in standards for certain pollutants. As shown in Figure 3 Japan has more stringent per-mile standards than the United States for hydrocarbon emissions, while the United States has more stringent standards for nitrogen oxides. Thus, designing a vehicle’s emissions system for one country will likely make that vehicle, in the other country, under-compliant for some pollutants and over-compliant for others.

51 China is another country that has its own certification system, “China Compulsory Certification.”
With respect to fuel efficiency, Japan has considerably tighter fuel economy standards than the United States. The U.S. standards are based on vehicle size, while Japanese standards are based on vehicle weight, so comparing the two systems can be complicated. However, using the example of the Ford Fusion, the U.S. size-based standard for model year 2012 would be roughly 33 miles per gallon.\(^5^2\) The Fusion’s fuel economy target in Japan would be 30.6 mpg (13.0 km/l);\(^5^3\) but converting the Japanese JC08 test to the less stringent U.S. CAFE test would lead to a target of roughly 38 mpg\(^5^4\)—considerably higher than the 33 mpg U.S. target.

Because of their low volume of sales in Japan, foreign automakers have found it costly to obtain “type approval” for their exports to Japan.\(^5^5\) Under a 1986 agreement with the United States,

\(^{52}\) U.S. standards are based on a vehicle’s “footprint” (the wheelbase times the track width). For the Ford Fusion (MY08) the footprint is 46 square feet, which has a target fuel economy of 33.0 mpg for 2012 (see http://www.epa.gov/otaq/climate/regulations/420f10014.htm).

\(^{53}\) The Japanese standards are based on curb weight. The base model Fusion weighs 3175 lbs. (see cars.com), which leads to a fuel economy target of 13.0 km/l (30.6 mpg).


\(^{55}\) As the costs of certifying a model are relatively constant, the cost of that certification may be spread across all vehicles sold. The more vehicles sold, the lower the average per-vehicle cost for certification.
Japan addressed complaints that its vehicle-certification procedures were too expensive for low-volume imports by creating a special approval system for imported vehicles entering Japan in quantities of fewer than 2,000 vehicles per year. This system, known as the Preferential Handling Procedure (PHP), has been used for over two decades to certify low-volume U.S. imports, basing Japanese certification on U.S. government approvals from EPA and NHTSA.56

The original Japanese clunker program required, among other things, minimum fuel economy performance. However, as U.S. vehicles were imported to Japan through the PHP, these vehicles were not assigned a Japanese fuel economy rating, rendering them ineligible for the Eco-Car program when it was launched in April 2009. About 43% of imported vehicles qualified for the first part of the Eco-Car program.57

In late 2009, the United States government asked the government of Japan to alter the Eco-Car program to include imports regulated under the PHP system. This modification, suggested by the U.S. auto industry, made more imported U.S. autos eligible for purchase.58 It was also reported that attorneys in the Office of the United States Trade Representative (USTR) considered that the program, as originally structured, might have violated national treatment obligations in GATT Article III.59

Following additional urging from the Obama Administration, the U.S. industry, and some Members of Congress, the Japanese government announced on January 19, 2010, that it would modify the program to permit autos entering Japan under the PHP system to qualify.60 Japan announced that as of January 19, 2010, it would examine fuel efficiency performance “by the official value given by manufacturing countries.”61 In other words, Japan would now accept the certification of the relevant government agency of the country of manufacture that a particular auto met Japan’s 2010 fuel efficiency standards.62 For the United States, NHTSA sets the fuel efficiency standards.63

While these modifications were viewed in the United States as an improvement over the original version of the program, only eight U.S. car models were later deemed eligible for purchase under the modified scheme. U.S.-made vehicles that were eligible under the revised procedure included

56 PHP also applies to low-volume European imports.
58 “Japan Rejects USTR Proposal to Open Cash-for-Clunkers to U.S. Autos,” Inside U.S. Trade, December 18, 2009, at 1, 18 [hereinafter Japan Rejects Proposal]; see also Letter from American Automotive Policy Council to Deputy U.S. Trade Representative Demetrious J. Marantis (December 9, 2009), Inside U.S. Trade, December 18, 2009 at 19.
59 Japan Rejects Proposal, supra note 58, at 18.
61 January 2010 METI Announcement, supra note 60.
62 See Japan Changes Program, supra note 60.
63 In the case of PHP imports in the more popular non-replacement, no-trade in part of Eco-Car, in order to qualify after the January 2010 modifications, imports had to both exceed the NHTSA fuel economy standard by 15% and meet the emissions test in Japan. Source: U.S. Trade Representative.
the GM Hummer H3 and Cadillac CTS luxury sports sedan, Chrysler Grand Voyager minivan, and Ford Escape XLT Limited SUV. A number of European vehicles were also made eligible.  

Japan’s Eco-Car program ended in early September 2010 when funds ran out. The program appears to have helped boost sales. In the 17 months that Eco-Car was in operation, 3.6 million vehicles were sold through the two-pronged rebate program. The non-replacement portion, for which no trade-in was required, was the more popular, accounting for the sale of 2.5 million vehicles. Eco-Car prompted a fairly steady pace of sales from its outset in April 2009, but sales appear to have accelerated in August 2010 as it neared the end. According to news reports,

> Domestic sales [in Japan in August 2010] shot up 47 percent, reportedly the biggest monthly jump since 1968, for a 13th straight month of gains. The total includes cars, trucks and buses. But the bounty of buyers is still stunning, given Japan’s anemic economy and decade-long trend of falling sales.  

The Japanese government does not appear to have issued a comprehensive report on the Eco-Car program. However, JAMA data show that from April 2009 through September 2010—during which time Eco-Car was in operation—6.3 million new passenger cars were registered in Japan, a 10% increase from the same period in 2008-2009.

Import sales were mixed during the 18-month Eco-Car program, according to JAIA. From April 2009 (Eco-Car began on April 10, 2009) through August 2010, imported passenger car sales rose 5% (over the same time period in 2008-2009). During the first 12 months of Eco-Car, imported car sales fell by nearly 6%, but in the last six months of the program, imports rose by 19%, when compared to the same period a year earlier. During the time when the Eco-Car program was in effect, European vehicles were the most popular imports and VW was the most popular brand, with sales rising 12% (to 66,063 vehicles). Audi sales rose 9% (to 26,001 vehicles), but sales of BMW were flat (46,391 vehicles) and Mercedes-Benz sales dropped 5% (to 45,289).

Among the Detroit 3, sales fell for all brands except Chevrolet: Ford’s sales fell 11% (to 4,533 vehicles), Cadillac’s fell 3% (to 1,528 vehicles), and Dodge’s fell 28% (to 1,536 vehicles). But Chevrolet sales rose 7% (to 1,248 vehicles). During this first year of Eco-Car, U.S. and certain European vehicles were excluded from the Eco-Car program, which may have had an impact on foreign auto sales in Japan.

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66 Next Generation Vehicle Promotion Center, http://www.cev-pc.or.jp/NGVPC/subsidy/eco/eco_PDF/shintyoku.pdf. According to JAMA, this nonprofit group helped manage Eco-Car for the Japanese government, including screening applications, keeping track of funds paid out and collecting data on the sales. The Center also advises consumers on other programs that provide subsidies for new generation vehicles, beyond Eco-Car.


GATT/WTO Obligations and Vehicle Retirement Programs

Because of its potential effect on imports, a government program under which a sales tax on a new automobile is temporarily reduced or eliminated or a consumer receives a rebate from the government for the purchase of a new vehicle within a given period of time may implicate obligations under the General Agreement on Tariffs and Trade 1994 (GATT 1994), one of the multilateral trade agreements that a country must accept as a condition of membership in the World Trade Organization (WTO). In particular, a program featuring a tax reduction or rebate on the purchase of a product would appear to fall within the scope of Article III, the GATT national treatment article. Article III applies to internal taxes and internal laws, regulations and requirements affecting the internal sale, offering for sale, purchase, transportation, distribution or use of products and prohibits discrimination between like imported and domestic goods in the imposition of such measures.

GATT national treatment requirements are informed by Article III:1, which states that tax and regulatory measures covered by the article “should not be applied to imported or domestic products so as to afford protection to domestic production.” Article III does not require that there be trade effects for the article to be violated. As noted by the WTO Appellate Body, “Article III protects expectations not of any particular import volume but rather of the equal competitive relationship between imported and domestic products.”

Where a temporary government program is considered to be inconsistent with WTO obligations, the utility of challenging such a program in the WTO may be questionable, given that the program may not be in effect at the time that WTO panel or Appellate Body reports are issued or

69 This section was written by Jeanne J. Grimmett, Legislative Attorney, American Law Division.

70 The granting of government subsidies—broadly, the provision of a benefit of an economic or financial nature to a producer or consumer—is subject to obligations under Articles III, VI, and XVI of the of the General Agreement on Tariffs and Trade 1994 (GATT 1994), as well as to obligations under the WTO Agreement on Subsidies and Countervailing Measures (SCM Agreement), and the Agreement on Agriculture. GATT Article VI addresses the imposition of countervailing duties on subsidized imports, while Article XVI contains obligations involving the granting of subsidies themselves by WTO Members. The SCM Agreement elaborates and expands upon GATT Articles VI and XVI; it also contains a definition of the term “subsidy” for purposes of the Agreement, stating that “a subsidy shall be deemed to exist” if there is a governmental financial contribution, or any form of income or price support, that confers a benefit. The Agreement on Agriculture is aimed at reducing export subsidies and domestic support involving agricultural products; the Agreement imports the SCM Agreement’s definition of “export subsidy” and sets out the types of measures that constitute covered domestic agricultural support.

Because the above-described obligations are concerned with subsidies to producers, obligations involving subsidies to consumers need to be found elsewhere in WTO agreements. Although GATT Article III does not contain a definition of the term “subsidy,” it nonetheless covers subsidies resulting from the exemption or reduction of taxes on products (Article III:2) or from internal regulations affecting the internal sale, offering for sale, purchase, transportation, distribution, or use of products (Article III:4), to the extent that discrimination between like domestic and imported products occurs. Article III:8(b) exempts from Article III national treatment obligations, “the payment of subsidies exclusively to domestic producers,” including payments derived from the proceeds of GATT-consistent internal taxes and charges and “subsidies effected through governmental purchases of domestic products.” For a discussion of the relationship of GATT Article III and the SCM Agreement, see Panel Report, Indonesia—Certain Measures Affecting the Automobile Industry, paras. 14.28-14.46, WT/DS54 et al. (July 2, 1998)(report not appealed)[hereinafter Indonesia Autos Panel Report].

the dispute proceeding concludes. The fact that a government program has an expiration date, however, does not preclude the initiation of a WTO dispute or a WTO ruling on the program. For example, in April 2009, China challenged a U.S. appropriations provision set to expire on September 30, 2009, which prohibited the use of appropriated funds “to establish or implement a rule allowing poultry products to be imported into the United States from the People’s Republic of China.” Even though the U.S. law expired shortly before China’s first written panel submission in the case, the panel determined that it nonetheless had discretion to decide whether or not to make findings on the U.S. measure and decided that it would do so on the grounds that (1) the United States had not conceded that the provision was WTO-inconsistent and (2) appropriations legislation is of an annual nature and thus the measure could easily be reimposed. The panel stated, however, that even if it were to find WTO violations, “it would be pointless to ask the United States to bring … [the provision] into conformity with those covered agreements since the measure is no longer in force.” Thus, while a WTO ruling on an expired government program may have little practical effect as to the program under challenge, it may nonetheless provide an indication of WTO issues that are likely to arise with respect to subsequent programs with similar features.

This portion of the report describes relevant portions of GATT Article III and discusses in general some WTO concerns that might arise in connection with requirements of the Korean and Japanese vehicle retirement programs.

**GATT National Treatment Obligations (Article III)**

**Article III:2 (Internal Taxation)**

Article III:2 addresses taxes on products (e.g., excise and sales taxes), also referred to as “indirect taxes.” Under Article III:2, the products of a WTO member imported into the territory of any other WTO member “shall not be subject, directly or indirectly, to internal taxes or other internal charges of any kind in excess of those applied, directly or indirectly, to like domestic products.”

For a violation of Article III:2 to be found, the following three requirements must be met:

(i) the measure must qualify as an *internal tax or other charge of any kind applied, directly or indirectly, to imported and domestic products*;

(ii) the taxed imported and domestic product must be *like*; and

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72 For further information on the WTO dispute settlement system, see CRS Report RS20088, *Dispute Settlement in the World Trade Organization (WTO): An Overview*, by Jeanne J. Grimmett.
75 *Id.* para. 7.56. See also Appellate Body Report, *United States—Import Measures on Certain Products from the European Communities*, para. 81, WT/DS165/AB/R (December 11, 2000)(Appellate Body found that panel erred in recommending that the WTO Dispute Settlement Body request the United States to bring into conformity with its WTO obligations a measure that the panel had found no longer existed).
(iii) imported products must be subject, directly or indirectly, to internal taxes or charges in excess of those applied, directly or indirectly, to like domestic products.\textsuperscript{76}

To determine whether the tax on an import exceeds the tax on the like domestic product, a strict test is applied, under which “even the smallest amount of ‘excess’ is too much;” neither a “trade effects” test nor a \textit{de minimis} standard qualifies the prohibition.\textsuperscript{77} Further, Article III:2 requires that actual, rather than nominal, tax burdens be compared.\textsuperscript{78} An identical tax rate could result in a heavier tax burden on an import and thus a WTO review would likely take into account not only the tax rate but also taxation methods and the rules for tax collection.\textsuperscript{79}

In addition, Article III:2 prohibits a member from “otherwise apply[ing] internal taxes or other internal charges to imported or domestic products in a manner” that “afford[s] protection to domestic production.” An interpretative note to the GATT states that this obligation applies “only in cases where competition was involved between, on the one hand, the taxed product and, on the other hand, a directly competitive or substitutable product which was not similarly taxed.”\textsuperscript{80}

In general, GATT and WTO dispute panels have viewed the policy purpose behind a tax as irrelevant so long as the member imposing the tax does not violate the GATT or other WTO obligations.\textsuperscript{81}

**Article III:4 (Internal Regulation)**

Article III:4 applies to internal “laws, regulations, and requirements affecting … [the] internal sale, offering for sale, purchase, transportation, distribution or use” of products. Article III:4 requires WTO members to accord an imported product no less favorable treatment than that accorded to the like domestic product with respect to any such law, regulation, or requirement. To find that a measure violates this provision, three findings must be made:

- that the imported and domestic products at issue are “like products”; that the measure at issue is a “law, regulation, or requirements affecting their internal sale, offering for sale, purchase, transportation, distribution or use”; and that the imported products are accorded “less favourable” treatment than that accorded to like domestic products.\textsuperscript{82}

The term “affecting” has long been given a broad scope in GATT jurisprudence. According to an early GATT panel, the use of this term indicates an intent to cover not only “laws and regulations which directly governed the conditions of sale or purchase but also any laws or regulations which might adversely modify the conditions of competition between domestic and imported products


\textsuperscript{77} Japan Beverages AB Report, supra note 71, at 23.

\textsuperscript{78} Argentina Hides Panel Report, supra note 76, para. 11.184.


\textsuperscript{80} GATT 1994 ad. art. III, para. 2.


on the internal market.”83 The panel in the case found that Article III:4 applied to a governmental program granting special credit facilities to farmers or farmers’ cooperatives for the purchase of domestic agricultural machinery, but not for the purchase of their imported counterparts, and that limiting the credit facility to the purchase of domestic goods denied equal treatment to like imported products, thereby violating Article III.84

Under Article III:4, it is possible for imported products to be subject to the same requirements as domestic products and nonetheless be treated less favorably. Alternatively, it is possible that imports of a particular product may be subject to requirements that differ from those imposed on a like domestic product and yet be deemed to be accorded nondiscriminatory treatment. Thus, in some cases it may be necessary to determine whether, in fact, a government law, regulation, or requirement accords less favorable treatment to the import than to a domestic product.85

“Like Products”

A key inquiry under GATT Article III:2 and Article III:4 is what constitutes the relevant “like product.” A narrow category of “like products” (e.g., passenger cars with a particular feature), may permit a government to impose a more extensive range of nondiscriminatory tax or regulatory measures without violating Article III, while a broader category (e.g., all passenger cars regardless of features) may make it easier to find less favorable treatment of imports. GATT and WTO panels have generally used four criteria to determine whether products are “like” for purposes of Article III:2 or Article III:4: (1) the properties, nature and quality of the products; (2) end-uses; (3) consumers’ tastes and habits; and (4) tariff classification.86 “Like product” determinations under Article III are made on a case-by-case basis under a significant body of GATT/WTO jurisprudence.87 “Likeness” basically implicates competitiveness concerns, the WTO Appellate Body having stated that a determination of “likeness” is “fundamentally, a determination about the nature and extent of a competitive relationship between and among products.”88

South Korea’s Vehicle Retirement Incentive Program

As discussed earlier in this report, South Korea, from May 2009 to December 2009, implemented a temporary tax incentive program that reduced taxes on automobiles that were purchased to replace other automobiles registered before the end of 1999. Although the program did not appear to expressly preclude or discourage the purchase of imported automobiles, it has been argued that

84 Id. paras. 5-16.
87 See generally id. at paras. 87-103 and World Trade Organization, WTO ANALYTICAL INDEX; GUIDE TO WTO LAW AND PRACTICE 145-48, 163-67 (2d ed. 2007).
88 EC Asbestos AB Report, supra note 86, para. 99 (panel concluded that, while the scope of Article III:4 is broader than Article III:2 first sentence, it is not broader than the “combined product scope” of both sentences of Article III:2, i.e., “like” products and “directly competitive or substitutable” products).
the program inordinately favored the South Korean domestic automobile industry due to the low market share of imported autos, a situation resulting from a variety of South Korean automotive trade barriers discussed elsewhere in this report.89

Because the South Korean program appears to have involved a reduction in indirect taxes imposed on a good, it would have potentially implicated GATT Article III:2, which provides that the products of a WTO member imported into the territory of any other WTO member may “not be subject, indirectly or directly, to internal taxes or other internal charges of any kind in excess of those applied, directly or indirectly, to like domestic products.” Assuming that U.S. and South Korean passenger automobiles were deemed to be like products, a national treatment violation could seemingly have been alleged if, for example, the tax reductions on the purchase of an imported vehicle had not been as generous as those available for the like domestic vehicle. In such case, it could have been argued that an imported automobile was being taxed in excess of its domestic counterpart.90 In the case before us, however, Korea appears to have made identical indirect tax incentives available to the consumer for the purchase of either domestic or foreign vehicles.

As noted above, concerns have been raised that, due to the lower market share claimed by U.S. automobiles in South Korea, autos exported from the United States did not benefit from the tax reductions available under the South Korean scrappage program to the same extent as autos made in South Korea. Because Article III:2 is concerned with the tax burden borne by the like imported product regardless of the volume of trade involved, however, the fact that U.S. autos have a lower market share in South Korea would not appear to be cause for complaint under Article III:2.91 To increase the market share of U.S.-produced automobiles in South Korea and thus increase the benefit of a similar car scrappage program to U.S. exporters in the future, trade barriers that are seen to prevent more substantial import penetration of U.S. automobiles into the South Korean market would seemingly need to be evaluated in light of GATT or other WTO obligations and challenged on their own, if violations can be discerned.

Japan’s Eco-Car Scrap Incentive Program

As described earlier in this report, Japan instituted a vehicle purchasing program in 2009. A fact sheet prepared by the Japan Automobile Manufacturers Association (JAMA) stated that the requirements of Japan’s vehicle purchase program “apply equally to both foreign and domestically produced vehicles.”92 It also explained, however, that certain imported autos might not in practice qualify for purchase under the program (as originally established) and thus would not benefit from the advantage provided by the government subsidy provided to consumers:

91 Cf. Appellate Body Report, Dominican Republic—Measures Affecting the Importation and Internal Sale of Cigarettes, paras. 93-96, WT/DS302/AB/R (April 25, 2005)[hereinafter DR Cigarettes AB Report] (“...the existence of a detrimental effect on a given imported product resulting from a measure does not necessarily imply that this measure accords less favorable treatment to imports if the detrimental effect is explained by factors or circumstances unrelated to the foreign origin of the product, such as the market share of the importer in this case.”).
92 JAMA Fact Sheet, supra note 50, at 3.
In Japan, all vehicles on the road must be certified by the government to meet safety and emissions requirements. Manufacturers have the option to undergo additional emissions certification to achieve superior emissions control status known as the four-star system. To obtain four-star status a vehicle must have emissions levels 75 percent below the 2005 standards. This allows manufacturers to advertise and sell their vehicles under the four star label, which is evaluated highly by the environmentally conscious Japanese auto consumer. 367 of the 827 passenger car models available for sale in Japan in 2008 carried the four-star label, including 310 of the 473 domestic passenger car models and 57 of the 354 imported passenger car models, according to calculations by the Japan Automobile Manufacturers Association based on data from the Japanese Ministry of Land, Infrastructure, Transport and Tourism.

While all vehicles in Japan must be certified for safety and emissions standards, the Government of Japan has established a certification option for low-volume imported vehicles of less than 2,000 vehicles per vehicle type. This certification program, known as the Preferential Handling Procedure (PHP), was established as an alternative to the standard “Type Approval System” procedures in 1986 at the request of the United States Government to ease the burden on importers of the more comprehensive Japanese Type Approval System. This was part of a program to facilitate vehicle imports into Japan. Japan’s comprehensive Type Approval System for emissions is similar to government certification programs around the world. It includes fuel economy testing and certification as well as emissions testing and certification.

Under the PHP system however, manufacturers are not required, and do not receive, certification for fuel efficiency. Since the Green Vehicle Promotion Purchasing Measures are designed as an environmental improvement program, those manufacturers which do not certify their vehicles either for fuel economy under the Type Approval System or for low emissions under the four-star emission program are not eligible for the program.93

As discussed earlier, Japan modified its program in January 2010 to permit autos entering Japan under the Preferential Handling Procedure (PHP) to qualify for purchase.94 First, Japan announced that as of January 19, 2010, it would accept the certification of the relevant government agency of the country in which the auto is manufactured (for the United States, NHTSA) that the auto met Japan’s 2010 city mileage-based fuel efficiency standards. Second, Japan stated that it would examine gas emission performance by the emissions data obtained at the time of importation under the PHP procedure. Again, while these modifications were viewed in the United States as an improvement over original program requirements, only eight U.S. cars were subsequently certified as eligible for purchase under the modified scheme.95

Given the apparent lack of comment in the United States on the use of PHP-generated emissions data, a factor that would bear on qualification for the more popular non-replacement portion of Japan’s purchase program, this modification appeared to satisfy at least some U.S. concerns over the exclusion of U.S. autos entering Japan under the PHP process. At the same time, the fact that Japan was basing the fuel efficiency of U.S. automobiles on city mileage instead of combined

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93 Id.
94 Japan Changes Program, supra note 60; USTR to Monitor, supra note 60; January 2010 METI Announcement, supra note 60.
95 U.S.-made vehicles eligible under the revised procedure include the GM Hummer H3 and Cadillac CTS luxury sports sedan, Chrysler Grand Voyager minivan and Ford Escape XLT Limited SUV. A number of European vehicles were also made eligible. See Japan, METI, Eligible Types of PHP Vehicles under the modified Eco-Car Scrap Incentive Program, http://www.meti.go.jp/english/press/data/20100119_01a.html.
city/highway mileage raised concerns in the United States both at the time that the program modification was announced, as well as at the time that the list of qualifying imported vehicles was issued, that the program was still not sufficiently inclusive. Because combining city and highway mileage results in a higher fuel efficiency rating for U.S. autos than does the use of city mileage alone, Japan’s use of city mileage as a standard for fuel efficiency was considered to continue to adversely affect U.S. participation in Japan’s program. However, the full U.S. city/highway fuel economy test is less stringent than Japan’s JC08 test—with fuel economy ratings perhaps 20% to 40% higher—and the Japanese government has argued that the U.S. city rating alone is more analogous to the JC08 test. Since the use of city mileage appears to have been the most problematic aspect of the Japanese purchase program from a U.S. perspective, this report focuses on this aspect of the program as the basis for WTO concerns.

Japan’s Vehicle Replacement Program

Japan’s auto replacement program provided a consumer with a rebate in a given amount for the purchase of an automobile meeting Japan’s 2010 fuel efficiency standards, provided the consumer traded in an older car. In assessing the modified program under GATT Article III:4, three issues, as noted above, need to be addressed: (1) whether like products are involved; (2) whether the challenged measure is a law, regulation, or requirement “affecting” the internal sale, offering for sale, purchase, distribution, or use of products; and (3) whether imported products are being accorded less favorable treatment than the like domestic products.

While a “like product” analysis must be a comprehensive one and address evidence related to all of the four “like product” criteria listed earlier, it may be argued that the passenger automobiles at issue here, at a minimum, share physical properties and end uses to a sufficient degree to be considered “like.” One may further argue that the requirement that new passenger motor vehicles meet Japan’s 2010 city mileage requirement in order that the purchaser may benefit from the consumer subsidy constituted a “law, regulation, or requirement” affecting the offering for sale or purchase.

98 For a comparison of Japan’s JC08 and comparable U.S. requirements, see Tables 7 and 8.
100 Szczesny, supra note 97.
101 We assume for purposes of this discussion that the fact that the fuel efficiency of U.S.-produced automobiles may be certified by the U.S. NHTSA has to some extent rendered moot an Article III:4 claim based on discriminatory conformity assessment procedures for imports. This report does not address the possible application of the WTO Agreement on Technical Barriers to Trade to the Japanese fuel economy standards and their related conformity assessment procedures.
102 Regarding the four like product criteria developed under GATT/WTO jurisprudence, see supra notes 86-88 and accompanying text. The WTO Appellate Body criticized one panel for its non-exhaustive consideration of “like product” criteria, stating that the panel “should have examined the evidence relating to each of those four criteria, and then, weighed all of that evidence, along with any other relevant evidence, in making an overall determination of whether the products at issue could be characterized as ‘like.’” EC Asbestos AB Report, supra note 86, para. 109 (emphasis in original).
purchase of these products. In such case, the remaining question would be whether the city
mileage requirement afforded less favorable treatment to U.S. passenger motor vehicles.

As discussed earlier, the question that is addressed in determining whether less favorable
treatment is being accorded for purposes of Article III:4 is whether the measure at issue “modifies
the conditions of competition in the relevant market to the detriment of imported products.” 103 As
otherwise stated by the WTO Appellate Body, “a measure accords less favourable treatment to
imported products if it gives domestic like products a competitive advantage in the market over
imported like products.” 104

If all domestic and imported passenger automobiles sold in Japan had to meet the same city fuel
efficiency requirement in order to qualify for purchase under the replacement program, the
requirement could be viewed as facially nondiscriminatory, that is, as applicable equally in law to
all like products, whether foreign or domestic. On the other hand, if all new Japanese and U.S.
passenger automobiles, regardless of their fuel efficiency, were “like products,” the regulation or
requirement seemingly prevented the purchaser of an imported automobile with lower overall fuel
efficiency from benefitting from a government-provided financial incentive or advantage, while
permitting the purchaser of a like domestic automobile with higher fuel efficiency to do so. In
such case, it could be argued that the city mileage requirement conferred a competitive advantage
on Japanese automobiles—which were already required to meet this requirement in order to be
sold in Japan—and thus accorded less favorable treatment to the like imported product in fact. 105

On the other hand, it might be argued that imported vehicles would not be treated less favorably
than like domestic products since, in Japan’s view, noted earlier, applying the city mileage
standard to imported vehicles ensures that they perform as well as Japanese vehicles given that
the imported models are not subject to the more stringent JC08 test.

Some recent statements by the WTO Appellate Body indicate that distinctions might be drawn
between otherwise like products in some circumstances without according less favorable
treatment to an imported good. In European Communities—Measures Affecting Asbestos and
Asbestos-Containing Products, the Appellate Body stated that even where the complaining
member had successfully established the relevant products were “like products” in a particular
case,

the complaining Member must still establish that the [challenged] measure accords to the
group of “like” imported products “less favourable treatment” than it accords to the group of
“like” domestic products. The term “less favourable treatment” expresses the general
principle in Article III:1, that internal regulations “should not be applied … so as to afford
protection to domestic production.” If there is “less favourable treatment” of the group of
“like” imported products, there is, conversely, “protection” of the group of “like” domestic
products. However, a Member may draw distinctions between products which have been
found to be “like”, without, for this reason alone, according to the group of “like” imported
products “less favourable treatment” than that accorded to the group of “like” domestic
products. In this case, we do not examine further the interpretation of the term “treatment no
less favourable” in Article III:4, as the Panel’s findings on this issue have not been appealed
or, indeed, argued before us. 106

103 Korea Beef AB Report, supra note 82, para. 137 (emphasis in original).
104 DR Cigarettes AB Report, supra note 91, para. 93.
105 See supra note 85 and accompanying text.
106 EC Asbestos AB Report, supra note 86, para. 100 (emphasis in original).
The Appellate Body later addressed the issue of “less favorable treatment” in Article III:4 as follows in Dominican Republic—Measures Affecting the Importation and Internal Sale of Cigarettes:

[T]he existence of a detrimental effect on a given imported product resulting from a measure does not necessarily imply that this measure accords less favorable treatment to imports if the detrimental effect is explained by factors or circumstances unrelated to the foreign origin of the product, such as the market share of the importer in this case.107

Thus, it might be further argued, for example, that, even though passenger automobiles are like products, any less favorable treatment of U.S. automobiles resulting from a city mileage requirement results, not from their foreign origin, but perhaps from their being built for a somewhat different constellation of roads and terrains and a different population configuration than are Japanese automobiles and thus highway performance may be a more important consideration in the United States. In any event, what constitutes “less favorable treatment” of a broad category of like products would be determined on a case-by-case basis in WTO dispute settlement.108 An analysis of all of the relevant factors that might apply in the case at hand is beyond the scope of this report.

Alternatively, it could be argued that the group of “like products” involved is narrower in scope than passenger automobiles, specifically, that the relevant like products are instead automobiles meeting Japan’s fuel economy standard based on city mileage. Such a distinction may arguably be grounded in “like product” criteria such as physical properties, end uses, and consumer preference, that is, that consumers “perceive and treat the products as alternative means of performing particular functions in order to satisfy a particular want or demand.”109 Were the argument in favor of distinguishing passenger automobiles on the basis of fuel economy to

107 DR Cigarettes AB Report, supra note 91, para. 96. In this case, the complaining WTO Member had argued that a bond requirement imposed equally on importers and domestic producers of cigarettes had resulted in a higher per-unit cost with respect to imports due to lower market share of the imported product, resulting in less favorable treatment of the imports.

Later, the WTO panel in European Communities—Measures Affecting the Approval and Marketing of Biotech Products cited the Appellate Body’s statements in construing the term “in no less favourable manner,” as contained in Annex C to the WTO Agreement on Sanitary and Phytosanitary Measures, which sets out obligations for control, inspection, and approval procedures used to determine whether a WTO Member’s sanitary or phytosanitary requirements were met. The panel rejected arguments by Argentina that the EC had treated imported biotech products in a less favorable manner than domestic products with regard to the EC’s processing of applications because Argentina had not shown that the alleged less favorable treatment was “explained by the foreign origin of these products rather than, for instance, a perceived difference between biotech products and novel non-biotech products in terms of the requirement care in their safety assessment, risk for the consumer, etc.” Panel Report, European Communities—Measures Affecting the Approval and Marketing of Biotech Products, para. 7.2411, WT/DS291/R, WT/DS292/R, WT/DS293/R (September 29, 2006)(report not appealed). The panel also rejected a similar argument made by Argentina with regard to the EC’s conduct of approval procedures before and after 1998, stating that it was “not obvious that the alleged less favourable manner of conducting approval procedures for the relevant imported biotech products after 1998 is explained by the foreign origin of these products rather than by other factors or circumstances, such as a different perception of risk associated with biotech products, etc.” Id. para. 7.2415.

108 Note again that in EC Asbestos, supra note 89, the WTO Appellate Body combined its discussion of “less favorable treatment” with its “like product” analysis and made clear that the issue of “less favorable treatment” was not a subject of the appeal and thus was not before the Appellate Body.

109 EC Asbestos AB Report, supra note 86, para. 101. Cf. id. at para. 113 (AB “very much of the view that evidence relating to the health risks associated with a product may be pertinent in an examination of ‘likeness’ under Article III:4 of the GATT 1994” and “believ[es] that this evidence can be evaluated under the existing criteria of physical properties, and of consumers’ tastes and habits”).
succeed, it would seemingly be easier to make the case that imports are not treated less favorably than domestic automobiles since consumers would be entitled to a rebate for the purchase of any “like product,” whether it is of foreign or domestic origin.

Where a persuasive case for less favorable treatment of imports can be made, a WTO member may seek to justify its measure under one of the general exceptions set out in GATT Article XX. These exceptions permit WTO members to maintain GATT-inconsistent measures for certain public policy reasons provided the measures are applied in a manner that complies with requirements in the proviso to Article XX, also referred to as the Article XX *chapeau*. Of apparent relevance in this context is GATT Article XX(g), which permits GATT-inconsistent measures “relating to the conservation of exhaustible natural resources, if such measures are made effective in conjunction with restrictions on domestic production or consumption.” It may be argued here, for example, that the exhaustible natural resource being conserved is petroleum or crude oil. Where a country has virtually no oil reserves, as it the case with Japan,110 however, a territorial issue involving Article XX(g) would need to be addressed, namely, the extent to which the exception may be invoked for purposes of conserving an exhaustible natural resource that is located outside the territory of the WTO member invoking the exceptions.111 Alternatively, it might be argued that the atmospheric effects of fuel economy requirements might make clean air the relevant exhaustible natural resource, a resource identified as such in at least one WTO dispute.112 In either case, the WTO member would also need to show that its requirement is “primarily aimed at” the identified conservation goal113 and that related domestic restrictions are in force, a condition that would presumably be satisfied here, given that the fuel efficiency requirement would apply to the like domestic product.114

If Japan’s measure was found to be preliminarily justified under this exception, Japan would also need to show that it had abided by the above-mentioned Article XX *chapeau*, that is, that it was not applying the measure “in a manner which would constitute a means of arbitrary and unjustifiable discrimination between countries where the same conditions prevail, or a disguised

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111 *See*, e.g., Appellate Body Report, *United States—Import Prohibition ofCertain Shrimp and Shrimp Products*, para.133, WT/DS58/AB/R (October 12, 1998)(hereinafter U.S. Shrimp AB Report). Note also Report of the Panel, *United States—Taxes on Automobiles*, DS31/R (October 11, 1994)(unadopted), at http://www.wto.org/gatt_docs/English/SULPDF/91810174.pdf, in which a GATT panel, examining whether U.S. Corporate Average Fuel Economy (CAFE) standards violated Article III:4, agreed with the United States that Article XX(g) could be invoked for the policy purpose of conserving gasoline. The panel noted that “gasoline was produced from petroleum, an exhaustible natural resource” and thus “a policy to conserve gasoline was within the range of policies mentioned in Article XX(g).” *Id.* para. 5.57. In arguing for the applicability of Article XX(g) in the event that the exception needed to be invoked, the United States appears to have made reference to the limited nature of both U.S. and global fossil fuel reserves and to the fact that U.S. fuel economy requirements “had been recognized internationally as a success not only in reducing US oil consumption but also in reducing emissions of carbon dioxide and other gases contributing to global warming and ozone depletion.” *Id.* para. 3.322.
112 Panel Report, *United States—Standards for Reformulated and Conventional Gasoline*, para. 6.37, WT/DS2/R (January 29, 1996)(panel report appealed on other grounds). If a defending WTO Member sought to argue the adverse atmospheric consequences of less restrictive fuel use, it might also invoke GATT Article XX(b), permitting GATT-inconsistent measures “necessary for the protection of human, animal, or plant life or health.” See Appellate Body Report, *Brazil—Measures Affecting Imports of Retreaded Tyres*, paras. 133-183, WT/DS32/AB/R (December 3, 2007), for a recent discussion of the requirements of this provision.
114 *Id.* at 20-21.
restriction on international trade." While an analysis of whether the proviso would be met is beyond the scope of this report, it may be noted that discrimination under the *chapeau* may occur between the exporting country and the importing country\(^{115}\) and that the fairness of Japan’s requirements and procedures for showing that an imported car had complied with the fuel efficiency standard would seemingly be a subject for examination by a WTO panel.\(^{116}\)

**Japan’s Non-Replacement Program**

As noted above, rebates were also available for the purchase of a new car, without scrapping an old model, where the fuel efficiency of the purchased automobile was at least 15% higher than Japan’s 2010 fuel efficiency standard and, while not focused on here, its emission levels were 75% or less than the 2005 Japanese standard. Assuming again that the relevant “like product” is passenger automobiles, it may be argued that the fuel efficiency requirement applied equally in law to all such autos, foreign or domestic. At the same time, though, it may be argued that, if the fuel efficiency standard was measured from the more stringent baseline of city mileage rather than combined city/highway mileage, exceeding this baseline would be easier for autos of Japanese origin, giving Japanese vehicles an impermissible competitive advantage for purposes of Article III:4.

Nevertheless, some of the same counterarguments would seemingly be available for the non-replacement portion of Japan’s program as made for the “purchase with trade-in” portion, including (1) that any less favorable treatment of imported passenger automobiles is not due to foreign origin but rather to other non-origin-related factors, and (2) that, if less favorable treatment of imported automobiles is found in violation of Article III:4, the city mileage requirement may be preliminarily justified under a GATT general exception and the requirements of the Article XX *chapeau* involving the application of the measure are met.

One might also argue for a narrow category of “like products” for the non-replacement program, that is, that the relevant category was passenger autos having, in part, fuel efficiency that is at least 15% higher than Japan’s 2010 fuel economy standard on the ground that these autos share physical properties and end uses, and were likely to be similarly perceived by consumers. On the other hand, it might also be argued that passenger automobiles that do not meet Japan’s more stringent standards may still be in a competitive relationship with qualifying autos, regardless of the origin of either, and thus a broader categorization may be more appropriate under WTO “like product” criteria.

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\(^{115}\) *Id.* at 23-24; U.S. Shrimp AB Report, *supra* note 111, para. 150.

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