Understanding of Korean Automobile Industry and Opportunities through the Korea-EU FTA

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Today’s Presentation

I. Elimination of Tariffs and Non-Tariff Barriers

II. Changes Following the FTA

III. Preconditions for Structural Advancement

IV. Direction of Cooperation and Growth strategies

V. Conclusion
1. Elimination of Tariff and non–Tariff Barrier

Tariff Reduction Schedule

- Immediate elimination of Auto–part and Tire import duty
  - Passenger Vehicles: Engine size, Smaller than 1,500cc: Within 5yrs
    - Export share: 41.6%(2009) ⇒ 31%(2010)
  - Engine size, Larger than 1,500cc: Within 3yrs
    - Export Share 69%(2010)

<Table> Import Tariff

<table>
<thead>
<tr>
<th></th>
<th>Korea</th>
<th>EU.</th>
<th>U.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Car</td>
<td>8</td>
<td>10</td>
<td>2.5</td>
</tr>
<tr>
<td>Truck</td>
<td>10</td>
<td>22 (Gasoline 2,800cc&lt; and Diesel 2,500cc&gt;)</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10 (Gasoline 2,800cc&gt;, Diesel 2,500cc&gt;)</td>
<td></td>
</tr>
<tr>
<td>Bus</td>
<td>10</td>
<td>22 (Gasoline 2,800cc&lt; and Diesel 2,500cc&gt;)</td>
<td>2.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10 (Gasoline 2,800cc&gt;, Diesel 2,500cc&gt;)</td>
<td></td>
</tr>
<tr>
<td>Parts</td>
<td>8</td>
<td>4.5</td>
<td>2.5~4.0</td>
</tr>
</tbody>
</table>
Increasing Production of Vehicles and Auto Parts

Import Market for Auto Parts
- EU : 91.3 Billion Euros (Regional sourcing 86%)
- U.S. : US$71.7 billion (N.A. sourcing 47%)

Realize Domestic Market

< Table > Vehicle Production of FTA Partners
Unit : thousands

<table>
<thead>
<tr>
<th>Market</th>
<th>Production (2010)</th>
<th>Share(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S.</td>
<td>7,761</td>
<td>10.0</td>
</tr>
<tr>
<td>EU(27)</td>
<td>16,913</td>
<td>21.8</td>
</tr>
<tr>
<td>ASEAN(6)</td>
<td>3,220</td>
<td>4.1</td>
</tr>
<tr>
<td>India</td>
<td>3,537</td>
<td>4.6</td>
</tr>
<tr>
<td>World</td>
<td>77,610</td>
<td>100</td>
</tr>
</tbody>
</table>

Source : OICA
<Figure> Vehicle Trade with the EU

Source: KITA

<Figure> Auto parts trade with the EU
Rapid Expansion of Overseas Production and R&D Investment

Increasing Overseas Production by Korean automakers

<Figure> EU Production of Hyundai & Kia

Overall R&D investment of automobile companies increases

- Hyundai’s investment has increased significantly
  * Average annual growth of 33% during 2003~2008.

- New models introduced and recent market share expansion.

  * Strengthening R&D capability of the parts industry (Sales to R&D ratio in 2009: Korea: 2.0%, Average of 84 Large Auto Companies : 4.2%)
Auto Parts Suppliers
- Number of 1st tier suppliers and employees has decreased since 2006, but increased in 2010
- Total number of suppliers has increased since 1999
- At the end of 2010, there were more than 3,000 suppliers
- Problems of size, specialization and internationalization.

Figure: Auto parts exports to the EU
Establishing a Global Supply Base

- Benchmarking major trading countries’ institutional norm and revision of current system

Technology Development
- Core Components & Parts
- Green Components & Parts

Infrastructure
- Reliability
- Quality
- B2B Infrastructure

Competitiveness of the Parts Industry

Modularization
- Systemization
- Integration
- Scale Economies

R. I. S
- Regional Technology Innovation Center
- Clustering

Attract FDI
- Deregulated business environment

Marketing
- Developing countries
- Regional sourcing
### 2. Changes Following FTA

<table>
<thead>
<tr>
<th>Pre–FTA</th>
<th>Factor</th>
<th>Post–FTA</th>
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</thead>
<tbody>
<tr>
<td>Frictional competition environment</td>
<td>Competition</td>
<td>Cooperative environment</td>
</tr>
<tr>
<td>Vertical division of labor</td>
<td></td>
<td>Horizontal division of labor</td>
</tr>
<tr>
<td>Protectionism and trade disputes</td>
<td>Trade</td>
<td>Fair &amp; free trade</td>
</tr>
<tr>
<td>Confrontational labor relations and rigid labor environment</td>
<td>Labor</td>
<td>Balance of trade</td>
</tr>
<tr>
<td>Vertical integration and closed procurement system</td>
<td>Procurement</td>
<td>Cooperative labor relations and flexible labor environment</td>
</tr>
<tr>
<td>Domestic R&amp;D led by OEMs</td>
<td>R&amp;D</td>
<td>Open procurement system and cooperative supply chain</td>
</tr>
<tr>
<td>Unilateral investment by developed countries</td>
<td>Investment</td>
<td>Expansion of strategic technology partnerships</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Promote reciprocal investment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Increase intra-firm trade</td>
</tr>
</tbody>
</table>
2. Changes Following FTA

Changes in industry Structure

- Elimination of tariffs and non-tariff barriers
- Establishment of EU-Korea supply networks
- Increase of strategic technology alliances
- Creation of an open innovation ecosystem
- Expansion of horizontal cooperation
- Expansion of export markets and investment opportunities
- Diversify products & services commercialization of Green cars
- Specialization, globalization and enlargement of parts companies
- Win-Win game structure
Institutional Harmonization

Standards and Certification Procedures

- Korea: Simplify standards and certification procedures for safety compliance and type approval
- EU: Streamline requirements for environmental standards and certification while tightening regulation to control the permissible volume emission limits of CO2, NOx, and PM

< Strengthening Fuel Efficiency >

<table>
<thead>
<tr>
<th>Current</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.4km/ℓ (Up to 1,500cc)</td>
<td>14.3km/ℓ (Up to 1,600cc)</td>
</tr>
<tr>
<td>9.6km/ℓ (Over 1,500cc)</td>
<td>11.0km/ℓ (Over 1,600cc)</td>
</tr>
</tbody>
</table>

- Introduce Self-Certification System (January 2003)
  - A self-certification system: Manufacturers certify the conformity of their vehicles with standards
3. Preconditions for Structural Advancement

**Creation of Joint R&D Environment**
- Cross licensing
- Expansion of joint research & development

**Improved FDI Environment**
- Change of labor’s attitude toward globalization
- Flexible labor environment
- “National Treatment”

**Increased SME Competitiveness**
- Strengthened basic capabilities
- Fostering innovation
- Creating jobs

**Expansion and Balance of Trade**
- Reciprocal trade environment
- Balanced elimination of tariffs & non-tariff barriers
- Non-preferential rules of origin

**Creation of Open Innovation Ecosystem**
4. Direction of Cooperation and Growth strategy

Stimulating Domestic Demand: Win–Win Cooperation

Institutional harmonization and rationalization

- Automobile industry deregulation
- Early tariff elimination
- Practical tax reform
- Joint development of future cars, scrap car programs

Consumer protection and welfare enhancement

Improvement in consumption and increase in domestic demand
4. Direction of Cooperation and Growth strategy

Mutual strengthening of competitiveness

- Strategic technology alliances
  - Technology transfer
  - Cross-licensing
  - Joint R&D
  - Strengthening Technological Capability
  - Continued improvement and innovation
  - Strengthened competitiveness
  - Cost reduction
    - Process innovation (mass customization, configure to order)
    - Related service development
    - Productivity improvements

- Cooperative supply network
  - Future car and parts development
  - Reciprocal procurement
  - New market entry
  - Supply chain innovation
  - Personnel exchanges
  - Future car and parts development
Cooperative R&D on Green Car (Clean Diesel, Hybrid, EV, FCV)

- EU Auto Manufacturers: Invest more than 26 billion Euros on R&D (5% of Revenue)
  
  Over 6,000 patents/yr

- Materials, IT, Alternative Energy, Powertrains, Recycle, Telematics, Aerodynamics and Ergonomics

Collaboration with Engineering, Software and Consulting Firms

- Few Korean companies in those industries

- Increasing demand of Korean Auto part companies

- Government support for specialists
4. Cooperation and Growth Strategies

Establishing Global Standards for Green Cars

- **Government-led joint R&D project development**

- **Formation of R&D Funds**
  - Open Technology Innovation Environment

- **Joint R&D support for public research centers**
- **Support for strategic technology partnerships between companies**

- **R&D cost reductions**
- **Promotion of new technology development**
- **Early commercialization of developed technologies**

- **High value-added development**
- **Fuel cell cars/parts**
- **Alternative fuels cars/parts**
- **Hybrid, EV cars/parts**
- **Clean diesel cars/parts**
5. Conclusion

□ Early elimination of tariffs and non-tariff barriers compared with the Korea–U.S. FTA

⇒ Action plans are more important to realize the positive effects of the Korea–EU FTA.

⇒ Institutional harmonization will facilitate trade and investment between Korea and EU.

⇒ Korean and the EU can set up global standards in terms of the environment and safety through close collaboration.

□ But mutual recognition of differences in institutional norms between Korea and the EU is needed for the time being.

⇒ Level of institutional norms in the EU is higher and more complicated.
5. Conclusion

- UNECE’s assistance in education and training of the contents and procedures for Korean SMEs which want to enter EU market.

  - Rules of Origin
  
  - Designation of Certified Exporter
  
  - Different Commodity Classification
  
  - Ceiling of Tariff Refund

- Automobile manufacturers are expecting a positive impact from the Korea–E.U FTA.

⇒ Government and agency support should be strengthened in order to realize their expectations.
Thank you for listening