2017.9.26

# Overview of Korean Automobile Industry

kama 한국자동차산업협회
Korea Automobile Manufacturers Association

# Introduction of KAMA

Korea Automobile Manufacturers Association (KAMA) :

Established in 1988

Non-profit organization

Representing the interests of auto makers in Korea.

KAMA's major roles :

- Representing the interests of Korean automakers
- Providing constructive solutions to public policies related to environment, vehicle safety-issues and consumer satisfaction.
- Supporting international cooperation.
- Leading public opinion on the automotive industry.
- Producing auto-related statistics and information.
- Organizing Seoul Motor Show biennially since 1995.

# KAMA Members

| (Year 2016) | HYUNDAI | KIA MOTORS | GM KOREA | SSANGYONG MOTOR | RENAULT SAMSUNG MOTORS |
|---|---|---|---|---|---|
| Employment (persons in 2015) | 66,404 | 34,121 | 16,236 | 4,773 | 4,220 |
| Production (thousand units) | 1,680 | 1,557 | 580 | 156 | 244 |
| Domestic Sales (thousand units) | 648 | 528 | 167 | 102 | 111 |
| Exports (thousand units) | 1,009 | 997 | 416 | 52 | 146 |
| Overseas Production (thousand units) | 3,186 | 1,467 | - | - | - |

# The Status of Korean Auto Industry

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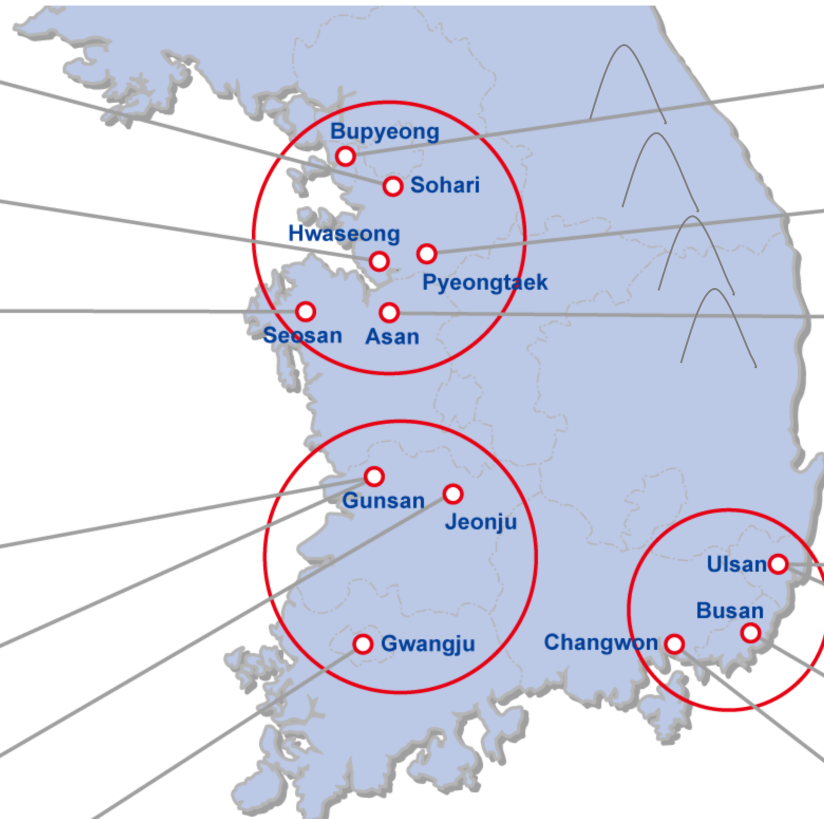
# Auto Plants in Korea ('16)

Total 4.7 million

(UNITS)




| | PCs | CVs |
|---|---|---|
| KIA MOTORS | 330,000 | - |
| KIA MOTORS | 555,000 | - |
| KIA MOTORS | 250,000 | - |
| GM KOREA | 235,000 | - |
| TATA DAEWOO | - | 20,000 |
| HYUNDAI | - | 107,000 |
| KIA MOTORS | 390,000 | 107,000 |
| GM KOREA | 394,000 | - |
| SSANGYONG MOTOR | 157,000 | - |
| HYUNDAI | 243,000 | - |
| HYUNDAI | 1,430,000 | - |
| DAEWOO BUS | - | 5,000 |
| RENAULT SAMSUNG MOTORS | 300,000 | - |
| GM KOREA | 200,000 | 10,000 |

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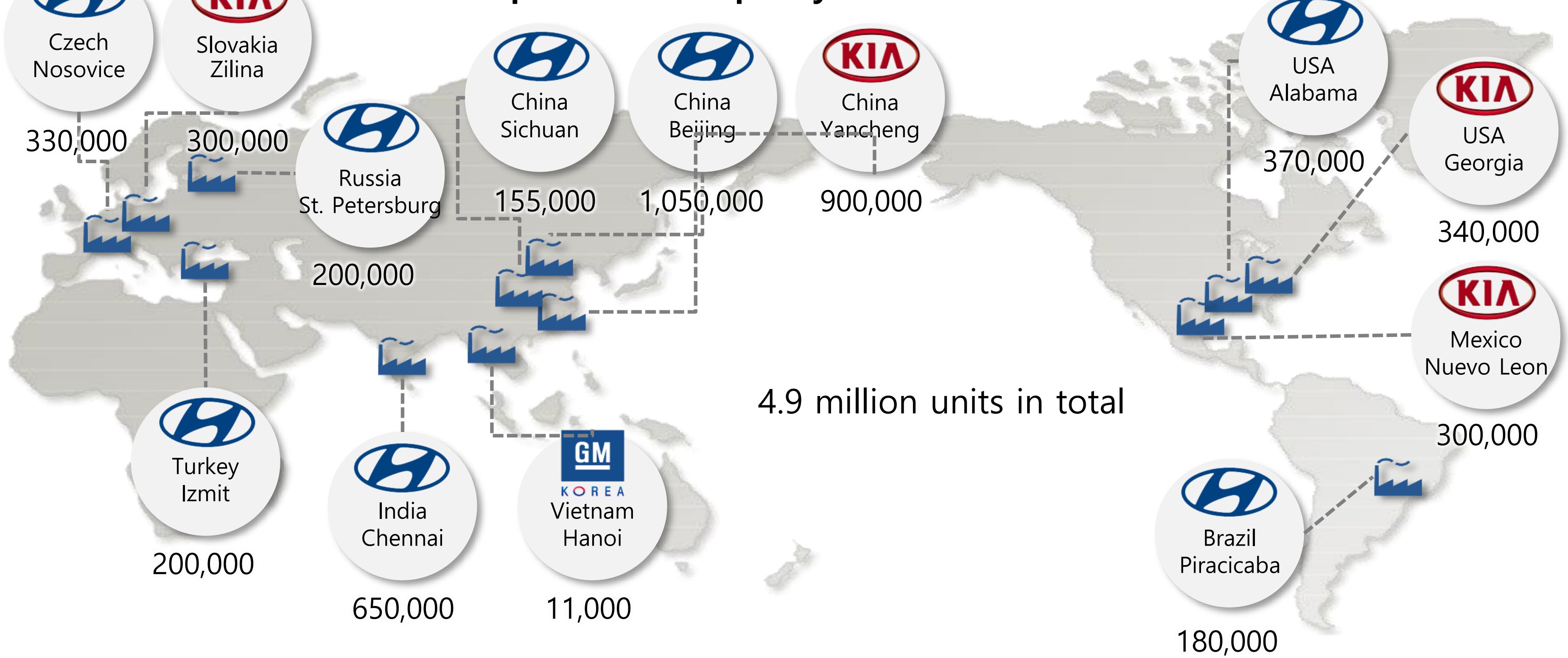
# Transplants('16)

## Offshore production capacity of Korean car makers

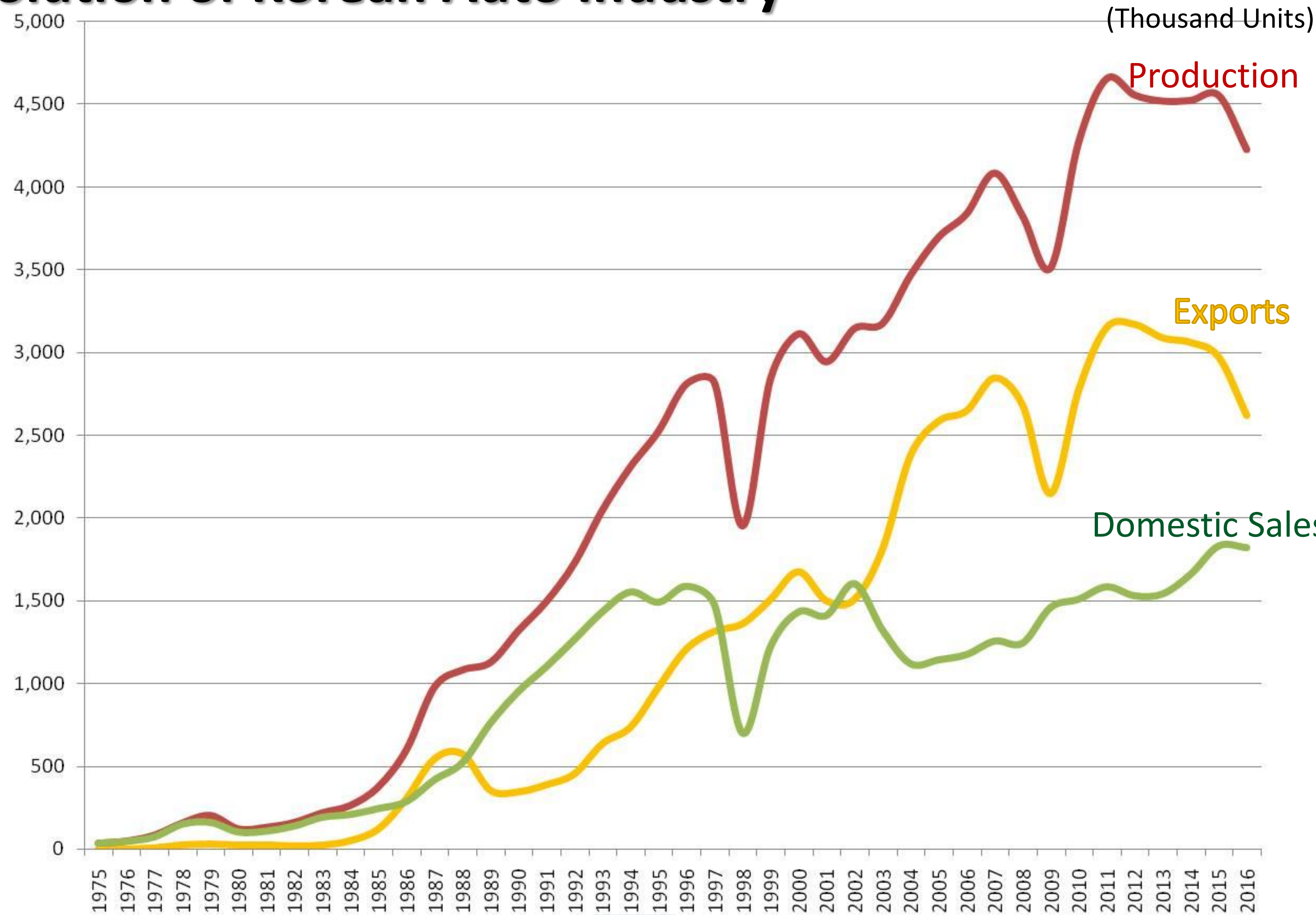



## Timeline of overseas plants in operation

| 1996 | 1997 | 1998 | 2002 | 2005 | 2006 | 2008 | 2009 | 2010 | 2012 | 2014 | 2016 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Vietnam | Turkey | India | China | USA | Slovakia | Czech | USA | Russia | Brazil | China | Mexico |
| GM KOREA | Hyundai | Hyundai | Hyundai, KIA | Hyundai | KIA | Hyundai | KIA | Hyundai | Hyundai | KIA | KIA |

HYUNDAI · KIA MOTORS · GM KOREA · SSANGYONG MOTOR · SAMSUNG RENAULT SAMSUNG MOTORS

# Evolution of Korean Auto Industry



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# Production & Sales of Korean auto industry

(Thousand Units)

| | Production | Domestic Sales | Imports | Exports | Transplant Production |
|---|---|---|---|---|---|
| ’14 | 4,524 | 1,662 | 219 | 3,061 | 4,414 |
| ’15 | 4,556 | 1,834 | 284 | 2,974 | 4,411 |
| ‘16 | 4,229 | 1,828 | 265 | 2,622 | 4,653 |
| ’17F | 4,170 | 1,800 | 270 | 2,640 | 4,300 |

HYUNDAI  KIA MOTORS  GM KOREA  SSANGYONG MOTOR  SAMSUNG RENAULT SAMSUNG MOTORS

# Future trends in automotive technologies

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■ Future development of the auto industry will feature eco-cars based on electric power and autonomous driving based on IT, communication, and electronic technologies.

## Two directions for the future development in automobile technology

**Eco-cars**

■ Environment regulations strengthening amid global warming, shortage of fossil fuels, and worsening air pollution.

- Developing eco-cars are necessary for higher competitiveness and survival

■ Various EV models using electric motors and high voltage batteries →

- HEV, PHEV, EV, FCEV, etc.

+

**Self-driving cars**

■ Consumer needs for auto safety and convenience increasing

- Interest in autonomous driving resulting from IT, connection and electronic technology development growing

■ Establishing Infrastructure, regulations and legal systems in progress

- In-car entertainment services offered by IT, communication technologies

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# Eco car sales trend in Korea

■ Eco-car sales marked all-time high in 2016 due to sales increase in HEV and EV.

- More choices of HEV and EV models released in market led to boost in sales of eco car as a whole.

(units)

| | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|---|---|---|---|---|---|---|
| Total | 19,652 | 37,120 | 29,674 | 35,831 | 41,959 | 67,387 |
| HEV | 19,371 | 36,603 | 29,060 | 34,516 | 39,014 | 62,210 |
| EV | 281 | 517 | 614 | 1,315 | 2,945 | 5,177 |

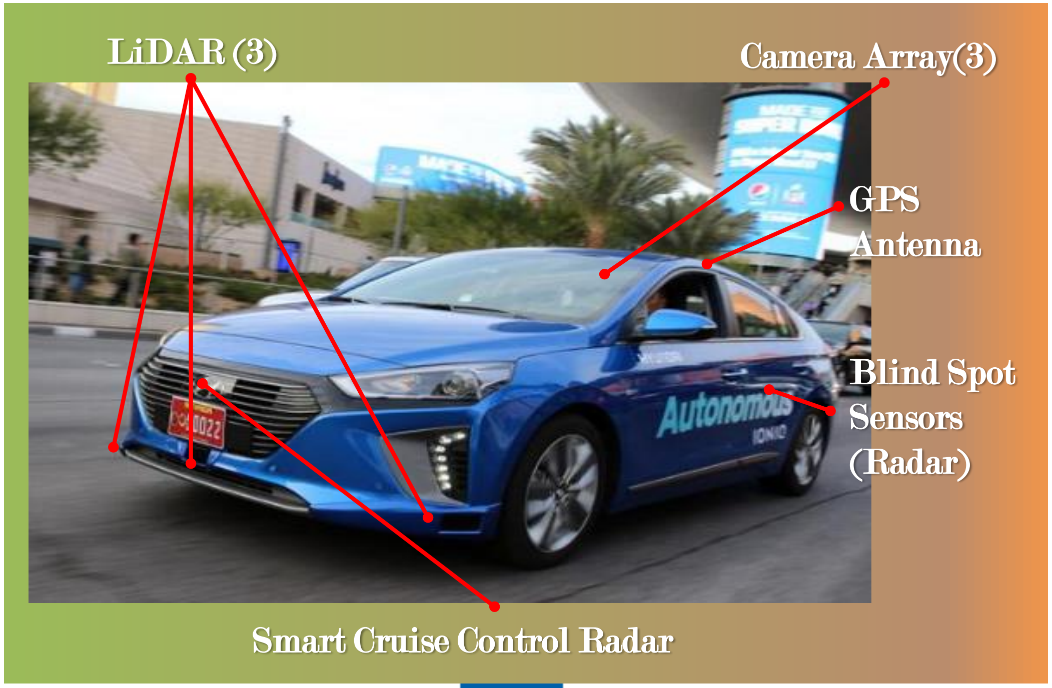
* Newly registered vehicles(domestic and imported cars)

# Autonomous Vehicles in Korea

■ Announcement of government support programs for Autonomous vehicle('15.5, MOTIE, MOTIL, MSIP)

- Preparing for regulatory environment and infrastructure for commercialization of self-driving cars
- Fostering parts suppliers with core technologies in driverless car sector

■ Hyundai presenting its automation level 4 IONIQ at CES 2017

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# The Status of Korean Auto Parts Industry

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# Suppliers in Korea

## Number of Tier 1 Suppliers

| Year | Large | Medium/Small* | Total |
|---|---|---|---|
| 2016 | 242 | 616 | 858 |
| 2015 | 241 | 642 | 883 |

* Either the number of employees under 300 or capital asset below 8 billion won.

## Number of Suppliers by Auto Maker

| Year | Hyundai | Kia | GM Korea | Ssangyong | Renault Samsung | Total |
|---|---|---|---|---|---|---|
| 2016 | 346 | 334 | 318 | 236 | 190 | 858 |
| 2015 | 348 | 333 | 317 | 237 | 213 | 883 |

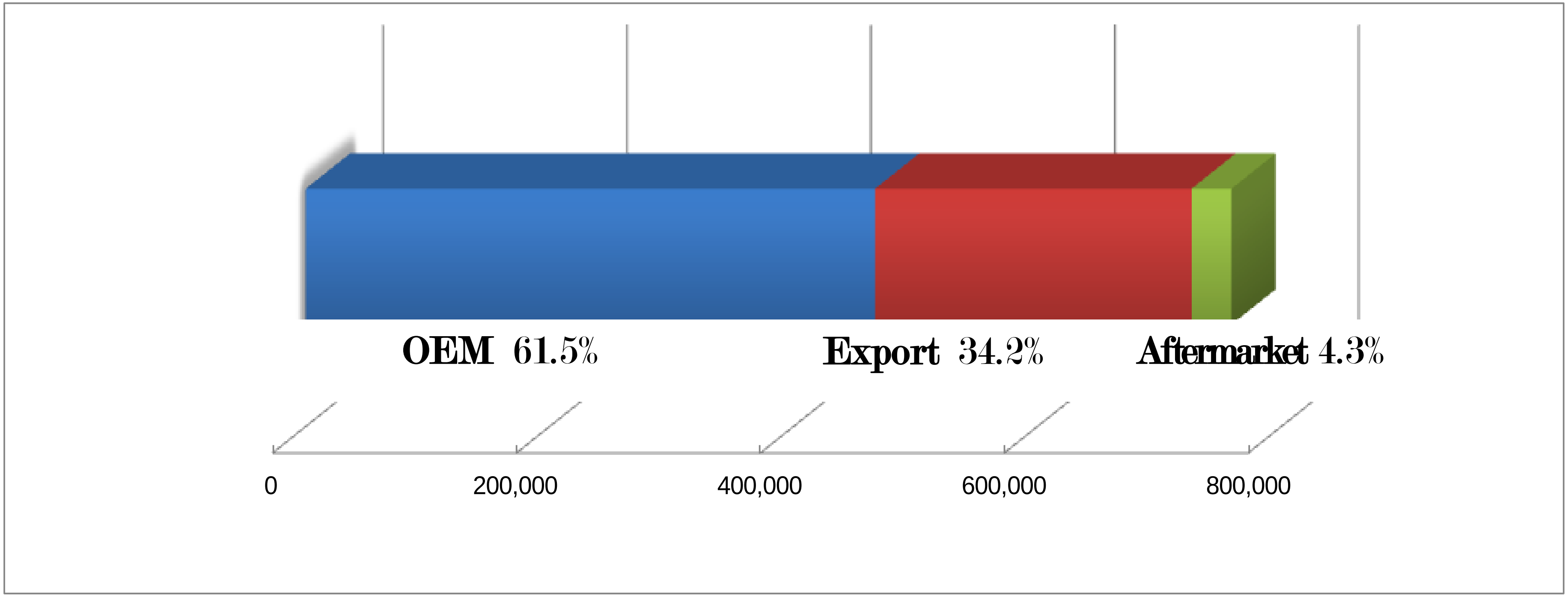
# Specialized & Non-Specialized Company (2016)

(Units)

| | Specialized Company | *Non-Specialized Company | Total |
|---|---|---|---|
| No. of Companies | 819 | 39 | 858 |
| No. of Employees | 186,006 | 107,140 | 293,146 |

Remarks) Non-specialized companies include companies for electronics, batteries, tires, textiles, chemicals and so on.

# Sales Volume (2016)




(Unit : Billion Korean Won)

| | OEM | Export | Aftermarket | Total |
|---|---|---|---|---|
| **2016** | 46,678 | 25,951 | 3,268 | 75,897 |

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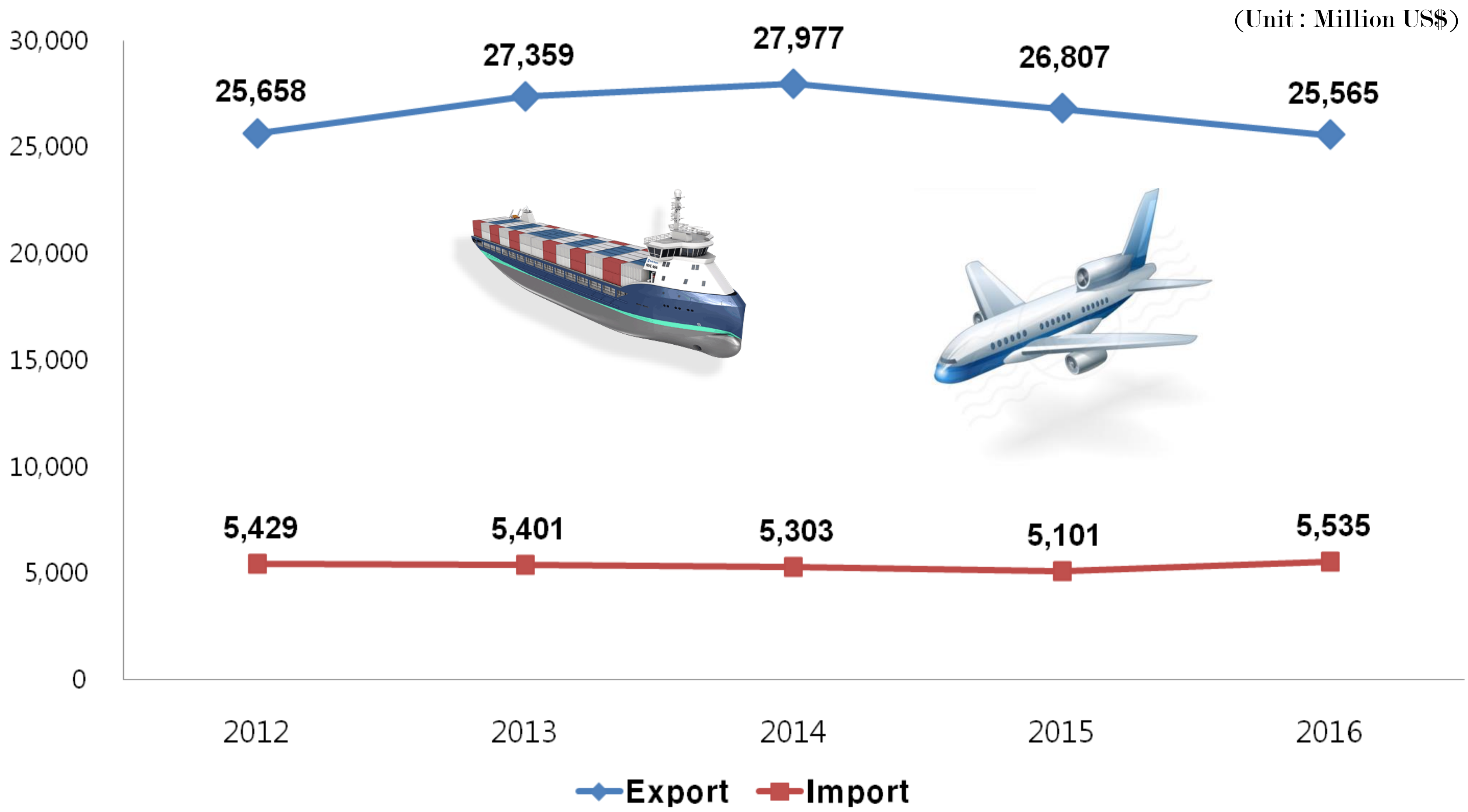
# The Amount of Supply & Domestic Turnover of Auto Makers (2016)

(Unit : Billion Korean Won)

| Car Makers | Domestic Turnover of Car Makers (A) | Amount of Supply (B) | B / A (%) |
|---|---|---|---|
| Hyundai | 41,714 | 20,131 | 48.3 |
| Kia | 31,642 | 16,772 | 53.0 |
| GM Korea | 12,234 | 5,227 | 42.7 |
| Renault-Samsung | 6,248 | 2,338 | 37.4 |
| Ssangyong | 3,626 | 1,645 | 45.4 |
| Tata Daewoo | 1,032 | 339 | 32.9 |
| Zyle Daewoo Bus | 434(e) | 226 | 52.2 |
| Total | 96,930 | 46,678 | 48.2 |

# Export & Import

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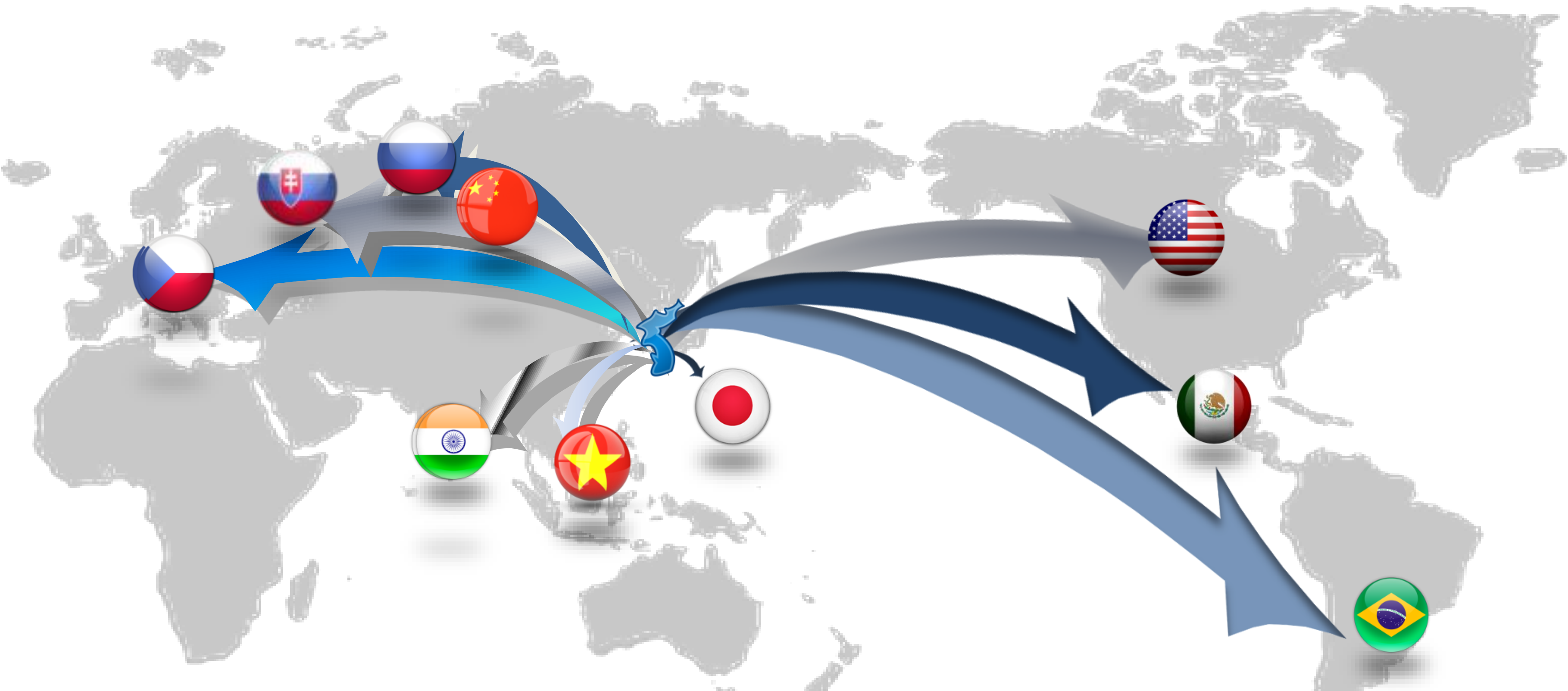
# Top 10 Countries by Export (2016)



## Auto-Parts Export Volume

(Unit : Million US$)

| Rank | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| Country | U.S.A. | China | Mexico | Slovakia | India | Czech | Japan | Russia | Brazil | Vietnam |
| Export | 6,751 | 5,673 | 1,684 | 1,111 | 953 | 944 | 914 | 728 | 518 | 441 |

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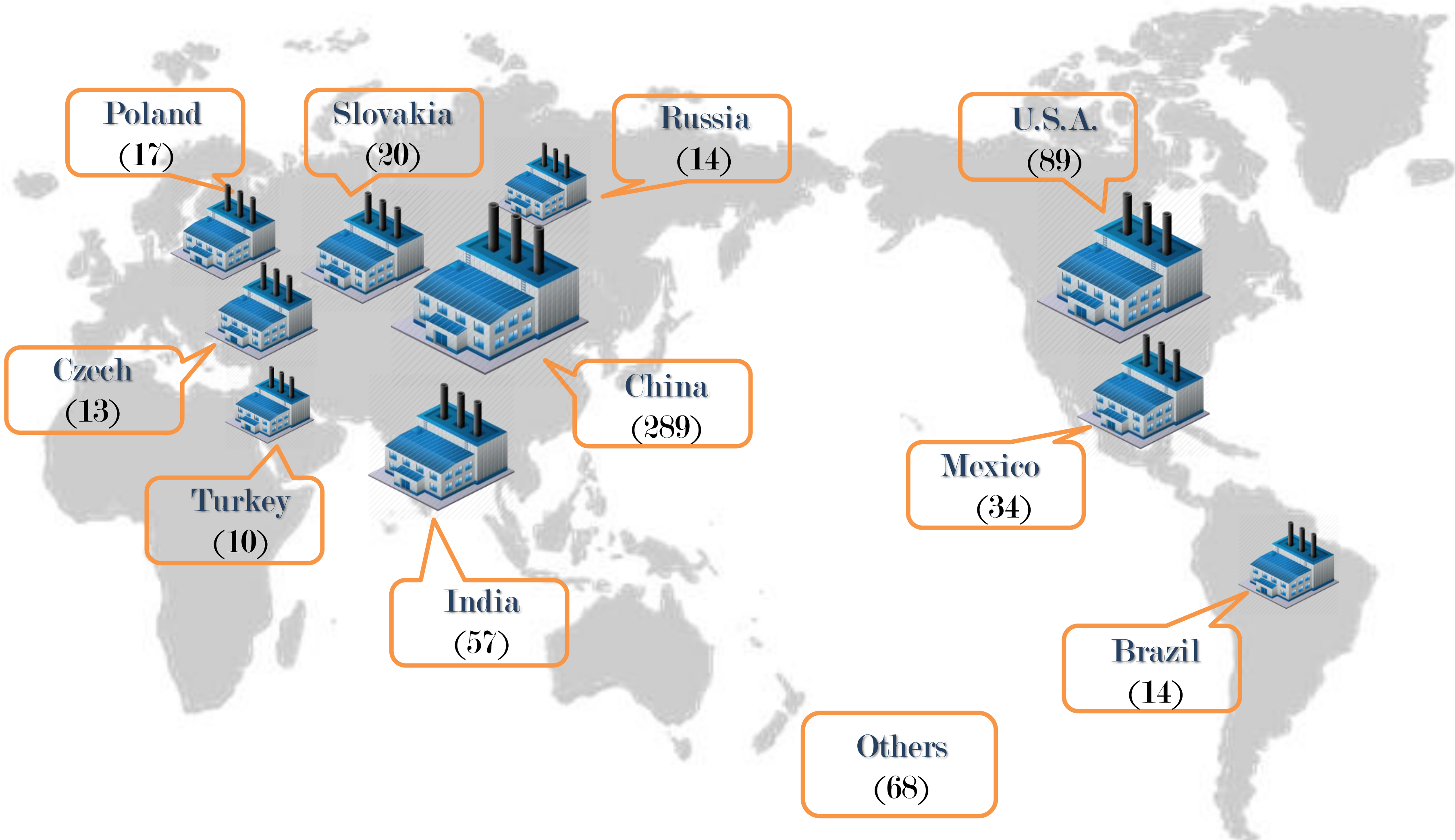
# Number of Korean Auto-parts Plants in Overseas

(Units)




※ As of 2016, total 625 factories are operating in overseas (KAICA members only).

- Each supplier has average 3.7 plants.

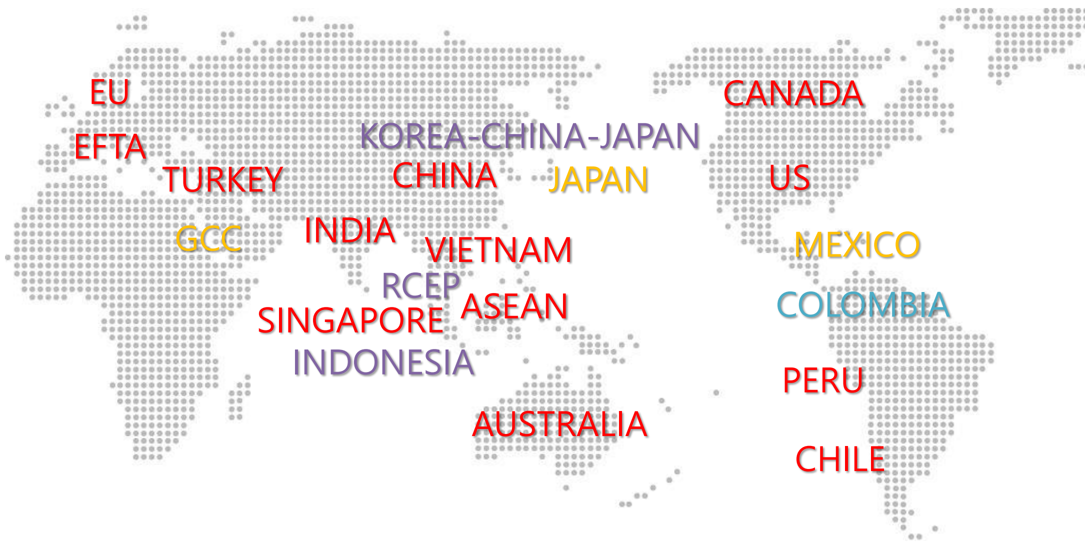
# Global OEM Parts Suppliers

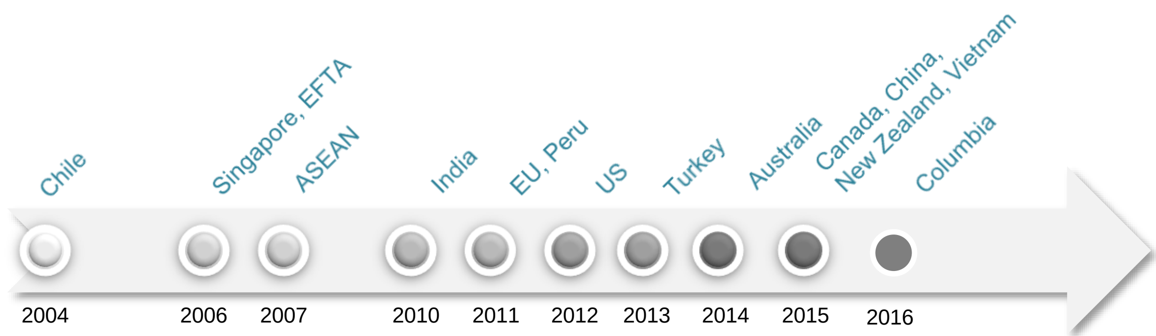
(Unit : Million US$)

| Rank | Company | Country | 2016 Turnover (OEM only) | 2015 Turnover (OEM only) | 2015 Rank |
|---|---|---|---|---|---|
| 1 | BOSCH | Germany | 46,500 | 44,825 | 1 |
| 2 | ZF | Germany | 38,465 | 29,518 | 5 |
| 3 | MAGNA | Canada | 36,445 | 32,134 | 3 |
| 4 | DENSO | Japan | 36,184 | 36,030 | 2 |
| 5 | CONTINENTAL | Germany | 32,680 | 31,480 | 4 |
| 6 | AISIN | Japan | 31,389 | 25,904 | 7 |
| **7** | **HYUNDAI MOBIS** | **Korea** | **27,207** | **26,262** | **6** |
| 8 | FAURECIA | France | 20,700 | 22,967 | 8 |
| 9 | LEAR CORP | U.S.A. | 18,558 | 18,211 | 10 |
| 10 | VALEO SA | France | 17,384 | 15,842 | 11 |
| **34** | **HYUNDAI WIA** | **Korea** | **7,043** | **7,480** | **29** |
| **46** | **MANDO** | **Korea** | **5,057** | **5,560** | **45** |
| **48** | **HYUNDAI POWERTECH** | **Korea** | **4,920** | **4,554** | **50** |
| **49** | **HANON SYSTEMS** | **Korea** | **4,915** | **4,912** | **-** |
| **56** | **HYUNDAI DYMOS** | **Korea** | **3,958** | **3,202** | **65** |

Source : Automotive News

# Korea's Free Trade Agreements




**FTAs in Effect (15)**

- Korea-Chile FTA
- Korea-Singapore FTA
- Korea-EFTA FTA
- Korea-ASEAN FTA
- Korea-India CEPA
- Korea-EU FTA
- Korea-Peru FTA
- Korea-US FTA
- Korea-Turkey FTA
- Korea-Australia FTA
- Korea-Canada FTA
- Korea-China FTA
- Korea-New Zealand FTA
- Korea-Vietnam FTA
- Korea-Colombia FTA

**FTAs Concluded (1)**

- Korea-Central America FTA

**FTAs under Negotiation (4)**

- Korea-China-Japan FTA
- RCEP
- Korea-Ecuador FTA
- Korea-Israel FTA

**FTAs Pending (4)**

- Korea-Mexico FTA
- Korea-GCC FTA
- Korea-MERCOSUR FTA
- Korea-EAEU FTA