TPI

Truck Production Index

Power Systems Research
Powerful Possibilities™

January 18, 2018
www.powersys.com | +1-651-905-8400 | info@powersys.com

The PSR-TPI measures truck production globally and across six regions: North America, China, Europe, South America, Japan & Korea and emerging markets. Data comes from CV Link™, the proprietary database maintained by Power Systems Research.

Outlook Is Bright for Global Truck Production

2017 Power Systems Research Truck Production Index (PSR-TPI) climbs 8.6%

ST. PAUL, MN (JANUARY 12, 2018) —The outlook for global truck production in the class 4-8 looks very promising for 2018 as it continues a strong growth pattern established in 2017. Even previously struggling countries such as Russia, Brazil and Turkey saw very positive signs in 2017 and are looking for continued growth this year. North America and Europe also are expected to have a good year in 2018.

With the exception of Japan Korea and possibly China, all regions are expected to see modest to strong demand for medium and heavy commercial trucks in 2018.

The Power Systems Research Global Truck Production Index (PSR-TPI) increased from 111 to 114, or 2.7%, for the three-month period ended December 31, 2017. The year-over-year (Q4 2016 to the Q4 2017) gain for the PSR-TPI was 8.6%, increasing from 105 to 114.

The PSR-TPI measures truck production globally and across six regions: North America, China, Europe, South America, Japan & Korea and Emerging Markets.

This data comes from CV Link™, the proprietary database maintained by Power Systems Research.

Looking at individual regions, this is what we see for 2018:

NORTH AMERICA: When final numbers for 2017 are tabulated, production of medium and heavy commercial trucks is expected to increase by 9.3%, compared to 2016. The class 8 heavy truck segment continues to improve, and production is expected to finish approximately 11.5% higher than 2016, driven by high order intake. The medium truck (class 4-7) segment is expected to remain strong with production increasing by 6.9% over 2016, primarily driven by a strong vocational segment. Demand for class 8 trucks declined in 2016 but stabilized in 2017, and production is expected to reach 300,000 trucks in 2018.

EUROPE: In Greater Europe, production for medium and heavy commercial vehicles is expected to increase by 9.7% in 2017, compared with 2016. After a relatively

TPI authors

Chris Fisher is the senior commercial vehicle analyst at Power Systems Research

Jim Downey is vice president - global data products at Power Systems Research

strong couple of years in Western Europe, demand has moderated somewhat, but production improved by 5% compared with 2016. After the past few years of political and economic strife, truck demand improved greatly in 2017 and is expected to finish the year 35.8% higher than 2016. This is due to a combination of companies upgrading their fleets and economic expansion.

SOUTH ASIA: With the exception of India, all of the countries of South Asia are expected to have a good year for medium and heavy commercial vehicle demand. Demand has slowed in India with the strict implementation of the BS-IV emission regulations on April 1, which increased the cost of the vehicles by 6% – 10%. There was very little truck pre-buy during the Q1 2017, and there was a sharp decline in demand during Q2 2017. However, demand appears to have stabilized in the third quarter. For the year, medium and heavy commercial truck demand is expected to decline by 1.8% compared to 2016.

SOUTH AMERICA: Medium and heavy commercial vehicle production has finally stabilized in Brazil albeit, at historically low levels with production expected to increase by 25% compared to 2016.

JAPAN/KOREA: Domestic and export demand for medium and heavy commercial vehicles are expected to decline in 2017 compared with 2016. Production for medium and heavy commercial vehicles is expected to decline by 3.3% in 2017.

GREATER CHINA: Production of medium and heavy commercial vehicles is expected to increase by 28.3% in 2017. In 2017, China started to strictly enforce the GB1589 regulations to control overloading of trucks. This change will reduce freight hauling capacities by 20% thus driving the need to increase truck capacity in the market.

The next update of the Power Systems Research TPI will be in April 2018 and will reflect changes in the TPI during Q1 2018. **PSR**

Power Systems Research Global Truck Production Index (PSR-TPI) (Class 4-8 Trucks & Bus Chassis)

	BASE 2012 Q1	2012 Q2	2012 Q3	2012 Q4	2013 Q1	2013 Q2	2013 Q3	2013 Q4
China	100	138	108	104	114	119	138	124
Emerging Markets	100	101	116	118	76	84	91	93
Europe	100	106	110	108	101	107	112	110
Japan & Korea	100	96	111	107	105	101	116	112
North America	100	87	79	82	85	87	83	87
South America	100	115	118	121	125	142	148	153
Global	100	113	105	103	101	105	115	110
Total Volume	**1,230,087**	**1,385,657**	**1,290,663**	**1,272,124**	**1,242,744**	**1,293,762**	**1,416,420**	**1,357,934**

	2014 Q1	2014 Q2	2014 Q3	2014 Q4	2015 Q1	2015 Q2	2015 Q3	2015 Q4
China	124	128	99	112	93	115	99	103
Emerging Markets	85	89	92	89	88	98	93	101
Europe	93	105	101	101	98	111	105	113
Japan & Korea	111	107	123	119	106	109	113	117
North America	97	102	94	94	105	111	102	102
South America	121	104	104	97	78	68	63	54
Global	107	111	101	104	97	108	100	104
Total Volume	**1,320,763**	**1,362,580**	**1,243,274**	**1,283,615**	**1,189,119**	**1,334,330**	**1,231,595**	**1,281,935**

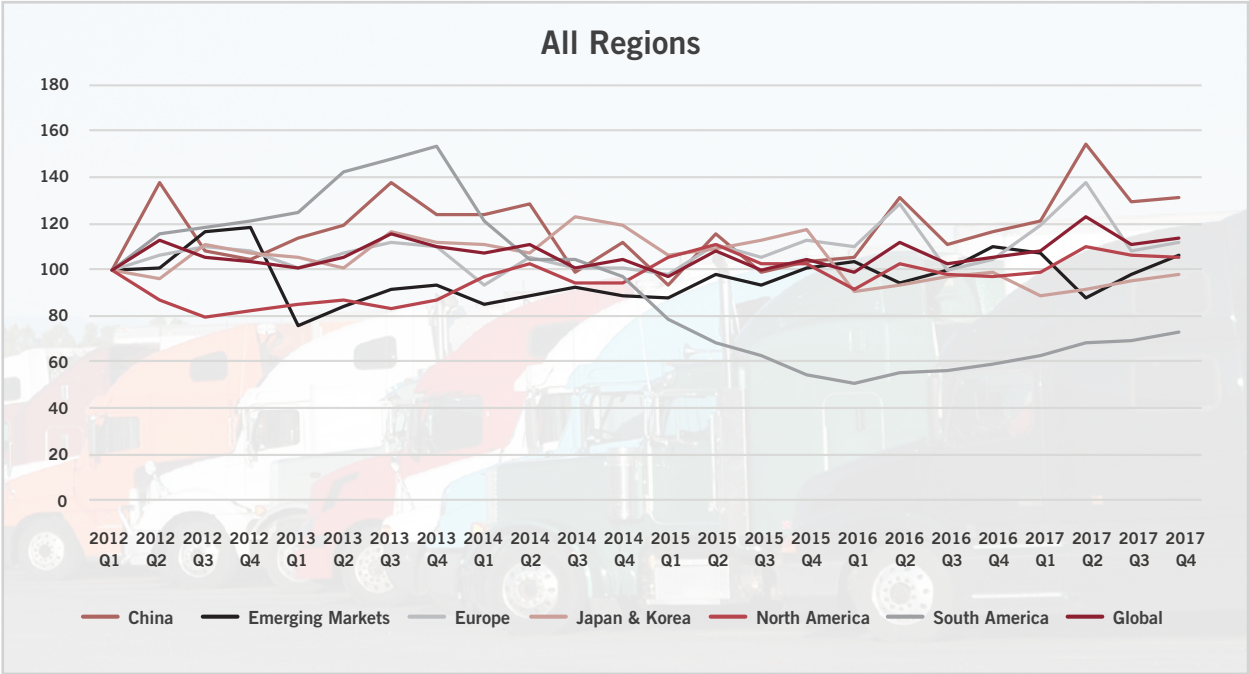
	2016 Q1	2016 Q2	2016 Q3	2016 Q4	2017 Q1	2017 Q2	2017 Q3	2017 Q4
China	105	131	111	116	121	154	129	131
Emerging Markets	103	94	100	110	107	88	98	106
Europe	110	128	100	104	119	138	108	112
Japan & Korea	90	93	97	99	89	91	95	98
North America	91	102	98	97	99	110	106	105
South America	51	55	56	59	63	68	69	73
Global	99	112	102	105	108	123	111	114
Total Volume	**1,216,194**	**1,378,957**	**1,249,227**	**1,296,243**	**1,329,651**	**1,515,692**	**1,361,757**	**1,397,887**

Source: CV Link™

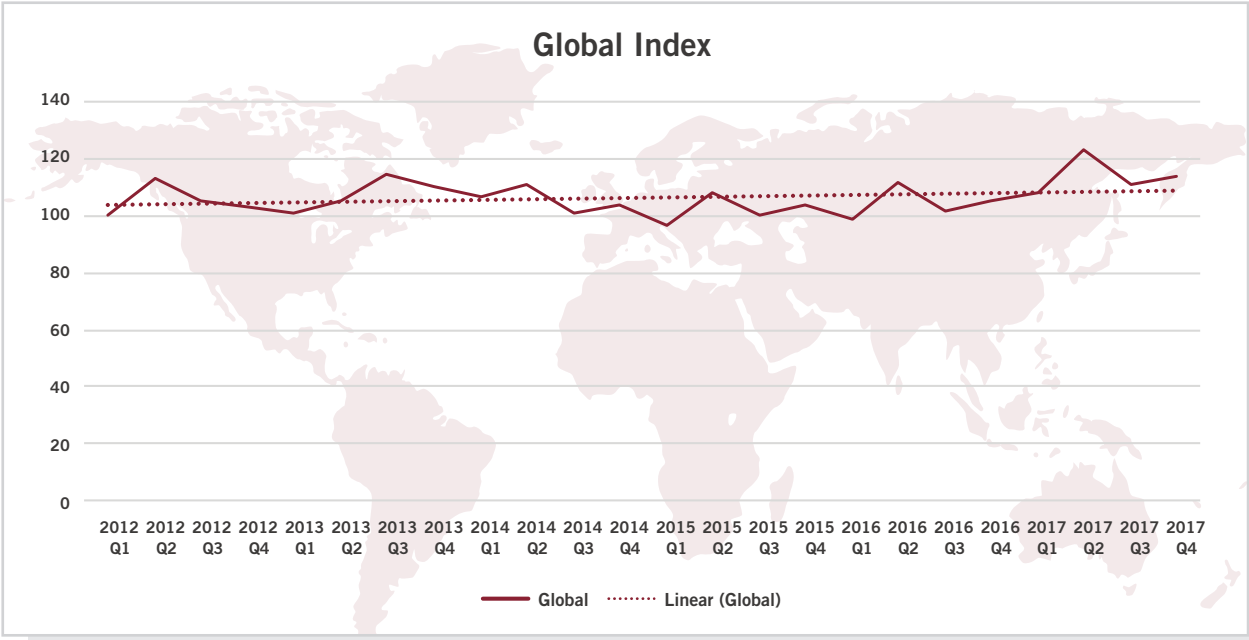
Power Systems Research
Powerful Possibilities™

January 18, 2018

Power Systems Research Global Truck Production Index (PSR-TPI) (Class 4-8 Trucks & Bus Chassis)

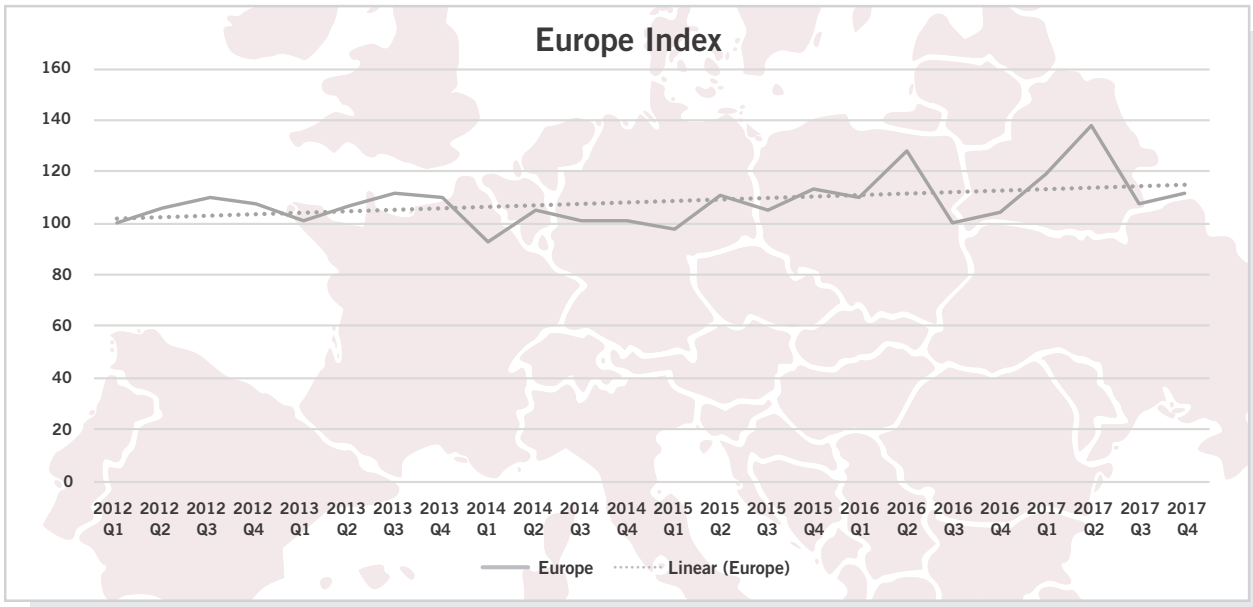


With the exception of Japan Korea and possibly China, all regions are expected to see modest to strong demand for medium and heavy commercial trucks in 2018.

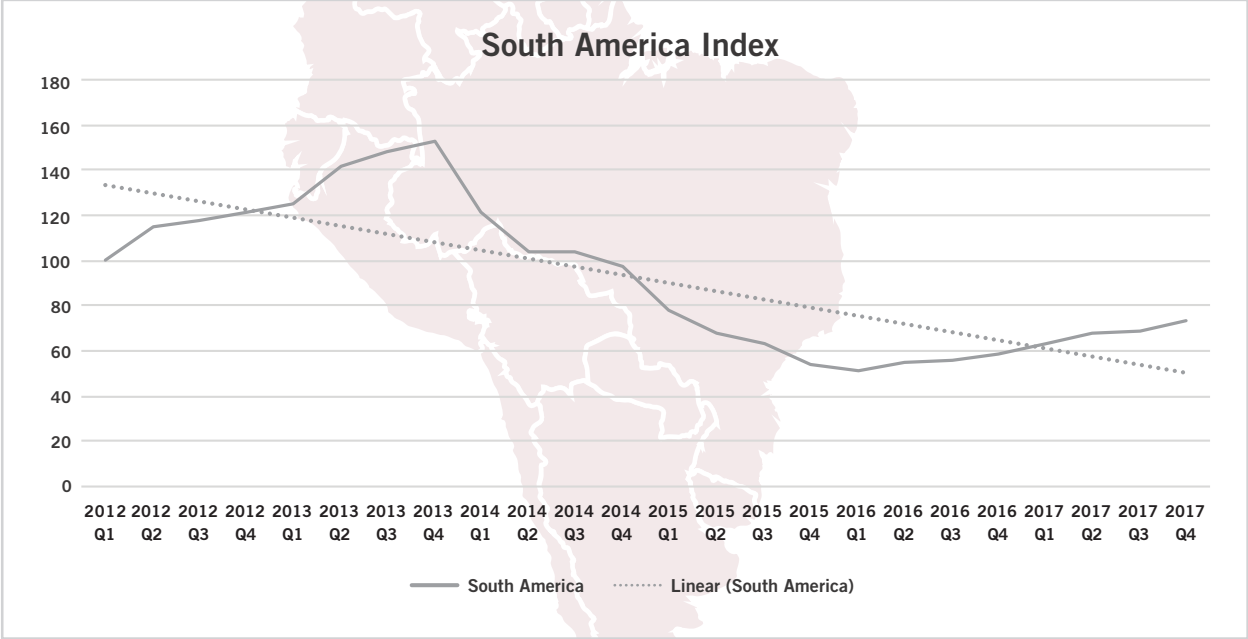


The global truck market continues to be strong and previously struggling countries such as Russia, Brazil and Turkey are seeing very positive signs this year. North America and Europe are also expected to have a good year in 2018.

Power Systems Research Global Truck Production Index (PSR-TPI) (Class 4-8 Trucks & Bus Chassis)



In Greater Europe, production for medium and heavy commercial vehicles is expected to increase by 9.7% in 2017, compared with 2016. After a relatively strong couple of years in Western Europe, demand has moderated somewhat, but production improving by 5% compared with 2016. After the past few years of political and economic strife, truck demand improved greatly in 2017 and is expected to finish the year 35.8% higher than 2016. This is a combination of companies upgrading their fleets and economic expansion.

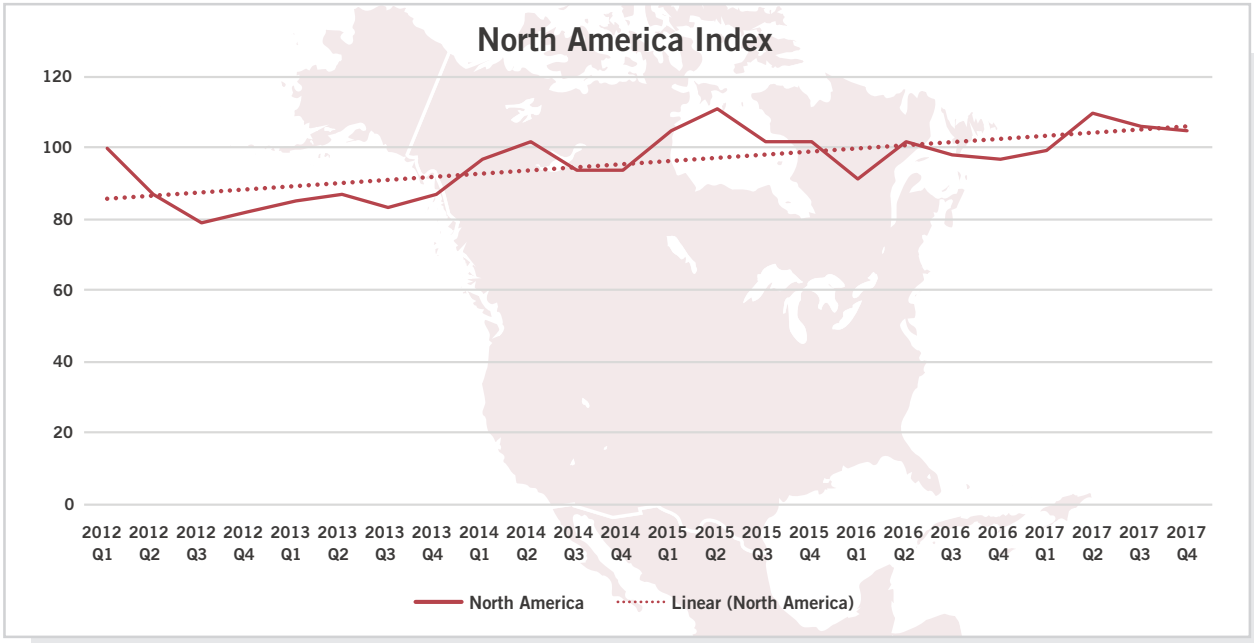


Medium and heavy commercial vehicle production has finally stabilized in Brazil albeit, at historically low levels with production expected to increase by 25% compared to 2016. Much of South America remains in recession, or very close to it, and stagnate domestic economies along with low commodity prices continue to put pressure on both domestic and export demand. There are important positive changes in spite of the low GDP expected for Brazil. Exports from Brazil can explain this growth since Brazilian products are becoming attractive for South America, Mexico and Africa.

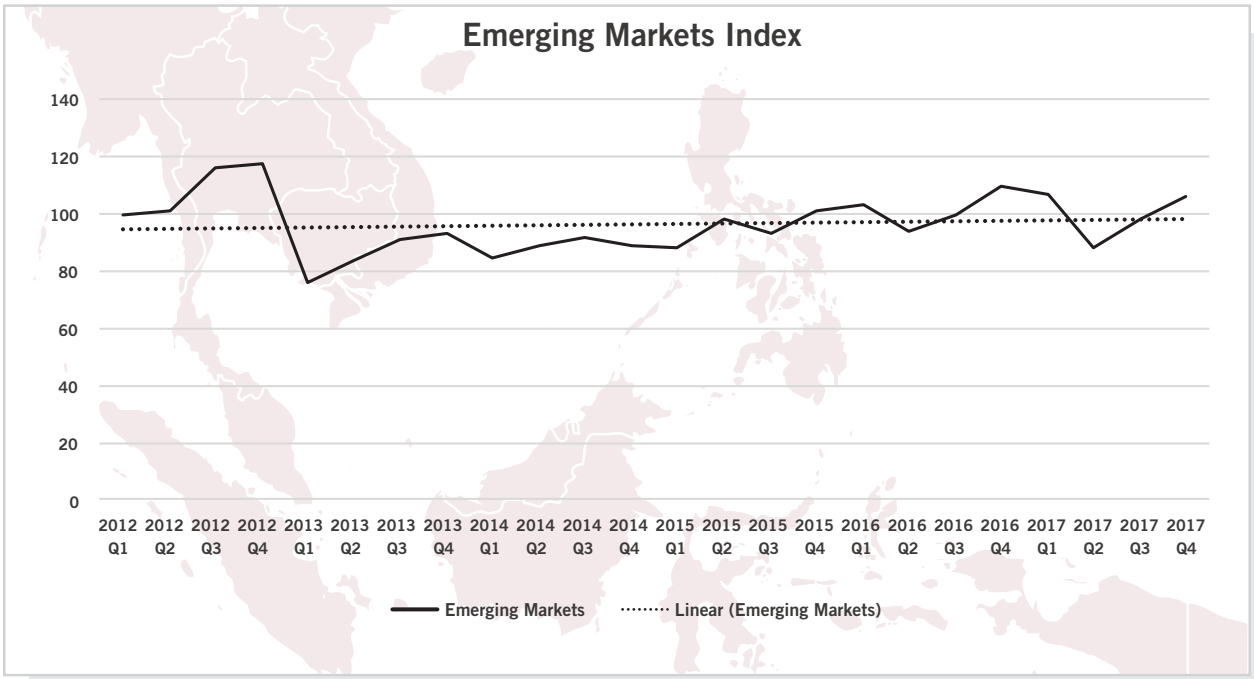
Power Systems Research
Powerful Possibilities™

January 18, 2018

Power Systems Research Global Truck Production Index (PSR-TPI) (Class 4-8 Trucks & Bus Chassis)

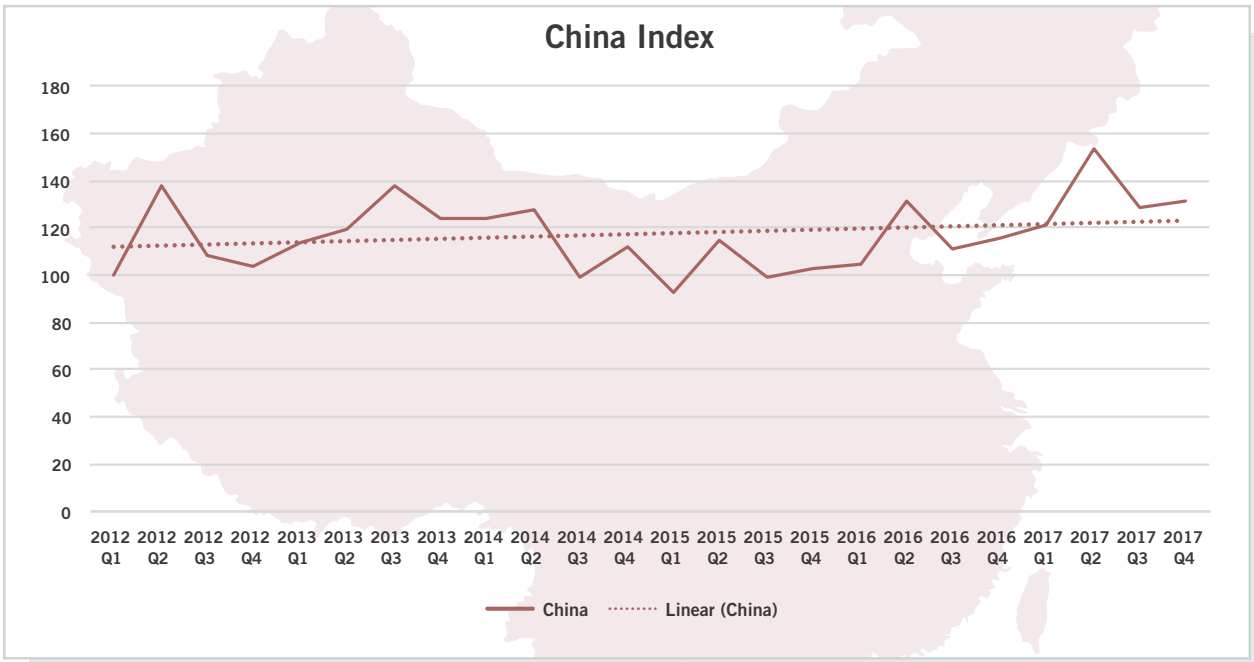


Medium and heavy commercial truck production is expected to increase by 9.3% for 2017, compared with 2016. The class 8 heavy truck segment continues to improve, while production is expected to finish approximately 11.5% higher than 2016, driven by higher orders. The medium truck (class 4-7) segment is expected to remain strong with production increasing by 6.9% over last year, primarily driven by a strong vocational segment. Demand for class 8 trucks declined in 2016, but stabilized in 2017, and production is expected to reach 300,000 trucks in 2018.

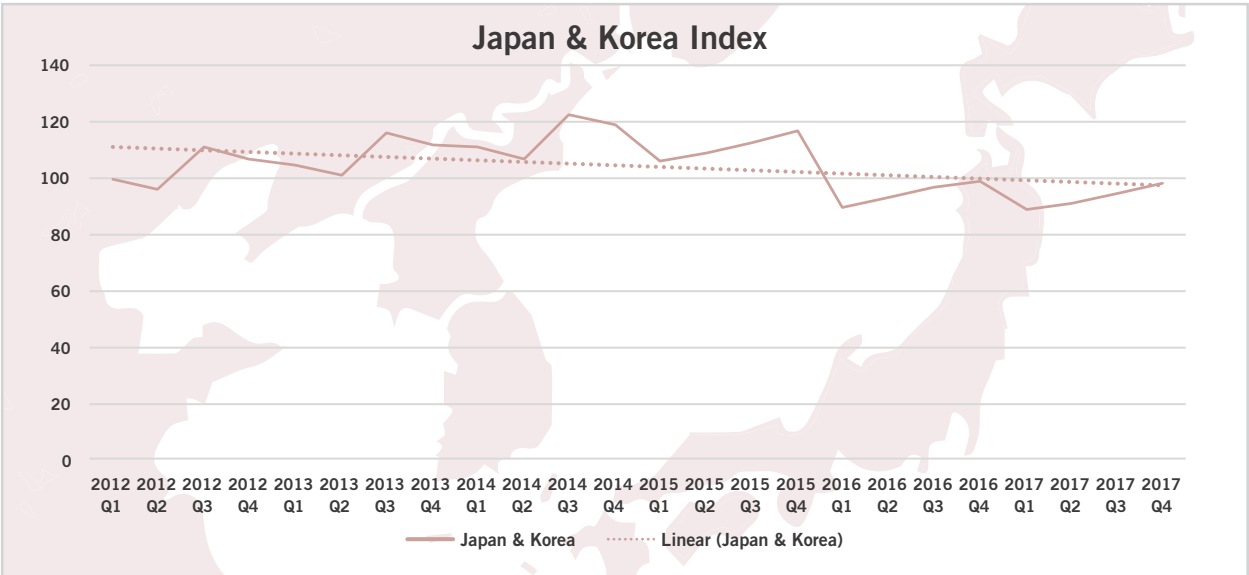


With the exception of India, all of the countries of South Asia are expected to have a good year for medium and heavy commercial vehicle demand. Demand has slowed in India with the strict implementation of the BS-IV emission regulations on April 1, which increased the cost of the vehicles by 6% – 10%. There was very little truck pre-buy during the first quarter, but there was a sharp decline in demand during the second quarter. However, demand appears to have stabilized in the third quarter. For the year, medium and heavy commercial truck demand is expected to decline by 1.8% compared to 2016.

Power Systems Research Global Truck Production Index (PSR-TPI) (Class 4-8 Trucks & Bus Chassis)



Production of medium and heavy commercial vehicles will increase by 28.3% in 2017. In 2017, China started to strictly enforce the GB1589 regulations to control overloading of trucks. The regulation, originally issued in 2004, specifies the limits of the external dimensions, axle load and mass of different vehicles. The national regulation can be divided into two aspects: Containerized Transportation and Non-Containerized Transportation. This change will reduce freight hauling capacities by 20% thus driving the need to increase truck capacity in the market.



Both domestic and export demand for medium and heavy commercial vehicles are expected to be decline for 2017, compared with 2016. Production for medium and heavy commercial vehicles is expected to decline by 3.3% in 2017. In Japan, the government moved out a scheduled tax increase to October 2019 due to the economic weakness in the country. To compete globally, both Japan and Korea rely on traditional export markets for increase revenue. More than 70% of commercial truck production serve the export markets.

LOCATIONS

Headquarters
St. Paul, USA
+1 651 905 8400
info@powersys.com

Beijing, China
+86 10 5737 9201
infocn@powersys.com

Brussels, Belgium
+ 32 2 643 2828
infobr@powersys.com

Campinas, Brazil
+55 19 3305 5657
infosa@powersys.com

Detroit, USA
+1 734 761 3440
infode@powersys.com

Moscow, Russia
+7 910 423 23 92
inforu@powersys.com

Pune, India
+91-20-25671110
Mobile: +91-9960641110
infoin@powersys.com

Tokyo, Japan
+91 90 9139 0934
infojp@powersys.com

Power Systems Research has been tracking the production of engines and their use around the world since 1976. We're the leading company in the world doing this research and building these databases.

We have many of the largest companies in the world as our customers, including John Deere and Caterpillar. They subscribe to our unique databases, and their facilities around the world access our data and forecasts through the internet 24/7.

We're based in St. Paul, Minnesota, and we have offices and analysts located around the world, from Brussels to Beijing and Tokyo to Brazil, to help us collect and analyze this data.

For information on our products and services, call +1 651-905-8400 or email us at info@powersys.com. Learn more about Power Systems Research at www.powersys.com.

Power Systems Research
Powerful Possibilities™