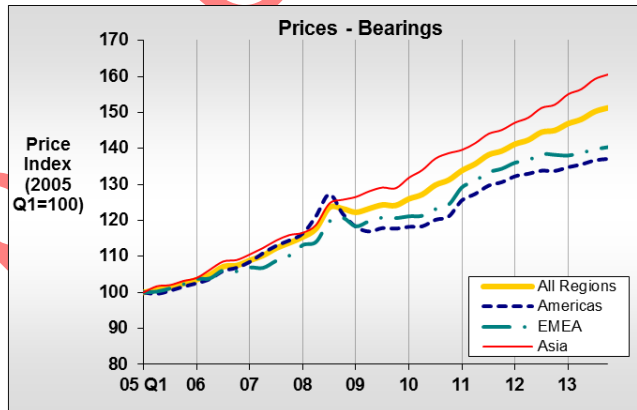
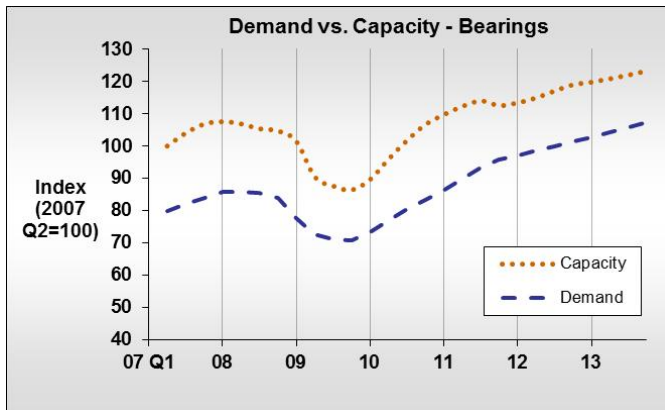


7 Bearings

Sales rose 3.5% in Q3 on wind energy orders and will rise 2.5% in Q4 on energy, automotive, and aviation industries demand, but growth will slow to 6% annually in 2012 and 2013 as manufacturing activity slows down in Europe. Capacity grew 1.5% in Q3 as NSK resumed activity after the Japanese earthquake in March, 2011, and SKF opened a new facility in China, but it will drop 1% in Q4 as SKF downsizes in Europe, which will raise utilization 3% to 85%. SKF, NSK, JTEKT, and Baldor will add 4.5% to capacity per year through 2013, but 6% annual demand growth will still raise utilization rates to 87%. Lead times will remain unchanged at 16 weeks in Q4. However, the rise in utilization will extend lead times to 16.6 weeks in 2013 on a 12% backlog increase. Price growth will slow from 2% in Q3 to 1% in Q4 due to falling metal prices. Prices will rise 4% annually in 2012 and 2013 on Asian labor costs but only 2.5% annually in Europe, due to the weak regional economic outlook.

Figure 10: Key Indicators for Bearings

Key Indicators		Q4 2011 - Q1 2012		Q4 2011 - Q4 2013
Demand	▲	1.5%	▲	12.2%
Order Lead Time	▲	3.9%	▲	3.6%
Prices	▲	1.4%	▲	8.6%
Capacity Utilization	▲	0.6%	▲	2.1%
Supplier Concentration	LO	0.3%	LO	2.4%



Japanese suppliers recovered from the Q2 slump while SKF had low growth of 3% in its automotive sector in Europe. Rotary equipment manufacturer John Crane acquired Turbo Components and Engineering to boost its aftermarket services. NSK developed a bearing with 50% less friction loss compared to conventional roller bearings for motors complying with upcoming IE3 and IE4 energy efficiency standards.

Figure 11: Top Bearing Suppliers

	Name	Home Country	3-Year Annual Growth Rate	Power Transmission as a % of Sales	2010 Bearing Revenues (\$M US)	R&D % of Sales 2010	Stock Price Change Last 90 Days	Q4 News
1	NSK	Japan	-10.0%	61%	\$3,851	1.5%	-17%	Investing \$150m in its largest overseas plant in China
2	SKF	Sweden	6.4%	49%	\$3,720	1.9%	-25%	Will increase Indian headcount 27% for industrial bearings
3	Schaeffler	Germany	-9.4%	26%	\$3,484	N/A	N/A	Adding R&D in Romania to access cheaper skilled labor
4	JTEKT/Koyo	Japan	N/A	25%	\$2,574	2.7%	48%	Opening Indonesian plant to serve local automakers
5	NTN	Japan	-5.0%	44%	\$2,109	3.0%	-4%	Integrated rotation sensor with bearing to detect rpm
6	Timken	USA	-14.5%	39%	\$1,438	1.2%	-15%	Introduced its housed bearings to the South African market
7	RBC Bearing	USA	-8.8%	100%	\$275	0.0%	0%	Q3 sales up 17.6% YOY on a 17.8% rise of industrial sales
8	Rexnord	USA	-5.2%	72%	\$245	N/A	N/A	Introduced easy installation heavy duty ball bearings
9	MAN	Germany	-4.6%	16%	\$241	2.5%	-1%	Q3 revenue rose 25% YOY on slide bearing sales
10	Harbin	China	N/A	100%	\$205	N/A	N/A	N/A

7.1 Sourcing Recommendations – Bearings:

1. Discuss a possible agreement with Harbin Bearing, in which Harbin would defer the pass-through of increased labor rates in exchange for a multi-year contract to avoid incurring higher prices due to a minimum 13% annual increase in Chinese labor costs. Labor costs in its Eastern provinces (most manufacturing facilities are situated here) such as Sichuan and Guangdong will rise faster than the country average. The cost increase will take effect in January each year.
2. Install NSK's new energy efficient bearings for high efficiency motors in a monitored system to compare energy consumption of the equipment with that of standard bearings. NSK claims that it has 50% less friction loss compared to conventional roller bearings, thus saving energy. It also conforms to both IE3 and IE4 efficiency standards, which will be effective in Europe as of 2015 and 2017, respectively.
3. Bundle aftermarket services contract for bearings and seals with purchases from John Crane for lower prices as it has just acquired a bearing and seals service company, Turbo Components and Engineering, and will be looking to break even on incurred costs as soon as possible.

7.2 Sales grew 2.7% in Q4 driven by demand from the energy and transportation industries. Sales growth will slow to 1.5% per quarter in 2012 due to the weak economic outlook for Europe, but surge in 2013.

Bearings sales rose 3.5% in Q3 driven by strong sales of wind turbines in the US and China. In Canada, Suzlon delivered 15 S97-2.1MW turbines at the Amherst wind farm, Nova Scotia. Chinese wind turbine manufacturer Goldwind ordered bearings worth about \$75m in Q3.

Sales will continue to rise at a pace of 2.5% in Q4 supported by energy, automotive, and aviation orders but hindered by slower growth in manufacturing sectors in major economies like China and India.

- The Shah Gas Project in Abu Dhabi ordered bearings for 10 compressors and 12 gearboxes. The order specifies tilting pad journal bearings with 70-140mm diameters.
- China National Heavy Duty Truck Group signed a long-term contract worth \$790m for equipment including tapered roller bearings.
- The US military ordered \$9m worth of bearings in a five-year contract.
- China's manufacturing sector shrank in November - China's official PMI (Production Managers Index) survey decreased from 50.4 in October to 49 in November (a number below 50 indicates contraction), which was its lowest level since February 2009.
- The manufacturing sector declined 6% YOY in October according to a report by the Indian Ministry of Statistics.

Global sales growth will slow to 1.5% in 2012 Q1 as European economies are still stuck in the aftermath of the 2008-09 recession. EMEA sales growth will slow down from 2.6% in Q4 to 0.5% in Q1 due to the impact of the European debt crisis on manufacturing industries. Demand growth for input materials for manufacturing industries in Western Europe declined from 4% in 2011 Q1 to 0.5% in 2012 Q1.