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China Railway Equipment Industry Report, 2009

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2.2 Supply

Locomotive: Currently, over 10000 kilometers of electrified railways are under construction. Generally, an electrified railway will be completed in one to one and a half year, so the future electrified railway construction will be accelerated significantly. In 2009, more than 5,000 kilometers of railways are expected to be built. Therefore, the demand for electric locomotives will increase apparently. We forecast that the capacity utilization of high-power electric locomotives will reach 100%. The production of diesel locomotives will be steady in the next two years, because the snowstorm in 2008 made diesel locomotives essential for electrified railways and the output of electric locomotives may not meet the demand. After railway transformation is completed, diesel locomotives will still prevail for some time.

Passenger Train: At the end of 2008, Ministry of Railways invited tenders for additional 1500 passenger trains, and the delivery date was from the end of 2008 until the end of Q1 2009. However, the output was less than 2500 in 2008. It is expected that the demand for passenger trains will increase significantly in 2009, and the capacity utilization rate will also rise.

EMU: With CSR's project is put into operation, the production capacity of EMU will be improved, but the situation that supply does not meet the demand will not change.

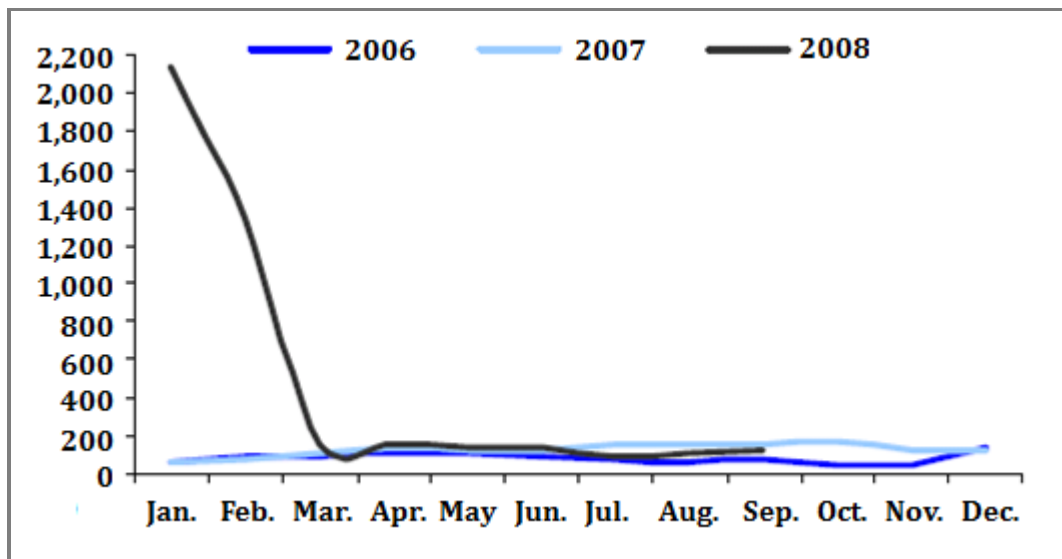
Truck: In terms of load, considerable trucks shall be replaced, because around 50% of trucks have the load of 60 tons or below 60 tons; however, as for speed, most ones have reached the speed of 120 km/h since the previous acceleration project. Therefore, from an economic point of view, large-scale light-duty truck replacement will be unnecessary in the future two years. At present, Ministry of Railways says the target is that the speed of trucks should be qualified. In the following two or three years, the reforms on the speed of trucks will be implemented continuously, but not in large scale. 500000 of China's existing trucks are qualified in speed, so only 15% of the total ones need be reformed.

Output of Railway Locomotives, 2006-2008

Time	Locomotive	Passenger Train	Truck
Jan-Nov 2008	1379	2100	529.54
Jan-Nov 2007	1357	1705	409.55
Jan-Nov 2006	856	1593	364.54

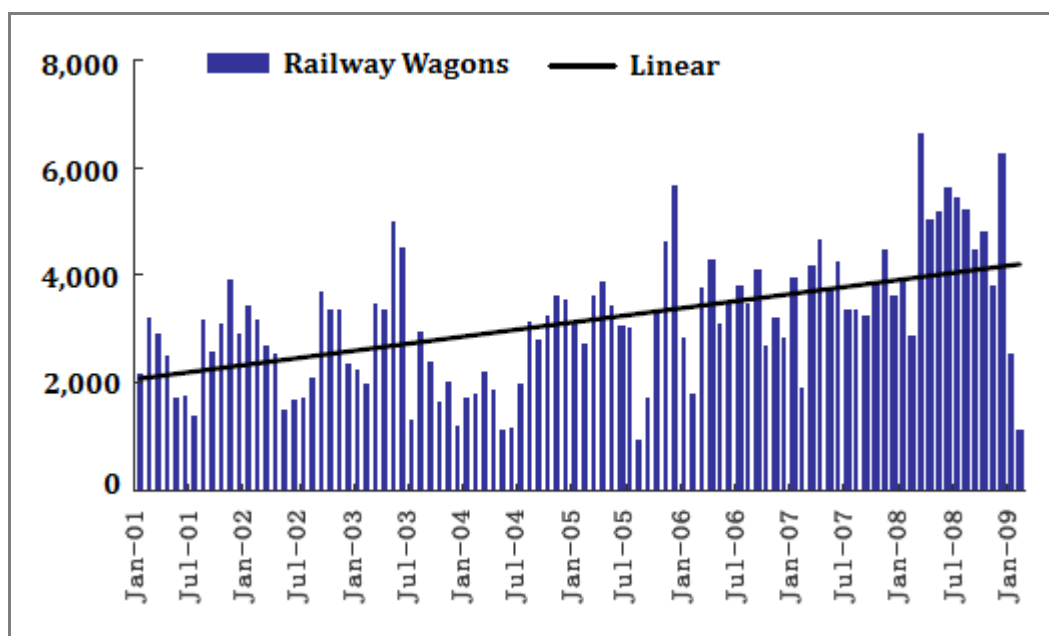
Source: CEIC

Output of Railway Locomotives, 2006-2008



Source: CEIC

Output of Railway Wagons, 2001-2009



Source: CEIC

Output of Railway Carriages, 2006-2008

See in full report

Production Capacity of Main Railway Equipment in China, 2009

See in full report

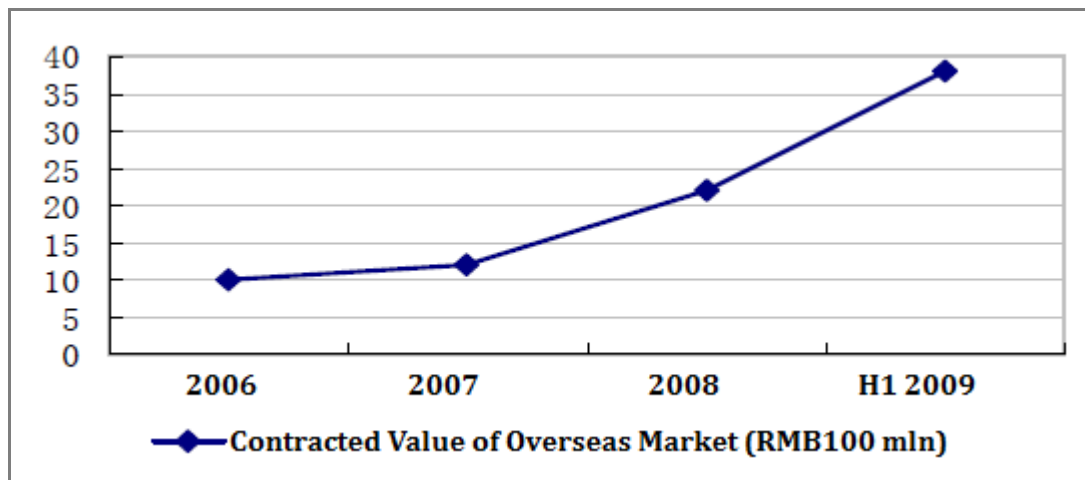
From January to February of 2008, 3470 locomotives were delivered in China, of which high-power electric locomotives occupied a relatively high proportion. After March, the production was stable. During January to September of 2009, 4373 locomotives were produced in China, 306% more than 1481 in 2008. In 2009, both of CSR and CNR made progress in R&D and production of high-power electric locomotives and diesel locomotives, which will drive the purchase costs of Chinese railway transportation equipment to rise.

In the future two years, the capacity utilization of major railway equipment will increase, especially locomotives and passenger trains. Electrified railway construction will speed up obviously. In 2009, 5000 kilometers of electrified railways are expected to be built. Therefore, the demand for electric locomotives will increase apparently. High-power electric locomotives will be in short supply. At the end of 2008, Ministry of Railways invited tenders for additional 1500 passenger trains, and the delivery date was from the end of 2008 until the end of Q1 2009. It is expected that the demand for passenger trains will increase significantly in 2009, and the capacity utilization rate will also rise. With CSR's project is put into operation, the production capacity of EMU will be improved, but the situation that supply does not meet the demand will not change. In the following two or three years, the reforms on the speed of trucks will be implemented continuously, but not in large scale; so the demand for new trucks will not be much, but the demand for related accessories will increase relatively rapidly. Compared with other types of vehicles, the capacity utilization of trucks will not change a lot.

To sum up, for most of vehicles, especially for locomotives and passenger trains, the capacity utilization will increase.

Meanwhile, Chinese railway equipment companies are actively exploring overseas markets. Complete vehicles and spare parts have been sold to North America, South America, Australia, Asia and Africa. On September 11, 2009, CNR signed a contract with KIWIRAIL (New Zealand), which stipulated that CNR would export 20 diesel locomotives (power: 3700 hp) to KIWIRAIL. This was the first time for Chinese enterprises to export locomotives to developed countries in large scale. It showed that China had the ability to provide advanced locomotives for developed countries. And, this success has created favorable conditions for further exploring markets of developed countries.

Expansion of Overseas Markets Yearly



Source: Debang Securities Research Institute

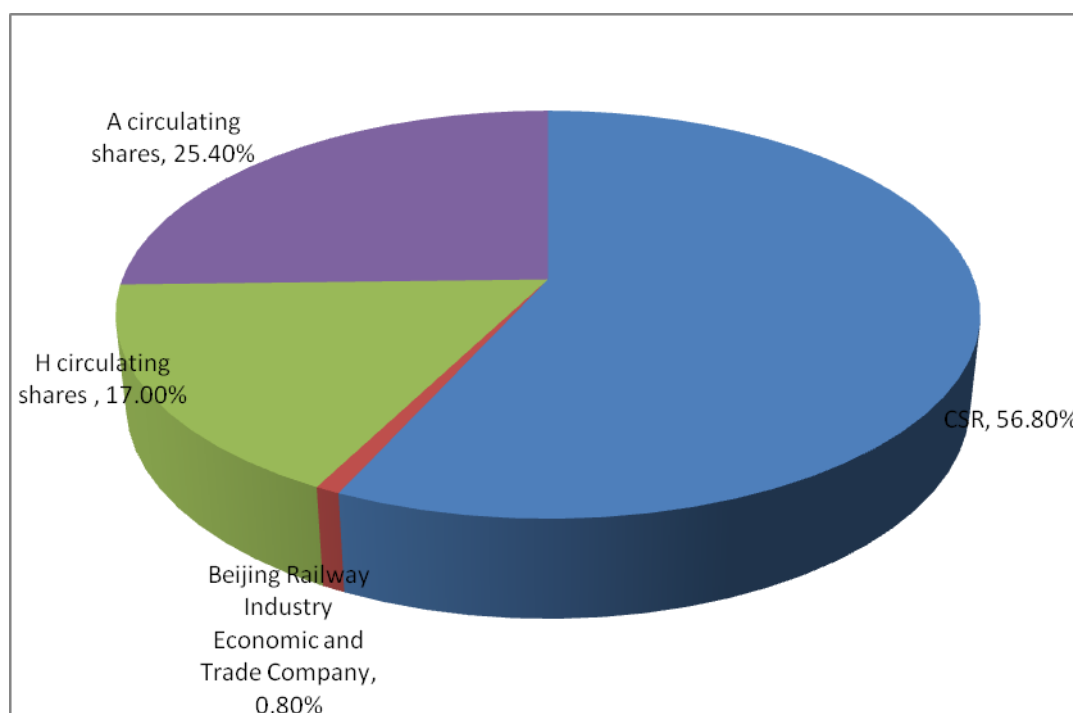
Since 2008, China's railway equipment export has gained a substantial growth, contributing 4.5% to industrial sales revenue. In the first half of 2009, the signed contracts in overseas markets valued RMB3.8 billion, much more than those in 2008. With the delivery of high-speed trains which can run more than 350 kilometers per hour in 2011, China's rail transportation equipment manufacturers will become strong competitors in the international market.

4.1 CSR

4.1.1 Profile

China South Locomotive & Rolling Stock Corporation Limited (CSR), is approved by the State-owned Assets Supervision and Administration Commission of the State Council and co-founded by China South Locomotive and Rolling Stock Industry Group Corporation and Beijing Railway Industry Economic and Trade Company with a total equity capital of 7 billion. The company was established on December 28, 2007 with 16 wholly funded and holding companies and over 80,000 employees distributed in 10 provinces and cities around the country.

CSR's Equity Structure and Key Vehicle Manufacturers



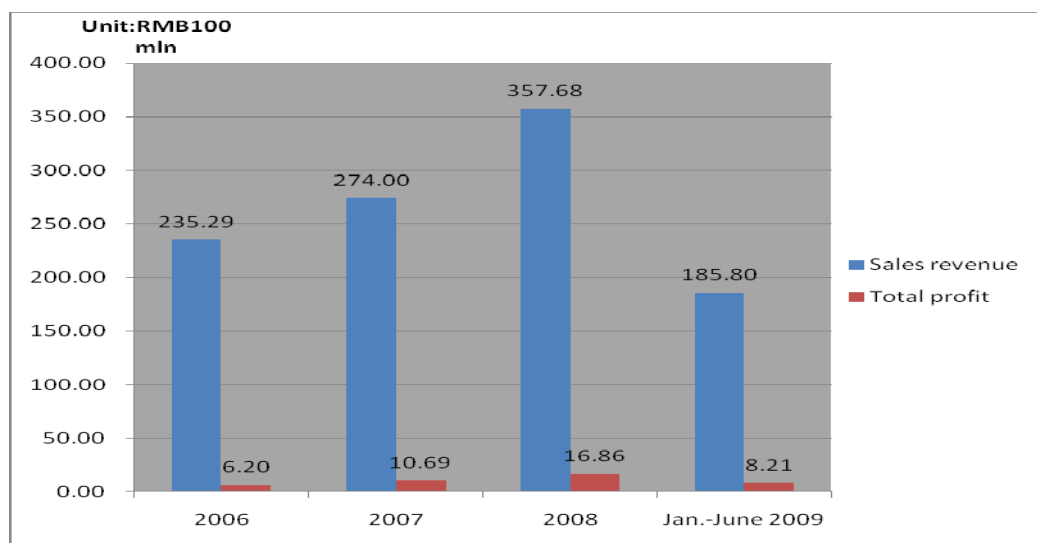
Name of subsidiary	Locomotives	Freight wagons	Passenger coaches	MUs	Rapid transit vehicles
Zhuzhou Electric Locomotive Company	•				•
Ziyang Company	•				
Qishuyan Locomotive & Rolling Stock Works	•				
Qingdao Sifang Locomotive and Rolling Stock Co., Ltd.			•	•	•
Puzhen Rolling Stock Co., Ltd.			•		•
CSR Yangtze Rolling Stock Co., Ltd.		•			
Meishan Rolling Stock Co., Ltd.		•			
Erqi Rolling Stock Co., Ltd.		•			

Source: Ping'an Securities

4.1.2 Operation

In the first half year of 2009, CSR realized operation revenue of RMB18.58 billion, up 23.98% yr-on-yr; net profit attributable to owners of the parent companies was RMB626 million, down 22.58% yr-on-yr.

CSR's Revenue and Net Profit, 2006-H1 2009



Source: ResearchInChina

CSR's main business range covers research and development, manufacturing, sales, refurbishment, leasing and relevant technical service, information consulting, industrial investment and management, export and import and other business in the concern of locomotives, passenger carriages, freight wagons, MUs, rapid transit vehicles and key related components as well as other businesses that utilize proprietary rolling stock technologies. In 2008, MU business enjoyed the fastest growth with increasing speed of 111.87%; then was rapid transit vehicles, up 51.4%; with delivery of large-power locomotives, this part of business also took growth rate of 14.74%. All these contributed 60% business revenue increase of 2008. Freight wagons presented slowed growth, but it was still the main source of business revenue, accounting 27% of the total. Exceptionally, revenue from passenger carriages was down on yearly basis, which was mainly for that some of ordinary passenger

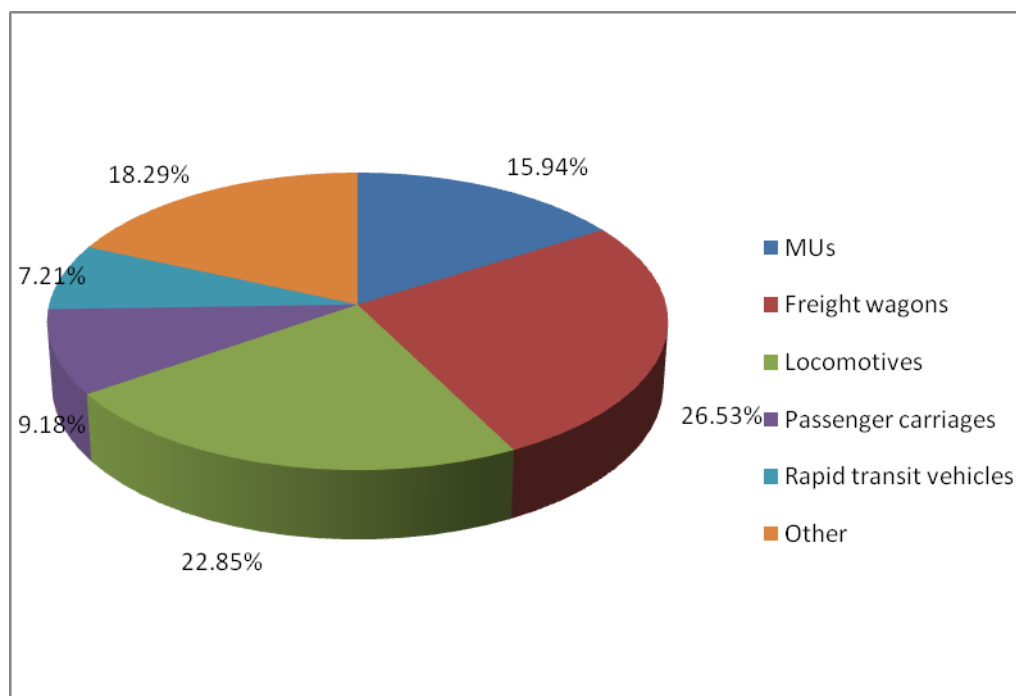
train was gradually replaced by MUs. In addition, other business revenue also increased with growth rate of more than one times.

Business Revenue and Growth, 2008

Revenue (RMB100 mln)	2008	Proportion (%)	2007	Proportion (%)	Growth rate (%)
Locomotives	81.72	22.85	71.21	25.99	14.75
Passenger carriages	32.83	9.18	34.23	12.49	-4.08
Freight wagons	94.90	26.53	92.23	33.66	2.9
MUs	57.03	15.94	26.92	9.82	111.87
rapid transit vehicles	25.80	7.21	17.04	6.22	51.4
Other	65.41	18.29	32.38	11.82	101.98
Total	357.68	100.00	274.01	100.00	30.54

Source: China Securities

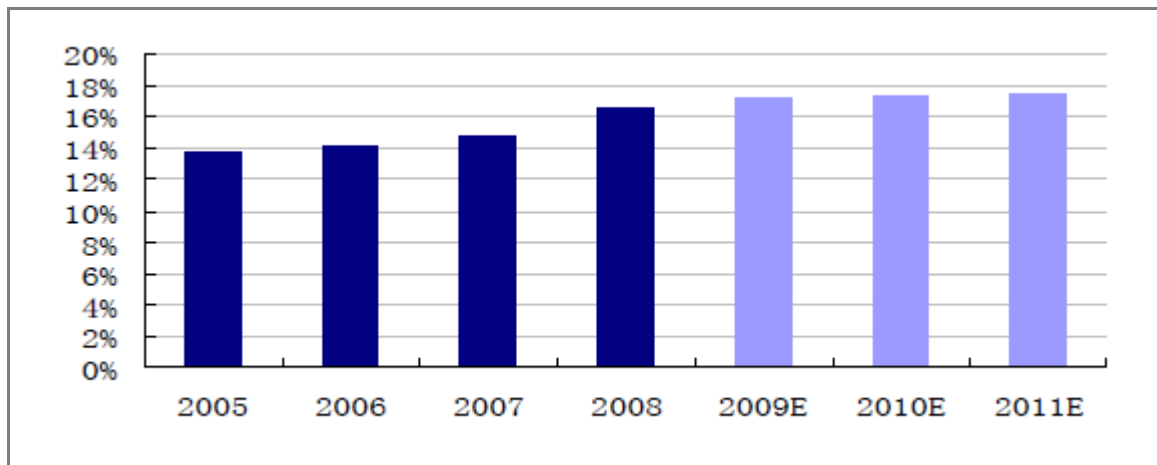
CSR's Businesses



Source: ResearchInChina

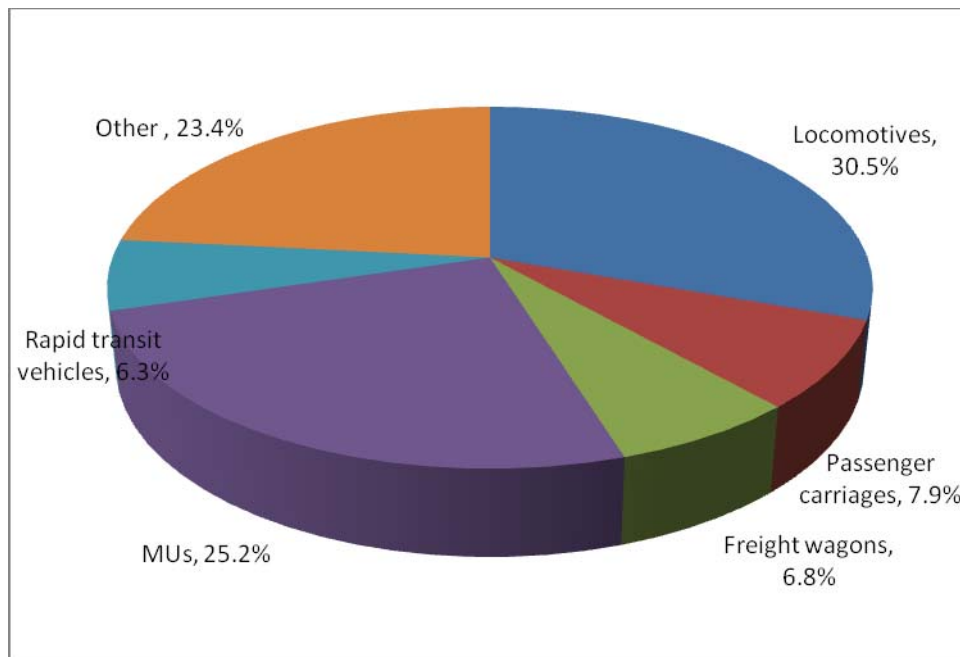
With the scaled development of business, improvement of management level, and upgrade of products, also structure adjustment, the gross profit margin is rising steadily. However, with the implementation of bid negotiation system of Ministry of Railways, the space for gross profit margin increase is limited, and the growth rate will be kept at 15-18% in future years.

Consolidated Gross Profit Margin of CSR



Source: CSR, China Securities

CSR's Gross Profit Margin by Product, 2009



Source: China Securities

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