

## Industrial Sector

December 2005

### China Auto Parts Review

Globalization and Industry Changes Driving  
M&A and International Expansion

#### Highlights

- Sizeable and rapidly growing US\$54 billion domestic auto parts market
- Industry M&A consolidation expected due to market fragmentation and increasing competition from international entrants
- Globalization and major industry trends driving cross-border M&A and private equity investment
- Notable recent deals include Carlisle's acquisition of Zhejiang Kete Auto Parts and Baring Private Equity Asia's investment into Minth

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## MARKET OVERVIEW

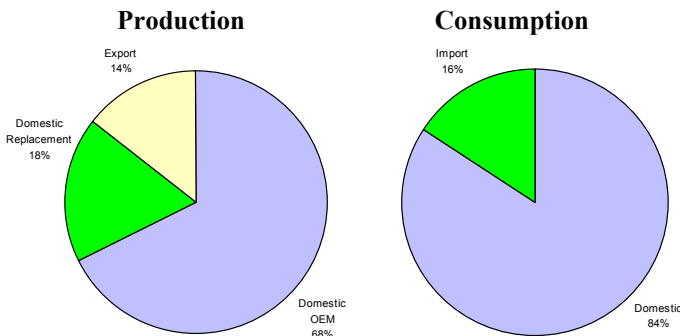
### China Auto Parts Market Size and Growth

In 1979, China's leader Deng Xiaoping visited the U.S. and toured a Ford auto factory that single-handedly made more cars in one month than China produced in a year. Twenty-six years later, China produced a record 4.2 million autos in the first three quarters of this year.

The robust growth of China's automotive industry over the past 2 decades (12.4% CAGR in new vehicles over this period) has spawned a significant domestic auto parts market with revenues of over US\$54 billion in 2004. Given China's current low vehicle penetration rate relative to other developed economies and spurred on by major global outsourcing/off-shoring trends, which are reshaping the industry, we expect continued rapid growth in China's auto parts sector as it benefits from the impact of industry globalization.

- Sizable China Domestic Auto Parts Market**  
 China's auto parts market has already expanded to US\$54.3 billion (RMB440 billion) in domestic sales, along with US\$55.8 billion worth of total production in 2004.

### China Auto Parts Market Breakdown

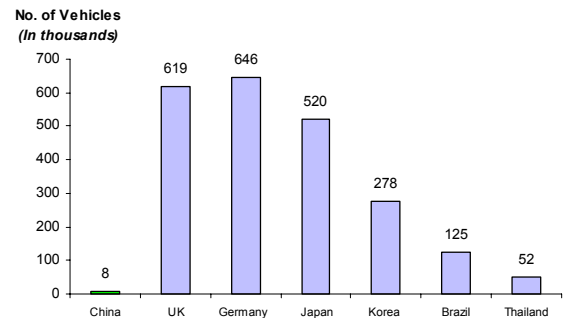


Sources: Latitude estimates; China Association of Automobile Manufacturers

- Huge Auto Parts Market Growth Potential**  
 Demand for auto parts is driven by the outlook of the automotive industry. Despite a market size that is well over US\$50 billion, China's auto parts industry is still poised for continued rapid growth due to the following reasons:
  - China's current vehicle penetration rate is less than 1% of that of developed countries. Pent-up demand for autos will continue to spur auto production and demand for auto parts;
  - China's vehicle production has been experiencing an impressive 24.8% CAGR since 2000, far outpacing flat-lining worldwide CAGR of 2.4%;
  - As new cars come off warranty, the replacement parts market will grow and contribute to auto parts demand; and

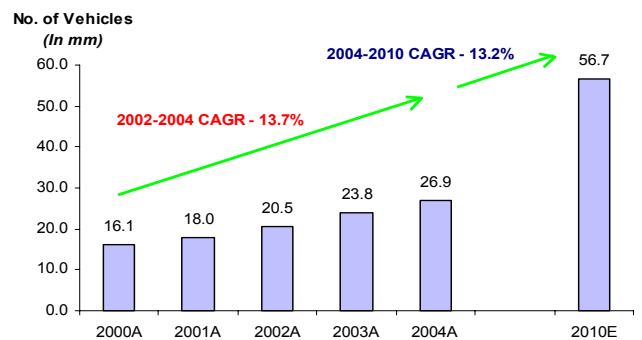
- China's current OEM to replacement market ratio of 1:1 is far below the worldwide benchmark of 1:1.7, representing a significantly underdeveloped replacement market.

### China Vehicle Penetration Versus Major Markets

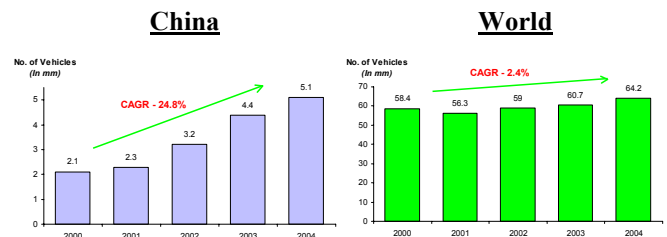


Source: Morgan Stanley research; Vehicle per 1000 Driving Age Population

### China Vehicular Growth



### China Vehicle Production versus World Production

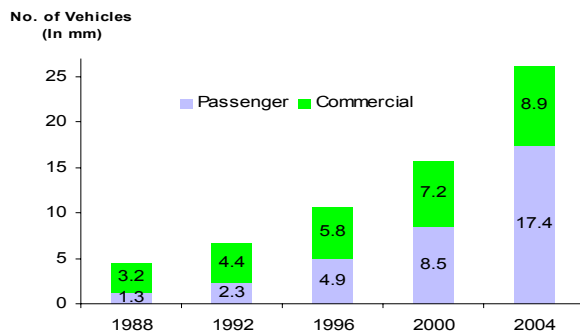


Sources: CEIC Data; China Association of Automobile Manufacturers and other automobile manufacturing associations

## China Auto Parts Market Dynamics

- Fragmented Industry Expected to Consolidate**  
 Currently, there are more than 4,000 auto parts suppliers in China, with the top 100 players accounting for close to 60% of total revenues. However, only five players generated sales of over US\$1 billion in 2004. Given the fragmented nature of the industry, we anticipate significant industry consolidation as the industry matures and faces increasing competition from international entrants.
- Greater Growth Expected in High-end Auto Parts Segment**  
 Passenger vehicle production has become the key driver for China's automotive market. The size of the passenger market exceeded the commercial vehicle market in 2000 and continues to outpace it in terms of growth. Passenger vehicles have much more stringent OEM auto parts requirements as compared to commercial vehicles. In the past, automotive manufacturers in China had to import high-end auto parts that domestic vendors could not yet produce to world-class specifications. As the quality control and skill of China's auto parts manufacturers increases, they will not only recapture this market share from international auto parts vendors but will likely gain the export market as well.

## Passenger versus Commercial Vehicle Growth in China



Sources: CEIC Data; China Association of Automobile Manufacturers

- Domestic Automotive Players will Drive Auto Parts Industry Consolidation**  
 China automotive players will need to drive efficiencies in their production processes to stay competitive globally. Like their US and Japanese counterparts, China automotive manufacturers will drive China auto parts suppliers to reduce costs; narrow the range of OEM vendors they use; and move to systems versus component procurement:
  - Shift to Tier I OEM suppliers focused on systems development and production will force out low-end component players; and
  - Surging raw material costs (e.g. steel and oil prices) will benefit larger players with scale

who will be able to maintain a lower cost production structure.

- China Opens Up Domestic Market**  
 China has been gradually opening up its automotive and auto parts markets under WTO commitments. With reduced Government protection, China's auto parts vendors will face significant competition from larger more efficient international counter parts and will need to operate much closer to international standards to remain competitive.

## Auto / Auto Parts Market Opening Timetable

	1/1/2005	7/1/2006
Quota	Removed	
License	Removed	
Auto tariff	30%	25%
Auto parts tariff	13%	10%

Source: Latitude research

## Key International Auto Parts Market Trends

- Automotive Systems versus Components Production**  
 Over the past decade in the face of eroding margins, automotive manufacturers have focused mainly on car design and assembly and have relied heavily on its auto parts suppliers for more and more systems design and production. China's auto parts suppliers will need to upgrade their capabilities to compete in this new environment.
- Industry Standardization**  
 Increasing standardization of auto parts, especially in the replacement market, will benefit low-cost, high-volume producers. Assuming that China auto parts suppliers are able to meet international quality standards, they should be able to take advantage of this industry trend given China's low cost production base.
- Global Procurement**  
 Increased industry specialization and standardization will allow greater ease of sourcing of non-time sensitive auto parts. As a result, global automotive manufacturers should continue to look internationally for low cost procurement and tap into emerging markets like China for cheaper auto parts.

## Recent China Auto Parts M&A, Investment & JV Activity

With China opening up its auto parts market and relaxing foreign ownership restrictions, both strategic buyers and financial investors have shown greater interest in tapping into China's auto parts market through M&A or private equity investments, while JVs, which used to be the main form of entry into the China market have become much less popular as a means of entering the market. We anticipate that M&A and private equity investments to be the dominant market entry strategy for international players, supplemented by an increasing number of JV buyouts.

- Strong M&A Interest from Strategic Buyers**  
 With China opening up its automotive and auto parts markets and the growing need for industry consolidation, we expect investors' interest to revolve around acquiring existing low-cost manufacturing platforms as opposed to establishing new joint ventures with local industry players. This theme is evident from the growing volume of M&A transactions during the past twelve months, in contrast to the reducing number of new joint ventures.

- Increasing Interest from Financial Investors**  
 Financial investors such as private equity firms are also showing more interest in China's auto parts market. When PE firms invest in domestic auto part players, they typically bring in operational and technological expertise along with experienced management skills to assist target companies in upgrading their businesses to world class standards.
- More JV Buyouts in the Future**  
 As China gradually loosens its restrictions on foreign ownership, another developing trend is for global automotive and auto parts leaders to buy out their Chinese JV partners.
- New JV Activities Still Active but Partnerships Only Formed with Established Domestic Players**  
 JVs used to be the preferred market entry strategy for the China's auto parts sector, but their popularity as a means of market entry has been diminishing. While JV activities are expected to remain strong in the short run, over time we foresee that both the international and Chinese players will want to control their respective China operations.

DATE	BUYER	TARGET	TARGET DESCRIPTION	PRICE (US\$mm)
<b>M&amp;A</b>				
2005-07-15	Carlisle Companies Inc.	Zhejiang Kete Auto Parts Co (Zhejiang)	Manufactures heavy-duty truck brake lining and brake shoes for China's OEM vehicle market	36.0
2004-10-25	Modine Manufacturing Co.	Anhui Jianghuai Climate Control Co, Ltd (Anhui)	Develops and manufactures air conditioning systems, components, parts, and related products for China's consumer vehicle and bus industries	NA
2004-09-16	Modine Manufacturing Co.	WiniaMando Climate Control Shanghai Div. (Shanghai)	Develops and manufactures commercial vehicles' heating, ventilation, and air conditioning systems (HVAC) for Japanese and Chinese auto makers	88.0
2004-09-01	Worldwide Manufacturing USA	Shanghai Chuan Lin Die Casting Products (Shanghai)	Manufactures casting parts, plastic parts, and metal stamping parts for China's automotive, oil and gas, and home appliance industries; also manufactures engine cylinders, motor casting, and automobile parts for China's OEM market	1.1
<b>Private Equity Investments</b>				
2005-07-11	Baring Private Equity Asia Ltd	Minth Group Ltd. (Ninbo)	Manufactures and sells structural and decorative molding trims to Chinese, US, European, Japanese, and Australian auto makers; Tier I supplier	27.0
2004-10-11	ZAP	Zibo Enterprises Co., Ltd. (Nanchang)	Manufactures batteries for China's automobile industry	NA
2004-03-03	Key Principal Partners	ASIMCO Technologies Limited (Beijing)	Manufactures and sells a wide range of powertrain, chassis, NVH, and diesel fuel injection products for light duty and commercial vehicles; distributes to both domestic and international markets; run by international and experienced local management team	100.0
<b>JV Partner Buyouts</b>				
2005-03-10	Dana Corp	Dongfeng Motor Co (Xiangfan)	Largest truck manufacturer in China; also sells trucks	60.0
<b>New Joint Ventures</b>				
2005-02-09	Dura Automotive Systems	Shanghai Ganxiang Auto Mirror Group (Shanghai)	Largest manufacturer of fuel-injection systems in China; state-owned	NA
2004-12-23	ThyssenKrupp	Wuhan Zhongren Auto Parts (Wuhan)	Manufactures front suspension lower control arm, support assembly for rear twist-beams, central insulating plate for silencer, and pedal assembly products for major Chinese and JV auto makers	60.0
2004-06-11	Behr GmbH & Co KG	Dongfeng Motor Co (Wuhan)	Largest truck manufacturer and fourth largest vehicle maker in China	NA
2004-01-06	Eaton Corp	Changzhou Senstar Automobile Air Conditioner Co (Shanghai)	Manufactures automotive power steering hose, air conditioner hose, sensor, fuel rail and other automobile fittings for China's OEM market	NA
2004-02-01	Behr GmbH & Co KG	Shanghai Automotive Co Ltd (Shanghai)	Manufactures auto parts including air conditioning system, cooling system, engine, etc.; public - SAIC is the major shareholder	NA

Source: Latitude research, CapitalIQ, Bloomberg, and Thomsononeanalytics.com

## COMPETITIVE LANDSCAPE

- Commercial Auto Parts Segment Dominated by SOEs**  
 China's commercial auto parts segment has traditionally been dominated by state-owned enterprises for the following reasons:
  - Passenger cars have only become prevalent in China since the 1990s, therefore SOEs and privately owned auto parts players do not have the technological capability to compete with established international vendors in this high-end auto parts segment.
  - Commercial auto parts sector typically generates thinner margins than the passenger vehicles segment due to its low technology content requirement and highly competitive business nature and hence is less attractive to international players.
- FIEs Focus on Passenger Vehicle Segment**  
 Foreign Invested Enterprises, leveraging the technical expertise and financial strength of their parent companies or financial investors, focus on serving the high-end auto parts market. With superior technological, operational, and financial capability, FIEs have dominated the passenger vehicle segment of the market.
- Privately Owned Auto Parts Vendors Currently Unable to Compete with FIEs or SOEs**  
 Privately owned suppliers are regarded as a group of minority players within China's auto parts industry because they lack the financial and technical resources to compete within this capital intensive and technology-driven industry. For instance, of the top 100 auto parts vendors in China, only 13 players are from the private sector, with the rest being FIEs or SOEs. However, Wanxiang Group is an exception and has emerged as a major player in the market.

### Selected Affiliates of Automotive Producers & Key SOEs

	<u>Headquarters</u>	<u>FY0 Sales</u> (US\$ mm)
<b>INTEGRATED</b>		
Anhui Jianghuai Automobile	Anhui	\$997.0
Dongfeng Automobile	Hubei	753.8
Shanghai Automotive	Shanghai	925.6
Torch Automobile	Hunan	1,426.0
<b>ENGINES</b>		
China Yuchai	Guangxi	689.8
Shanghai Diesel Engine	Shanghai	491.1
<b>TIRES</b>		
Aeolus Tyre	Henan	346.1
Shanghai Tyre & Rubber	Shanghai	583.5
<b>OTHER</b>		
Changchun FAW – Sichuan Auto	Changchun	416.8

### Selected Privately Owned Companies

<b>COMPONENTS</b>		
Norstar Founders	Anhui	272.6
Wanxiang Group	Zhejiang	288.1
<b>GLASS</b>		
Fuyao Glass	Fujian	289.8

### Selected FIEs

<b>ENGINES</b>		
Dongfeng Cummins	Hubei	NA
Dongfeng Honda Engine	Hubei	NA
Shanghai Delphi	Shanghai	NA

### Selected Major Auto Parts Vendors By Market Segment

	<u>Headquarters</u>	<u>Selected Key Customers</u>	<u>Tier</u>
<b>CHASSIS</b>			
Anhui Jianghuai Automobile <sup>1</sup>	Anhui	• Anhui Jianghuai Automobile	I
Changchun FAW-Sihuan Auto <sup>2</sup>	Changchun	• FAW, FAW-VW	I
Dongfeng Automobile <sup>3</sup>	Hubei	• Dongfeng Automobile	I
Nanjing Motor Group <sup>3</sup>	Nanjing	• Nanjing Motor Group	I
Shanghai Huizhong <sup>3</sup>	Shanghai	• SAIC, Shanghai VW, Shanghai GM	I
<b>COMPONENTS</b>			
Huade Plastics	Shanghai	• Shanghai VW, Shanghai GM, FAW-VW, Jiang Ling Ford, Chang An Ford	I
Ningbo Huaxiang	Ningbo	• Shanghai VW, Shanghai GM, Shanghai Delphi, FAW, SAIC, Feng Shen Motor	I
Yanfeng Visteon Automotive	Shanghai	• Shanghai VW, Shanghai GM, FAW-VW, Dongfeng Citroen, Beijing Jeep	I
Jiang Nan Mould & Plastic Technology	Jiangsu	• Shanghai VW, Shanghai GM, Feng Shen Motor	I
<b>ENGINES</b>			
Dongfeng Cummins Engine <sup>3</sup>	Hubei	• Dongfeng Automobile	I
Harbin Dongan Auto Engine	Harbin	• NA	I
Kunming Yunnei Power	Kunming	• NA	I
<b>GLASS</b>			
CSG Automotive Glass	Shenzhen	• NA	I
Fuyao Glass	Fujian	• FAW, FAW-VW, Shanghai VW, Shanghai GM, Guangzhou Honda, Dongfeng Automobile	I
Qinhuangdao Haiyan Safety Glass	Hebei	• NA	NA
Shanghai Yaohua Pilkington Glass	Shanghai	• NA	NA
Xinyi Glass	Shenzhen	• PPG Industries, North Star Automotive Glass, Mygrant Glass, Diamond Triumph Auto Glass, O'Brien Glass Industries, Carglass New Zealand	I & II
<b>SYSTEMS (AIR CONDITIONING)</b>			
Shanghai Delphi Automotive AC	Shanghai	• Shanghai VW, Shanghai GM, Beijing Jeep-Chrysler, Wuhan Citroen, Chongqing Isuzu, Changhe Suzuki, Shenyang Jinbei	I
<b>SYSTEMS (OTHER)</b>			
Lile Group	Jiangsu	• FAW, Dongfeng Automobile, Jinbei, Chang An Ford, Jiangxi Isuzu, King Long, Zhong Tong Bus, DAEWOO	I
Shandong Binzhou Bohai Piston	Shandong	• Dongfeng Automobile, Shanghai Diesel Engine, Changchun Group, Nanjing Motor Group, China Yuchai, Weichai Power	I & II
Shanghai Jiao Yun	Shanghai	• Shanghai GM, Shanghai VW	I
Shanghai Ming Fang Auto Parts	Shanghai	• NA	NA
Zhong Ming Auto Parts	Jiangsu	• NA	NA
<b>TIRES</b>			
Aeolus Tyre	Henan	• Dongfeng Automobile	I & II
Giti Tyre	Anhui	• Mercedes-Benz, Nissan, Mazda,	I & II
Rong Cheng Rubber	Shandong	• NA	NA
Qingdao Huanghai Rubber Group	Qingdao	• NA	NA
Shandong Triangle Group	Shandong	• NA	NA
Shanghai Tyre & Rubber	Shanghai	• FAW, Volvo, Yutong Bus, King Long	I & II

<sup>1</sup> Part of a conglomerate automotive group; supplies to its parent company; other customers not available

<sup>2</sup> A subsidiary company of FAW; primarily serves its parent company and FAW-VW

<sup>3</sup> A subsidiary company of Shanghai Automotive; primarily serves its parent company and SAIC's JVs

## MAJOR M&A AND PRIVATE PLACEMENT TRENDS

- ***Strategic Buyers/Financial Investors Acquiring Low-Cost Manufacturing Platforms to Serve the International Replacement Market***

With China opening up its automotive industry and the Government easing foreign ownership regulations, we anticipate a growing number of strategic buyers or financial investors acquiring low-cost, China-based manufacturing platforms to serve the international replacement market.

- ***Greater Interest in China's Domestic Auto Parts Market***

Another developing trend is the increasing number of PE firms or global auto parts leaders looking to tap into China's domestic OEM auto parts market, characterized by its significant market size and robust growth prospects. We anticipate this surge of investor interest in China's auto parts industry to become a driver for cross-border M&A activities within this sector.

- ***China's Auto Parts Players Raising Capital to Expand Internationally***

As China's automotive industry gradually matures, we foresee a growing number of

domestic auto parts leaders seeking to raise funds from financial or strategic investors in order to expand internationally. As a result, China auto parts outbound M&A activities are expected to develop and escalate in the future.

### SUMMARY

Driven by globalization, global procurement, and the increased need for China's domestic auto parts companies to partner or merge with global players in order to remain competitive, we see a huge opportunity for M&A consolidation within the highly fragmented and fast-growing China auto parts sector.

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Appendix:

A. Selected China Auto Parts Trading Comparables

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The information and statistical data herein has been obtained from sources we believe to be reliable but in no way are warranted by us as to accuracy or completeness. We do not undertake to advise you as to any change of our views. This is not a solicitation or any offer to buy or sell. Latitude Capital Group ("Latitude") has produced this report for private circulation only. All information and advice is given in good faith but without any warranty. Latitude, our affiliates or companies or individuals connected with Latitude, may have used the information set forth herein before publication and may have positions in, may from time to time purchase or sell, or may be materially interested in any of the securities mentioned or related securities.

## China Auto Parts Sector Review | Selected Trading Comparables

No.	Company	Stock		Size		Market			Tier	EV / Revenue			EV / EBITDA			P / E			Gross Margin			Operating Margin			Net Margin			Growth*			Business Descriptions and Comments		
		Ticker	Description	M.Cap.	EV	Rev FY0	OEM	AM*		Exp*	FY0	LTM	FY1	FY0	LTM	FY1	FY0	LTM	FY1	FY0	1H04	1H05	FY0	1H04	1H05	FY0	1H04	1H05	Revenue	GP		Op. Profit	Earnings
<b>AUTOMOTIVE/AUTO PARTS</b>																																	
1	Shanghai Automotive	CH 600104	A	1,279	1,196	926	Y*	Y		I	1.29x	1.56x	1.45x	3.8x	6.4x	13.4x	5.2x	10.3x	9.2x	25.4%	26.9%	18.3%	7.3%	7.1%	3.0%	26.3%	34.2%	15.9%	-30.9%	-52.8%	-70.7%	-67.9%	Manufactures and markets automobiles (passenger cars) and related parts and accessories; main products include automobile chassis, transmission systems, steering systems, suspension springs, antilock braking systems, and auto lights
2	Torch Automobile Group	CH 000549	A	360	811	1,426	Y	Y	20%	I	0.57x	0.67x	NA	5.3x	5.0x	NA	19.2x	10.9x	NA	21.3%	19.1%	20.2%	9.9%	7.1%	9.3%	1.3%	1.3%	4.4%	-28.3%	-24.3%	-5.8%	141.7%	Manufactures and sells commercial vehicles (heavy trucks), automobile brake systems, and other auto parts; also manufactures metal products; automobile parts are marketed worldwide
3	Dongfeng Automobile *	CH 600006	A	647	393	754	Y			I	0.52x	0.38x	0.35x	5.2x	4.4x	NA	11.1x	9.8x	9.5x	18.3%	11.6%	16.1%	8.8%	4.2%	6.9%	7.8%	11.1%	6.6%	109.6%	192.0%	246.0%	25.5%	Develops, manufactures, and markets diesel engines, light trucks, castings, and related spare parts
4	Anhui Jianghuai Automobile	CH 600418	A	438	461	997	Y		1%	I	0.46x	0.44x	0.39x	5.6x	5.2x	4.4x	11.0x	8.1x	7.6x	17.9%	19.1%	17.2%	5.8%	5.6%	6.9%	4.0%	3.2%	5.4%	11.6%	0.6%	37.3%	86.7%	Manufactures and markets bus and light truck chassis, gear boxes, other auto parts, and business passenger vehicles
Mean											0.71x	0.76x	0.73x	5.0x	5.2x	8.9x	11.6x	9.8x	8.8x	20.7%	19.2%	18.0%	7.9%	6.0%	6.5%	9.8%	12.5%	8.1%	15.5%	28.9%	51.7%	46.5%	
Median											0.55x	0.55x	0.39x	5.3x	5.1x	8.9x	11.1x	10.1x	9.2x	19.8%	19.1%	17.8%	8.0%	6.4%	6.9%	5.9%	7.2%	6.0%	-8.4%	-11.8%	15.7%	56.1%	
<b>COMPONENTS</b>																																	
1	Ningbo Tongmuo New Material	CH 600114	A	121	137	43	Y		16%	II	3.17x	2.63x	NA	12.3x	11.6x	NA	30.8x	26.8x	NA	28.7%	28.9%	23.7%	16.7%	18.3%	12.6%	9.1%	9.8%	8.8%	46.2%	19.7%	0.8%	31.7%	Develops, manufactures, and markets powder metallurgical products; products include motorcycle parts, compressor parts, electric tool parts, automobile parts, and other parts; advanced technology
2	Hubei Aviation Precision Machinery Technology	CH 002013	A	41	37	13	Y		5%	II	2.89x	3.13x	NA	16.3x	21.6x	NA	40.8x	67.4x	NA	25.1%	27.2%	21.7%	9.9%	14.8%	7.9%	7.8%	11.1%	6.8%	-13.2%	-30.6%	-53.3%	-47.0%	Manufactures and markets precision punching products, including angle modulation devices for auto seats, sliding rails, seat lifting devices, and other related products; advanced technology; FY04 sales breakdown and GM: seat angle modulation devices - 82.8% and 29.2%, seat sliding rail - 15.0% and 12.1%
3	Guizhou Guihang Automotive Components	CH 600523	A	67	92	62	Y	Y		II	1.47x	1.42x	NA	10.5x	12.8x	NA	182.7x	NM	NA	25.1%	25.2%	19.7%	4.4%	6.3%	1.9%	0.6%	2.0%	-1.8%	7.2%	-16.5%	-68.5%	-195.6%	Manufactures a variety of automobile (sedan) parts; products include air filters, radiators, locks, evaporators, rubber sealing strips, transmission belts, and flexible tubes
4	SORL Auto Parts	US SAUP	OTC	70	79	47	47%	26%	27%	II	1.69x	1.42x	NA	12.7x	10.6x	NA	14.5x	12.3x	NA	23.3%	23.9%	22.4%	12.1%	12.1%	11.9%	10.3%	10.0%	9.9%	44.3%	34.8%	41.9%	42.3%	Manufactures and distributes automotive air brake valves and hydraulic brake valves primarily for commercial vehicles market in China; products distributed (both in China and internationally) under SORL trademarks
5	Changchun Yidong Clutch	CH 600148	A	58	62	37	Y	Y		II	1.65x	1.71x	NA	14.1x	20.3x	NA	27.7x	50.6x	NA	22.9%	23.1%	18.3%	7.9%	7.8%	1.3%	5.6%	6.0%	1.0%	-6.9%	-26.4%	-84.9%	-84.5%	Manufactures and markets a variety of automobile clutches; products sold to manufacturers of cars, buses, and farm vehicles
6	Xiangyang Automobile Bearing	CH 000678	A	53	76	28	Y	Y	Y	II	2.73x	2.35x	NA	14.2x	11.0x	NA	4.2x	3.8x	NA	22.5%	18.1%	23.9%	10.7%	7.1%	12.3%	45.0%	0.7%	8.1%	34.6%	77.9%	133.4%	1486.0%	Develops, manufactures, and markets automobile bearings and related parts; company's auto bearings sold under ZXY brand; leader in bearings market
7	Shandong Binzhou Bohai Piston	CH 600960	A	76	117	82	Y	Y		II	1.43x	1.39x	NA	8.7x	9.4x	NA	14.5x	19.2x	NA	21.7%	22.7%	18.6%	11.7%	14.3%	7.4%	6.4%	7.1%	3.9%	6.1%	-13.2%	-45.1%	-41.4%	Develops, manufactures, and sells pistons for power generating machineries; leader in piston market
8	Wanxiang Qianchao	CH 000559	A	411	552	288	Y	Y		I	1.92x	1.63x	NA	10.8x	9.6x	NA	27.2x	25.3x	18.9x	20.2%	20.8%	18.9%	11.2%	11.3%	10.5%	5.2%	5.0%	4.3%	37.8%	25.5%	27.7%	16.4%	Manufactures and markets a variety of auto parts; products include universal joints, car vibration absorbers, transmission systems, bearings, and other related parts; also trades merchandises; leader in universal joints market
9	Hubei Bothwin Investment	CH 000760	A	34	54	29					1.89x	1.51x	NA	NM	NM	NA	NM	NM	NA	17.4%	17.1%	16.3%	-56.0%	1.7%	0.4%	-59.8%	-1.8%	-113.4%	58.2%	50.2%	-62.0%	NM	Manufactures and markets auto parts including axles, gears, and other parts
10	Norstar Founders Group	HK 2339	M	287	312	273	Y		100%	I & II	1.14x	1.14x	0.88x	8.0x	8.0x	6.1x	8.5x	8.5x	6.4x	16.7%	NA	NA	13.8%	NA	NA	12.4%	NA	NA	29.6%	NA	NA	31.5%	Manufactures and sells automotive spare parts (brake shoes and pads); also manufactures and sells construction decorative hardware products
11	Lan Bao Technology Info	CH 000631	A	37	123	100	Y			I	1.23x	0.38x	NA	NM	NM	NA	NM	NM	NA	-0.3%	11.4%	2.6%	-54.8%	-44.1%	-3.8%	-24.2%	-26.4%	-2.0%	368.1%	6.1%	NM	NM	Manufactures and markets automobile parts, communication equipment, and photoelectric products; products include auto plastic bumpers, automobile air conditioning systems, communication monitoring systems, communication resources management systems, and other related products; FY04 sales breakdown and GM: auto parts - 89.9% and 2.05%
Mean											1.93x	1.70x	0.88x	11.9x	12.8x	6.1x	39.0x	26.7x	12.7x	20.3%	21.9%	18.6%	-1.1%	5.0%	6.2%	1.7%	2.3%	-7.4%	55.6%	12.7%	-12.2%	137.7%	
Median											1.69x	1.51x	0.88x	12.3x	11.0x	6.1x	27.2x	22.2x	12.7x	22.5%	22.9%	19.3%	10.7%	9.6%	7.7%	6.4%	5.5%	4.1%	34.6%	12.9%	-45.1%	16.4%	
Mean - PRC Listed Only											2.04x	1.79x	NA	12.4x	13.8x	NA	46.8x	32.2x	18.9x	20.4%	21.6%	18.2%	-4.3%	4.2%	5.6%	-0.5%	1.5%	-9.4%	59.8%	10.3%	-19.0%	166.5%	
Median - PRC Listed Only											1.89x	1.63x	NA	12.3x	11.6x	NA	27.7x	26.0x	18.9x	22.5%	22.7%	18.9%	9.9%	7.8%	7.4%	5.6%	5.0%	3.9%	34.6%	6.1%	-49.2%	-41.4%	

## China Auto Parts Sector Review | Selected Trading Comparables

No.	Company	Stock		Size			Market			Tier	EV / Revenue			EV / EBITDA			P / E			Gross Margin			Operating Margin			Net Margin			Growth*				Business Descriptions and Comments	
		Ticker	Description	M.Cap.	EV	Rev FY0	OEM	AM*	Exp*		FY0	LTM	FY1	FY0	LTM	FY1	FY0	LTM	FY1	FY0	1H04	1H05	FY0	1H04	1H05	FY0	1H04	1H05	Revenue	GP	Op. Profit	Earnings		
<b>ENGINES</b>																																		
1	China Yuchai International	US CYD	NYSE	297	416	690	Y				I	0.60x	0.53x	0.54x	3.7x	NM	NA	4.9x	5.3x	3.8x	28.2%	31.0%	24.2%	14.0%	17.0%	11.6%	8.8%	10.8%	7.3%	28.9%	0.8%	-11.9%	-13.1%	Manufactures, assembles, and sells diesel engines in China; products include 1-6 cylinder diesel engines for vehicles, construction machinery, agriculture, vessels, and power generation use; general market leader
2	Jinan Diesel Engine	CH 000617	A	282	274	82	Y				I	3.32x	2.89x	NA	15.2x	14.3x	NA	19.0x	17.5x	NA	25.4%	26.3%	24.1%	15.2%	14.7%	12.7%	18.1%	15.6%	14.3%	31.5%	20.5%	13.2%	20.7%	Manufactures and markets offroad diesel and gas engines and engine sets
3	Weichai Power	HK 2338	H/M	734	620	761	Y				I	0.81x	0.76x	0.72x	5.4x	5.1x	5.0x	11.0x	10.9x	9.5x	24.4%	22.0%	23.2%	13.0%	13.7%	12.7%	8.8%	8.7%	7.8%	15.2%	21.1%	6.8%	3.0%	Manufactures high-speed, heavy-duty diesel engines for heavy-duty vehicles, wheel-loaders, bulldozers, and road-rollers
4	Shanghai Diesel Engine	CH 600841 CH 900920	A&B	282	257	491	Y	4%			I	0.52x	0.59x	NA	5.1x	7.9x	NA	9.5x	19.9x	NA	21.0%	21.4%	17.4%	7.6%	9.6%	4.3%	6.0%	7.8%	3.0%	-19.3%	-34.5%	-63.5%	-68.9%	Manufactures and markets diesel engines, construction machinery, oil pumps, and diesel engine parts; FY04 sales breakdown: construction machinery - 42%, vehicles - 31%, vessels - 16%, power generation - 11%
5	Kunming Yunnei Power	CH 000903	A	100	117	193	Y				I	0.61x	0.59x	NA	6.7x	6.8x	NA	12.5x	14.4x	NA	15.8%	14.8%	16.2%	7.4%	4.7%	5.5%	4.2%	3.8%	2.6%	4.8%	14.5%	23.2%	-27.8%	Manufactures and markets a variety of diesel engines and related parts (multi-cylinder small bore); also manufactures and sells commercial vehicles (05-3T agriculture vehicles, light trucks, and passenger travel vehicles)
6	Jianghuai Engine	CH 000816	A	108	124	179	Y	28%			I	0.69x	0.63x	NA	8.2x	8.1x	NA	26.5x	25.6x	NA	13.3%	14.3%	14.4%	5.1%	4.5%	3.8%	2.3%	2.0%	1.9%	17.8%	19.0%	-0.7%	7.6%	Manufactures and markets single cylinder and multi-cylinder diesel engines (mid to small), tyres, tractors, and single cylinder gas engines
7	Changchai	CH 000570 CH 200570	A&B	120	100	206	Y	Y			I	0.49x	0.45x	NA	7.7x	7.5x	NA	20.1x	18.2x	NA	11.5%	10.5%	10.3%	2.6%	1.9%	2.9%	2.9%	2.1%	2.3%	18.9%	16.9%	79.5%	31.6%	Manufactures and markets diesel engines (mid to small), related spare parts, agricultural transport vehicles, and combine harvesters
8	Anhui Quanchai Engine	CH 600218	A	90	56	112	Y	Y	3%		I	0.50x	0.48x	NA	NM	NM	NA	NM	NM	NA	9.3%	9.7%	8.6%	-3.4%	1.6%	1.8%	-5.8%	1.5%	1.6%	10.0%	-2.1%	24.3%	17.7%	Manufactures and markets various diesel internal combustion engines (mid to small) for tractors, farm vehicles, and other vehicles; also manufactures pipe building materials and retails general merchandise
9	Harbin Dongan Auto Engine	CH 600178	A	218	189	310	Y				I	0.61x	0.68x	NA	6.3x	6.9x	NA	2.1x	2.2x	NA	15.4%	15.3%	15.0%	4.4%	5.2%	4.8%	32.7%	4.3%	4.0%	-17.2%	-18.9%	-23.5%	-22.6%	Manufactures and markets a variety of mini-engines (for mini vans, mail delivery cars, and other mini vehicles), speed transmissions, and other auto parts; market leader
	Mean											0.91x	0.84x	0.63x	7.3x	8.1x	5.0x	13.2x	14.2x	6.7x	18.3%	18.4%	17.0%	7.3%	8.1%	6.7%	8.7%	6.3%	5.0%	10.1%	4.1%	5.3%	-5.8%	
	Median											0.61x	0.59x	0.63x	6.5x	7.5x	5.0x	11.8x	16.0x	6.7x	15.8%	15.3%	16.2%	7.4%	5.2%	4.8%	6.0%	4.3%	3.0%	15.2%	14.5%	6.8%	3.0%	
	Mean - PRC Listed											0.96x	0.90x	NA	8.2x	8.6x	NA	15.0x	16.3x	NA	16.0%	16.0%	15.1%	5.6%	6.0%	5.1%	8.6%	5.3%	4.2%	6.6%	2.2%	7.5%	-6.0%	
	Median - PRC Listed Only											0.61x	0.59x	NA	7.2x	7.7x	NA	15.7x	17.8x	NA	15.4%	14.8%	15.0%	5.1%	4.7%	4.3%	4.2%	3.8%	2.6%	10.0%	14.5%	13.2%	7.6%	
<b>GLASS</b>																																		
1	Xinyi Glass Holding	HK 868	M	348	342	133	Y	Y	66%	I & II	2.58x	2.28x	NA	9.2x	8.7x	NA	11.4x	11.3x	NA	36.3%	36.5%	34.3%	24.6%	24.5%	21.1%	22.9%	23.5%	18.7%	28.6%	21.0%	10.5%	2.1%	Manufactures a variety of processed glass products for autos and construction and household markets; also offers glass wall installation service	
2	Fuyao Group Glass Industries	CH 600660	A	627	1,050	290	Y		27%		I	3.62x	3.39x	2.85x	11.9x	11.0x	8.7x	12.8x	13.5x	10.0x	33.7%	34.8%	33.3%	22.0%	23.1%	22.2%	16.9%	18.7%	14.7%	15.3%	10.3%	10.9%	-9.6%	Manufactures and distributes automobile glass, decorated glassware, and other industrial glassware; products marketed internationally; also provides glass installation service
	Mean											3.10x	2.83x	2.85x	10.5x	9.9x	8.7x	12.1x	12.4x	10.0x	35.0%	35.6%	33.8%	23.3%	23.8%	21.6%	19.9%	21.1%	16.7%	21.9%	15.7%	10.7%	-3.7%	
	Median											3.10x	2.83x	2.85x	10.5x	9.9x	8.7x	12.1x	12.4x	10.0x	35.0%	35.6%	33.8%	23.3%	23.8%	21.6%	19.9%	21.1%	16.7%	21.9%	15.7%	10.7%	-3.7%	
<b>OTHER</b>																																		
1	Fengfan	CH 600482	A	168	197	123	Y	Y	1%		I	1.60x	1.33x	28.00x	13.8x	13.1x	NA	27.3x	23.8x	NA	19.4%	20.5%	16.5%	8.0%	6.9%	5.2%	5.0%	2.8%	3.1%	54.1%	23.8%	17.8%	69.5%	Manufactures and markets automobile storage batteries, storage battery separators, and battery shells
2	Dongfeng Electronic Tech	CH 600081	A	100	146	101	Y	Y			II	1.45x	1.29x	NA	12.5x	13.5x	NA	21.4x	28.2x	NA	16.6%	19.5%	11.7%	6.6%	7.3%	1.4%	4.6%	5.0%	2.1%	26.2%	-24.4%	-75.5%	-46.3%	Manufactures and markets motor vehicle parts and instruments including sensors, bearings, valves, and other related auto parts; also conducts automobiles and parts trading; FY04 sales breakdown and GM: instruments/sensors/flexible shafts - 22.7% and 22.7%, fuel injection/braking/die casting/trims - 52.7% and 19.9%
3	Changchun FAW-Sihuan Auto	CH 600742	A	93	115	417	Y	Y			I & II	0.28x	0.37x	NA	7.5x	12.0x	NA	25.7x	NM	NA	5.6%	5.3%	3.7%	1.2%	1.7%	-2.8%	0.9%	1.3%	-2.0%	-40.9%	-59.2%	-194.6%	-195.8%	Manufactures and markets motor vehicle parts and specialized trucks; products include tyres, trailers, ignition coils, and vehicle electrical appliances; also trades vehicle parts and vehicles
	Mean											3.10x	2.83x	2.85x	10.5x	9.9x	8.7x	12.1x	12.4x	10.0x	35.0%	15.1%	10.6%	5.2%	5.3%	1.3%	3.5%	3.0%	1.1%	13.2%	-19.9%	-84.1%	-57.5%	
	Median											3.10x	2.83x	2.85x	10.5x	9.9x	8.7x	12.1x	12.4x	10.0x	35.0%	19.5%	11.7%	6.6%	6.9%	1.4%	4.6%	2.8%	2.1%	26.2%	-24.4%	-75.5%	-46.3%	

## China Auto Parts Sector Review | Selected Trading Comparables

No.	Company	Stock		Size			Market			Tier	EV / Revenue			EV / EBITDA			P / E			Gross Margin			Operating Margin			Net Margin			Growth*				Business Descriptions and Comments	
		Ticker	Description	M.Cap.	EV	Rev FY0	OEM	AM*	Exp*		FY0	LTM	FY1	FY0	LTM	FY1	FY0	LTM	FY1	FY0	1H04	1H05	FY0	1H04	1H05	FY0	1H04	1H05	Revenue	GP	Op. Profit	Earnings		
<b>SYSTEMS</b>																																		
1	Aerospace Hi-tech Holdings	CH 000901	A	95	122	21	Y					5.74x	5.70x	NA	25.4x	26.3x	NA	100.6x	162.8x	NA	41.3%	35.0%	32.0%	14.0%	9.1%	7.2%	4.5%	3.2%	-1.0%	1.6%	-7.1%	-20.1%	-132.1%	Manufactures and markets automobile electronic instruments and products, mini electricity generators, aviation products, environment monitoring, arts & crafts, and other related products; FY04 sales breakdown and GM: auto instruments - 56% and 42.8%
2	China Automotive Systems	US CAAS	NASDAQ	186	206	58	Y	Y	Y	I	3.54x	3.31x	NA	17.7x	19.6x	NA	27.0x	34.3x	NA	39.8%	42.3%	35.8%	18.5%	19.6%	10.7%	11.8%	10.6%	4.5%	15.1%	-2.7%	-37.3%	-51.5%	Manufactures power steering systems and other related products for different segments of the automobile industry in China, focusing on parts, accessories, and new technologies; geographic focus: North America, Asia-Pacific, and Middle East	
3	Ningbo Huaxiang Electronic	CH 002048	A	92	104	33	Y			II & I	3.18x	2.79x	NA	NM	NM	NA	23.1x	31.2x	NA	31.5%	33.0%	19.6%	19.5%	22.2%	8.3%	12.1%	11.8%	5.0%	24.6%	-26.1%	-53.3%	-47.1%	Manufactures non-metallic automobile parts such as case assembly, harness protection system, engine accessories, fuel pipe system, shock absorber accessories, and interior trim parts	
4	Shanghai Jiao Yun	CH 600676	A	129	133	110	Y			I & II	1.21x	1.33x	NA	6.0x	6.5x	NA	13.5x	14.0x	NA	29.0%	28.9%	24.4%	13.0%	13.6%	9.5%	8.7%	6.2%	6.9%	-16.8%	-29.8%	-41.9%	-8.3%	Manufactures and sells vehicle parts and accessories (seats, clutches, and automatic gearing systems); also provides passenger and freight transportation services; FY04 sales breakdown and GM: auto (sedan) parts - 75.0% and 10.7%	
5	Weifu High-Technology	CH 000581 CH 200581	A&B	375	454	258	Y	Y	Y	II	1.76x	1.27x	1.04x	9.2x	7.9x	NA	12.3x	11.2x	10.9x	22.8%	25.5%	20.8%	9.5%	12.7%	11.6%	11.8%	14.2%	9.0%	85.7%	51.8%	70.4%	17.3%	Manufactures and markets fuel injection pumps for diesel engines, injectors, and related parts	
6	Shanghai Aerospace Automobile Electromechanical	CH 600151	A	345	375	217	Y	Y		I & II	1.73x	1.99x	1.92x	11.7x	16.1x	NA	30.4x	56.5x	58.1x	20.6%	21.0%	18.5%	8.4%	9.9%	4.8%	5.2%	5.6%	1.7%	-23.6%	-32.7%	-63.2%	-76.6%	Manufactures and markets automobile air conditioners, sensors, antennae, and other auto parts; also researches and develops aerospace and solar energy; FY04 sales breakdown and GM: air conditioner - 73.7% and 17.7%, total auto parts - 90.4% and 20.0%	
7	Chengdu Tianxing Instrument and Meter	CH 000710	A	48	58	15	Y		9%	II	3.95x	3.55x	NA	41.2x	39.1x	NA	NM	NM	NA	15.8%	19.6%	17.7%	1.2%	2.2%	3.7%	-3.2%	-1.8%	-0.9%	25.4%	13.4%	113.4%	NM	Manufactures and sells meters for motorcycles as well as automobiles; FY04 sales breakdown and GM: meters - 89.6% and 13.5%	
8	Huangshan Jinma	CH 000980	A	54	63	22	Y			Y I & II	2.92x	2.31x	NA	21.8x	20.4x	NA	45.0x	38.7x	NA	15.2%	20.7%	16.6%	6.9%	11.8%	6.5%	5.5%	4.4%	4.0%	67.0%	33.9%	-7.3%	51.8%	Manufactures and markets automobile and motorcycle instruments and auto parts; also paper products and security doors; FY04 sales breakdown and GM: instruments 37.2% and 16.4%, auto parts - 49.3% and 18.9%	
Mean											3.00x	2.78x	1.48x	19.0x	19.4x	NA	36.0x	49.8x	34.5x	27.0%	28.2%	23.2%	11.4%	12.8%	7.8%	7.1%	6.8%	3.6%	22.4%	0.1%	-4.9%	-35.2%		
Median											3.05x	2.55x	1.48x	17.7x	19.6x	NA	27.0x	34.3x	34.5x	25.9%	27.2%	20.2%	11.3%	12.2%	7.8%	7.1%	5.9%	4.2%	19.8%	-4.9%	-26.7%	-47.1%		
Mean - PRC Listed Only											2.93x	2.71x	1.48x	19.2x	19.4x	NA	37.5x	52.4x	34.5x	25.2%	26.2%	21.4%	10.4%	11.7%	7.4%	6.4%	6.3%	3.5%	23.4%	0.5%	-0.3%	-32.5%		
Median - PRC Listed Only											2.92x	2.31x	1.48x	16.7x	18.3x	NA	26.8x	34.9x	34.5x	22.8%	25.5%	19.6%	9.5%	11.8%	7.2%	5.5%	5.6%	4.0%	24.6%	-7.1%	-20.1%	-27.7%		
<b>TYRES</b>																																		
1	Giti Tyre	CH 600182	A	139	364	209	Y	Y	46%	II	1.74x	1.43x	NA	8.9x	6.8x	NA	13.7x	10.6x	NA	17.0%	13.1%	17.0%	13.9%	9.6%	13.4%	4.8%	1.1%	3.2%	63.1%	112.0%	127.6%	385.5%	Manufactures and markets tyres; products include cross-ply and radial tyres	
2	Shanghai Tyre & Rubber	CH 600623 CH 900909	B	614	911	584	Y	Y		II	1.56x	1.49x	NA	19.3x	19.2x	NA	NM	NM	NA	16.8%	17.5%	16.0%	6.1%	4.9%	5.5%	2.0%	2.3%	2.6%	10.3%	1.0%	25.7%	21.4%	Manufactures and markets rubber tyres, soap, and other rubber products; FY04 sales breakdown and units: tyres - 78% and 4.62 million sets; radial rate: 35%	
3	Aeolus Tyre	CH 600469	A	155	270	346	Y	Y	24%	II	0.78x	0.67x	NA	10.0x	7.3x	NA	16.5x	10.5x	NA	15.5%	14.2%	16.9%	6.0%	6.1%	8.3%	2.7%	2.9%	4.6%	36.9%	62.9%	87.8%	118.5%	Develops, manufactures, and sells tyres; products include cross-ply and radial tyres; pre and post business tax GMs: 27.5% and 13.7%; radial rate: 48.0%	
4	Guizhou Tyre	CH 000589	A	120	272	282	Y	Y	20%	II	0.96x	0.83x	NA	11.6x	10.1x	NA	NM	NM	NA	13.2%	12.4%	14.3%	4.1%	3.6%	4.0%	0.7%	0.2%	1.0%	34.0%	54.5%	48.2%	436.2%	Manufactures and markets cross-ply and radial tyres for construction machinery, heavy trucks, light trucks, cars, agricultural machinery, forestry machinery, and industrial machinery; radial rate: 35%	
5	Qingdao Doublestar	CH 000599	A	147	235	287	Y	Y	29%	II	0.82x	0.67x	NA	9.4x	8.6x	NA	25.2x	22.8x	NA	9.8%	11.8%	9.6%	4.3%	5.9%	4.4%	2.0%	2.6%	2.0%	52.3%	23.8%	13.4%	20.0%	Manufactures and markets tyres, athletic footwear, leather shoes, and shoes for special use; also manufactures foundry machinery, rubber and plastics machinery, and embroidery products; FY04 sales breakdown and pre-business tax GM: tyres - 79% and 11.5%, other - 21% and 12.2%; tyre production: 3.08 million sets	
Mean											1.17x	1.02x	NA	11.8x	10.4x	NA	18.5x	14.6x	NA	14.5%	13.8%	14.8%	6.9%	6.0%	7.1%	2.5%	1.8%	2.7%	39.3%	50.8%	60.5%	196.3%		
Median											0.96x	0.83x	NA	10.0x	8.6x	NA	16.5x	10.6x	NA	15.5%	13.1%	16.0%	6.0%	5.9%	5.5%	2.0%	2.3%	2.6%	36.9%	54.3%	48.2%	118.5%		

Sources: Bloomberg, periodic reports of companies, companies' websites, www.cninfo.com.cn

Notes:

- Share price data as at November 28, 2005 closing
- Exchange rates: 8.0929 RMB/US\$ 7.7580 HK\$/US\$
- Glossary: AM - aftermarket; Exp - export; 1 - yes; Growth means from FY0 to FY1 for Norstar and from 1H04 to 1H05 for all other companies
- Financial year ended December for all companies except Forstar, which has a financial year end of March
- Dongfeng Automobile's parent company expected to be listed on the HKSE in December 2005

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