The Evolution of the Chinese Car Market Over the Next Decade

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“It was the best of times, it was the worst of times, it was the age of wisdom, it was the age of foolishness”

Charles Dickens  A Tale of Two Cities

English novelist (1812–1870)
Presentation Outline

• Macroeconomic Review
• China Car Market
• Evolution 1: From Popularization to Maturity?
• Evolution 2: Will Chinese Brands Grow Up?
• Evolution 3: Large or Small?
Key Highlights and Assumptions (1)

- GDP growth of 11.9% in 2007, the fifth consecutive year that exceeded 10%; slow down in 2008 but still likely to exceed 10%. GDP in 2020 is expected to be four times GDP in 2000.
- Number of households that can afford cars increases significantly with diverse needs… Market and consumer dynamics entering first stage of maturity.

GDP (%change)

Urban/Rural Households RMB Saving Deposit (RMB 100 Mil)

Per Capita Disposable Income Of Urban Households (RMB)
• 2007 growth was once again powered by investment and export (24.8% and 25.7%).
• Foreign trade enjoying strong surplus — 7.5% of GDP in 2007. Exports crucial element of the boom and slow down in Feb 2008, but rebound in March.
• Retail sales growth of 20.6% in first quarter of 2008 — highest increase since 1997. Higher CPI is one of the factors.
Chinese Export Outlook Depends on Whether the U.S. Will Drag Down the Global Economy

Chinese export growth by major market (percent)

Source: World Bank
2007: Production Growth of 2.35 Million Units in Asia...China Again the Main Growth Engine

Global: 4.08m units; Asia: 2.35m units; China: 1.62m units

2007 Production Growth/Decline by Country/Region

Strongest Performers

Weakest Performers

Change in Vehicle Production (Thousand units)
Sales Growth Diffusing Away From Mega-Cities

Per Capita GDP in US$ (2006) | Car Ownership Per ‘000 people
--- | ---
Tier 1 | >5000 | 50
Tier 2 | 2500 - 5000 | 18
Tier 3 | 1500 - 2500 | 5
Tier 4 | <1500 | <5

4% of the population, 10% of GDP, 15% of the car market

30% of the population, over 50% of GDP, 60% of the car market
Car Price Decline Trend By Segment…C-Segment Compact Cars Experiencing Biggest Falls

- Segment A: 20.4%
- Segment B: 27.0%
- Segment C: 32.5%
- Segment D: 26.3%
- Segment E/F: 12.1%

Outlook:
- Local companies putting further pressure on prices
- Weak brands and older models most vulnerable
- Contemporary models, stronger brands and luxury segments less vulnerable
Prices Already Below U.S. Levels for Many Models in Segment A/B...But Prices Remain High in C and D

<table>
<thead>
<tr>
<th>Brand</th>
<th>Model Name</th>
<th>Retail Price (US$)</th>
</tr>
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<tbody>
<tr>
<td></td>
<td></td>
<td>CHINA</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LOW</td>
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<tr>
<td>Chevrolet</td>
<td>Aveo</td>
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<tr>
<td>Honda</td>
<td>Accord</td>
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</tr>
<tr>
<td>Hyundai</td>
<td>Sonata</td>
<td>$20,257</td>
</tr>
</tbody>
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Prices of Chevrolet models considerably lower in China

Price of Fit base model 28% lower than in the U.S.

Civic and Corolla base version prices 19% and 12% higher than in the U.S.

Accord and Camry base version prices 25% and 41% higher than in the U.S.
From Popularization to Maturity?
High-income earners (>RMB120,000 or $17,242):
- Surged by over 30% to 2.12 m from 2006
- Total income were over RMB 773 billion, 50% increase from 2006
- Average per capita income of high-income earners rose by 17% to RMB 364,000 ($48,571)
**1995–2010 CHINA TOTAL HIGHWAY MILEAGE (KM)**

- **Expected to overtake the U.S. in 2008 as number 1 in the world**

(Source: Ministry of Transportation, P.R.China)
Further Motorization Supported by Low Car Ownership Base and Faster Urbanization

Car ownership per 1000 population still low

Faster urbanization... 60% expected in 2020; More demand for transportation
Most Developed Countries Experienced the Three Stages

- **Gestation**: High growth rate on lower base, more new entrants
- **Popularization**: Relatively high to moderate growth rate, market enters first stage of maturity, more consolidation
- **Maturity**: Market share and growth rate stable, low growth rate on higher base
Will China Follow the Same Path?

Car Sales (Million)

- Toyota Corona 1960
- Toyota Crown 1970
- Hyundai Stellar 1983
- Hyundai Excel 1990
- Chery Flagwind 2002

CAGR (percent)

- Toyota Corona 0.15 1960
- Toyota Crown 0.49 1964
- Hyundai Stellar 0.59 1965
- Hyundai Excel 2.32 2002
- Chery Flagwind 12.11 2018

Gestation
- 35.9% 1964

Popularization
- 0% 1965
- 22.7% 1973
- 22.7% 1981
- 21.9% 1985
- 20.1% 1997
- 11.6% 2002
- 12.11 2018

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Will Chinese Brands Grow Up?
Government Policy — 11th Five-Year Plan Emphasis on Independent Technical Development

• Aims to control the total fuel consumption growth within 50% when PARC reaches 55 million units
  – Reduce average vehicle fuel consumption by 15%
  – Encourage use of small displacement vehicles
  – Government funding hybrid/fuel cell vehicle program in “863” project to develop alternative fuel and powertrain technologies
• Focus on promoting purely Chinese car manufacturers
  – Aim to increase market share of local brands to at least 50% in the passenger car market
• Strong support of independent R&D activities
  – Direct finance support and indirect tax incentives
• Aims to consolidate State-owned Enterprises

• Traditional Big 3 (FAW, Dongfeng, and SAIC) are facing increasing pressure to build up independent passenger car brands and high local R&D capability

• New emerging local Chinese companies will be able to obtain more government support to accelerate independent technical development
Competitive Price Positioning
Chinese Brands Make Significant Improvements (1)

- The styling and quality of Chinese brand cars are vastly improved as a result of leveraging the global supplier base and overseas design houses
  - Chery use Italian design houses, including Pinanfarina and Bertone
  - Changan set up overseas R&D centers in Japan and Italy
Chinese Brands Make Significant Improvements (2)

- Geely use Italian and Korean design houses to refresh its models

Geely NL SUV

Geely GT coupe

Geely FC-2 sedan

Geely HL MPV
Chinese Brands: Examples of Other Development Strategies (1)

**Acquisition of foreign companies to accelerate development**

- SAIC-NAC purchase of MG, Ssangyong and Rover technology

**Rely on foreign JV partner to transfer technology**

- FAW obtaining access to VW, Toyota, Mazda platforms
- Dongfeng developing own model based on PSA, Nissan platforms
Chinese Brands: Examples of Other Development Strategies (2)

Local OEMs cooperate with foreign companies
Chery alliance with Chrysler, Fiat and Quantum to gain R&D capability and international experience

Joint Ventures launch independent brand
Guangzhou Honda debuts its “Li-Nian”
Toyota also plans launch of independent brand with local partners
More Competition From Local OEMs

Chinese OEMs set very ambitious plans for the next five years:
- Much more aggressive expansion plans than foreign companies and will dominate new model launch in 2008 and 2009
- Will accelerate motorization rate rather than take significant share from foreign OEMs
- Core technology and brand are still the obstacles
  - “Horsepower is nothing without brainpower”
Technical Road Map of Chinese R&D Build-up

Step 1: Imitation, reverse engineering of foreign OEM models; R&D complete outsourcing

Step 2: Improve collaboration with international suppliers, joint development with overseas R&D institutes

Step 3: Synchronize the supply chain, independent development, increasing R&D capabilities and technology transfer

Step 4: Be able to compete with global OEMs

Further consolidation?

Pre 2000

Over 60 Local OEMs

Increasing R&D capabilities and technology transfer, stronger local supplier base

Shakeout, Market Reshuffling

2000–2015

Around 10 major local OEMs

Post 2015

Low end

Full Product Line-up

Low-to-Medium
Market Share Trend by OEM Country of Origin
Large or Small?
Fastest-growing Market in the World…
Gradual Changes in the Segmentation Profile

- Overtook the United Kingdom and France to become the fourth most significant vehicle market in 2002
- Overtook Germany to become the third-largest vehicle market in 2003
- Overtook Japan by a very narrow margin to become the second-largest market in 2005
- Passenger car sales rose seven-fold between 2001 and 2007
- Segmentation profile changed gradually
Price Controls Have Kept China’s Domestic Energy Prices Below International Prices for Many Years

2008 - less chance for fuel tax to be implemented due to inflation concern

International crude oil price has increased from $24 in 2002 to $117 a barrel

Domestic oil refining industry reported RMB 24 billion loss in Q1 2008

Diesel: (RMB/ton)
- Wholesale: 6,500
- Retail: 5,983

Scenario 3: 100% increase
Scenario 2: 50% increase
Scenario 1: 30% increase
Segment A Under Pressure — Fell by 16% in 2007

Sales Growth by Segment — 2007 vs 2006 (thousands)
Will China Be the Next U.S.?

• Fuel tax is crucial to consumer attitude towards fuel efficiency

• Fuel tax in developed countries:
  - Germany: 260%; France: 300%; Japan: 120%

• Consumption tax accounts for only 6% of gasoline and 3% of diesel retail price at the pump in China
  - Chinese fondness for larger cars is likely to continue in short term due to the government caps on fuel price:
    • Average car engine size increased from 1.53 litre in 2006 to 1.68 litre in 2007
    • Longer wheel base important feature for Chinese market: A6L, Passat, Cadillac SLS
  - Not a sustainable growth in the long term: will China be the next U.S.?
In 2007, nearly 50% of oil was imported, and this ratio is expected to rise to 61% in 2020.
Environmental Concerns

China emitted 2.3 billion tons of CO$_2$ in 2004; 25.9 million tons of sulphur emissions in 2006.

Acid rain now falls on 30% of China.

Coal makes up almost 75% of the country's energy needs.

16 of the 20 most polluted cities in the world are in China.

China is the second largest emitter of carbon dioxide after the United States.
B and C Segments Expected to Account for Nearly 50% of All Growth in the Period 2008–2018

Growth in Period 2008–2018
Total Growth: 5.8 million units

Includes Cars, SUVs and MPVs ... But Excludes Minibuses

2018
Total Sales: 12.1 million units

More opportunities for Chinese brands
Summary

• Overall motorization rate is still low and there is significant scope for growth in the next decade.
• The demand is in its first stage of maturity now and is expected to reach the next level in the period 2008–13.
• China will eventually become a mature market after 2018.
• Chinese brands are expected to continue to grow despite the production ramp up by global OEMs.
• Regulatory developments driven by Energy and Emission concerns. Compact and small cars will account for half of the growth.
Thank You!

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