Challenges/Opportunities in the Global Auto Industry

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Nationwide

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Overview

Global auto industry continues to expand and post record sales and revenue. Gains in 2007 have exceeded the outlook at the start of the year despite the underperformance in the US.

Unfortunately for domestic OEMs, pressures remain substantial due to three sets of factors:

- Slump in the US – down 2 million units from the peak in CY 2000
- Intense competitive pressures and the structural shift of the last two decades
- Impact and risk of governmental policies

In response, the industry is focused on a couple of key business strategies that will continue to impact the Midwest and the long term viability of the industry:

- Rapid expansion outside of developed markets
- Aggressive cost reduction and the corresponding shifting of footprint and operating structure
- An even more aggressive push on the product side – in terms of price, features, performance and content
# Economic Outlook

## Real GDP Growth (%)  

<table>
<thead>
<tr>
<th>Region</th>
<th>'95-'04</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>'09-'12</th>
</tr>
</thead>
<tbody>
<tr>
<td>World</td>
<td>2.7%</td>
<td>3.1%</td>
<td>3.4%</td>
<td>3.0%</td>
<td>3.0%</td>
<td>3.1%</td>
</tr>
<tr>
<td>NA</td>
<td>3.1%</td>
<td>3.1%</td>
<td>3.0%</td>
<td>2.0%</td>
<td>2.7%</td>
<td>3.1%</td>
</tr>
<tr>
<td>Europe</td>
<td>2.3%</td>
<td>2.3%</td>
<td>3.3%</td>
<td>3.0%</td>
<td>2.7%</td>
<td>2.6%</td>
</tr>
<tr>
<td>AP</td>
<td>2.8%</td>
<td>3.9%</td>
<td>3.8%</td>
<td>3.9%</td>
<td>3.7%</td>
<td>3.6%</td>
</tr>
<tr>
<td>LAAM</td>
<td>3.1%</td>
<td>5.0%</td>
<td>4.9%</td>
<td>4.5%</td>
<td>4.0%</td>
<td>3.5%</td>
</tr>
</tbody>
</table>

R^2 = 0.9759
Sales and Mix Shifts Impact Global Auto Revenues

Global Auto Revenue* by Region ($B)

- LAAM
- AP
- Europe
- NA

*OEM revenue; excludes taxes, dealer gross margins, logistics and other costs on new vehicles
A Substantial Re-Alignment of Global Sales

1996
- Mature Market: 40.8 (78%)
- Emerging: 7.5 (15%)
- Other: 3.4 (7%)
- Total: 51.7 mil.

2006
- Mature Market: 44.0 (66%)
- Emerging: 17.1 (25%)
- Other: 6.3 (9%)
- Total: 67.4 mil.

2016
- Mature Market: 48.0 (51%)
- Emerging: 37.1 (39%)
- Other: 9.2 (10%)
- Total: 94.3 mil.
Realignment Should Continue Through the Next Decade

Millions – New Vehicle Sales by Region


- AP 4.8%
- Europe 2.7%
- LAAM 3.8%
- NA 2.8%

Forecast

Source: GMIA; GSRA, July 2007 Short-term Forecast, Prelim BP08
US Economic and Industry Outlook

The US economy is expected to remain in a slow growth phase through 2008.

- Employment and income growth are offsets but the headwinds are substantial.

The housing market is likely to deteriorate further and energy prices remain a concern.

- Home construction activities have not bottomed out.

Vehicle market will struggle to stay around 16 million units in the near term—likely more risk on mix and perhaps a third consecutive year of falling revenue.
Nonfarm Payroll Employment
Monthly Change, Thousands

Nonfarm payroll employment increased by 166,000 in October but the pace of expansion is slowing down

Source: Bureau of Labor Statistics /Haver Analytics
Wages & Salaries versus Disposable Personal Income
Year-Over-Year Percentage Change, Chained 2000$

-4 -2 0 2 4 6 8 10

Wage and Salary Disbursements
Disposable Personal Income

Y/Y% Change, Chained 2000$

<table>
<thead>
<tr>
<th>Wage and Salary Disbursements</th>
<th>Aug-06</th>
<th>Sep-06</th>
<th>Oct-06</th>
<th>Nov-06</th>
<th>Dec-06</th>
<th>Jan-07</th>
<th>Feb-07</th>
<th>Mar-07</th>
<th>Apr-07</th>
<th>May-07</th>
<th>Jun-07</th>
<th>Jul-07</th>
<th>Aug-07</th>
<th>Sep-07</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.8%</td>
<td>3.2%</td>
<td>4.2%</td>
<td>4.6%</td>
<td>4.1%</td>
<td>3.4%</td>
<td>3.2%</td>
<td>3.7%</td>
<td>3.9%</td>
<td>4.8%</td>
<td>4.4%</td>
<td>4.9%</td>
<td>5.3%</td>
<td>4.6%</td>
<td></td>
</tr>
</tbody>
</table>

| Disposable Personal Income   | 5.3%   | 3.7%   | 4.2%   | 3.2%   | 2.9%   | 3.0%   | 3.3%   | 3.7%   | 3.4%   | 3.6%   | 3.3%   | 4.0%   | 4.4%   | 3.9%   |

New home sales increased from 0.735 to 0.77 million in September but the increase was because August sales was revised down.

During the month, existing home sales dropped m-o-m from 4.79 to a 4.38 million annualized rate.
Crude Oil Price v.s. U.S. Retail Gas Price

Domestic Spot Market Price: Light Sweet Crude Oil, WTI, Cushing
EOP, $/Barrel

U.S. Retail Gasoline Price: Regular Grade
Avg, US$/Gallon

Sources: WSJ, EIA/DOE /Haver
Deteriorating buying attitude following gas prices back above $3

Current Conditions for Buying Vehicles: Bad: Price of Fuel

U.S. Retail Gasoline Price: Regular Grade
Avg, US$/Gallon

Sources: UMICH, EIA/DOE /Haver

With gas prices climbing back above $3, buying attitude deteriorates
Lower income households are hurt more due to run-up gas prices and food prices.

Consumer Sentiment: Families with Income Greater than $50,000/Year

Consumer Sentiment: Families with Income Less than $50,000/Year

Source: University of Michigan /Haver Analytics
New vehicle buyers by annual household income

- Less than 74.9k
- 75k to 124.9k
- 125k to 200k
- 200k and above

Income categories:
- Less than 74.9k
- 75k to 124.9k
- 125k to 200k
- 200k and above

Years:
- 2004
- 2005
- 2006
- 2007
Motor vehicle and parts purchase as a % of GDP

(No text content available)
Despite high gas prices, vehicle transaction prices continue to rise
US Industry Annual Rates (SAAR)

Million

2008 Forecast
Upside/Downside Risks

**Upside Factors**
- Easing monetary policy
- Contained Inflation risks
- Resilient manufacturing investment
- Solid job market

**Downside Factors**
- Deeper and prolonged housing correction
- Tightened credit market
- Dampened consumer confidence
- Weaker labor market
- Oil/gas prices remain high on a persistent basis
Impact of $100 Oil on US Economy and Industry

- $100 Oil could drag GDP growth from 2.3% to 2.1% in 2008
- Unemployment rate is expected to creep up from 5.1% to 5.3%
- Headline inflation may increase from 2.8% to 3.4%
- Vehicle sales would be reduced by about 100 - 150 thousand units
Car Market Share versus Gas Prices

Gas Prices ($/gal)

Car Share

[Graph showing the relationship between gas prices and car market share from January 2004 to October 2007.]
Supply-Side Dynamics is Really About Reshaping the Competitive Landscape, Implications for OEMs are at Times Overwhelming

From the product perspective
- Increased competitive pressure
- Significant upgrading of product

Aggressive cost reduction and price restraints
- Pressure to increase productivity
- Platform consolidation
- Global manufacturing and supply-chain optimization

Pressure on margins
- Profitable niches have to be constantly defended
- Increasing emphasis on strong brands, QRD, product differentiation
- Divergence of winners and losers
Increased Competition Evident Across the Globe

Total Vehicle* Entries – Selected Markets

U.S.  
1995  346  283  2006  384  2011**

C/W. Europe  
1995  289  394  442  2006  2011**

Japan  
1995  204  249  2006  249  2011**

Australia  
1995  142  217  2006  235  2011**

Major Emerging Markets  

Mexico  
1995  199  75  2006  245  2011**

Russia  
1995  60  2011**

India  
1995  19  53  2006  96  2011**

Thailand  
1995  85  2006  65  2011**

Brazil  
1995  110  115  2006  149  2011**

S. Africa  
1995  73  2006  188  2011**

Major Mature Markets  

U.S.  
1995  346  283  2006  384  2011**

C/W. Europe  
1995  289  394  442  2006  2011**

Japan  
1995  204  249  2006  249  2011**

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China  
1995  79  2006  231  2011**

Russia  
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India  
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Brazil  
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S. Africa  
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*Non-Commercial  
** 2011 – forecast

Source: Historical Counts from GSRA applying .01% cutoff  
Forecast from Global Insight
Increasing Price Pressure Reflects Competitive Intensity

U.S. - Real New Vehicle Price Developments
(Inflation & Equip. Adjusted, All Makes)

-9.9% change (Nov-86 to Dec-95)
-28.8% change (Jan-96 to Jul-07)

Nov-86, 1.024
Jul-07, 0.655
Price Pressure is Not Just a U.S. Issue

China Passenger Car Pricing Index

Prices down ~ 25% in 3 years

Jan-04 0.9 0.8 0.7 0.6 0.5 0.4 0.3 0.2 0.1 0.0

Jan-05 0.893

Jan-06 0.844

Jan-07 0.789

Jun-07, 0.763

Source: www.cheshi.com
Big Three US Market Share

Source: GSRA
Government and OEM Demands for Regulation

• Governments will increasingly look to control pollution, congestion, and develop appropriate infrastructure and regulatory processes

• Scope of regulatory issues is broad
  ■ Vehicle use requirements
  ■ Facilities and production controls
  ■ End-of-Life vehicles
  ■ Distorting tax regimes
  ■ Trade agreements
  ■ Capacity and export controls
  ■ JV controls
  ■ Safety Standards

• OEMs will seek competitive advantages through regulations
  ■ Minimize cost of regulation for production
  ■ Access to markets