Topics for Today

• Population and Demographic Trends
• Vehicle Ownership and Real GDP Per Capita
• Trends in Global Vehicle Demand
• Regulatory and Trade Outlook
Population by Region in 2002 to 2022

Emerging Markets Account for 84% of Total World Population in 2002, 86% in 2022

Projected Global Population (bils.)

- Japan – (4)%
- North America - 20%
- Europe – 1%
- South America - 23%
- Other Asia/Pacific – 50%
- India – 15%
- China – 13%
- Other – 34%

Country/Region and Cumulative Growth Rate

- Emerging Markets: 84%
- Developed Markets: 85%
- Total World: 86%

Source: U.S. Census International Database
Over 3 Billion People will be Between 15 and 44 In 2020 – Opportunity for Differentiation by Understanding Global Youth Needs and Requirements

Percent of Total Population 15 to 44

Developed Europe, Japan, and China youth population shares are declining substantially

Source: U.S. Census International Database
Developed Europe, Japan, and China are aging rapidly.

This age group has the highest buy rate among vehicle buying population.

Changing Population Age Composition

<table>
<thead>
<tr>
<th>Region</th>
<th>0-44</th>
<th>45-54</th>
<th>65+</th>
</tr>
</thead>
<tbody>
<tr>
<td>North America</td>
<td>76</td>
<td>76</td>
<td>7</td>
</tr>
<tr>
<td>South America</td>
<td>76</td>
<td>76</td>
<td>7</td>
</tr>
<tr>
<td>Europe (19 countries)</td>
<td>7</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Japan</td>
<td>146</td>
<td>395</td>
<td>584</td>
</tr>
<tr>
<td>Other Asia-Pacific</td>
<td>395</td>
<td>146</td>
<td>76</td>
</tr>
<tr>
<td>All Other (147 countries)</td>
<td>1,887</td>
<td>1,614</td>
<td>1,287</td>
</tr>
</tbody>
</table>

Population in Millions

<table>
<thead>
<tr>
<th>Year</th>
<th>North America</th>
<th>South America</th>
<th>Europe</th>
<th>Japan</th>
<th>China</th>
<th>Other Asia-Pacific</th>
<th>All Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>422</td>
<td>362</td>
<td>450</td>
<td>127</td>
<td>1,287</td>
<td>1,614</td>
<td>1,887</td>
</tr>
<tr>
<td>2020 Proj.</td>
<td>498</td>
<td>438</td>
<td>457</td>
<td>123</td>
<td>1,433</td>
<td>2,009</td>
<td>2,471</td>
</tr>
</tbody>
</table>

Source: U.S. Census International Database
Over 700 Million People will be Older than 65 In 2020 – Opportunity to Design Vehicles for Changing Physiology

Developed Europe, Japan, and China are aging rapidly

<table>
<thead>
<tr>
<th>Region</th>
<th>2002</th>
<th>2010</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>World Population 65+ in Millions</td>
<td>436</td>
<td>517</td>
<td>707</td>
</tr>
</tbody>
</table>

Source: U.S. Census International Database
Vehicle Ownership Increases with Income Per Person

Real GDP per Capita (@ppp1998$)

<table>
<thead>
<tr>
<th>Country</th>
<th>2002</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>5,000</td>
<td>35,000</td>
</tr>
<tr>
<td>China</td>
<td>5,000</td>
<td>25,000</td>
</tr>
<tr>
<td>Brazil</td>
<td>10,000</td>
<td>20,000</td>
</tr>
<tr>
<td>Poland</td>
<td>15,000</td>
<td>30,000</td>
</tr>
<tr>
<td>Japan</td>
<td>20,000</td>
<td>40,000</td>
</tr>
<tr>
<td>Germany</td>
<td>25,000</td>
<td>45,000</td>
</tr>
<tr>
<td>U.S.</td>
<td>30,000</td>
<td>50,000</td>
</tr>
</tbody>
</table>

Memo: Average Annual Growth Rate
- India: 4%
- China: 6%
- Brazil: 3%
- Poland: 3%
- Japan: 2%
- Germany: 2%
- U.S.: 2%

Source: World Bank
Determinants of Income Per Capita

- Productivity Growth
- Market Access
- Human Capital and Other Investment
- Institutional Framework – Rule of Law and Property Rights
North America, Europe, and Japan Accounted for 86% of Vehicle Sales in 1990, and 77% in 2000
Looking Ahead

Emerging Markets will Represent 90% of Vehicle Sales Growth During the Next Decade

2002
- North America: 35%
- Europe: 19%
- South America: 4%
- Japan: 10%
- China: 6%
- Asia Ex: China & Japan: 9%
- All Other: 7%

2012
- North America: 29%
- Europe: 19%
- South America: 5%
- Japan: 9%
- China: 10%
- Asia Ex: China & Japan: 12%
- All Other: 9%

Emerging Markets: 90% of Vehicle Sales Growth
Global Vehicle Sales

90-98 Average Annual Growth: 1.7%

98-02 Average Annual Growth: 2.4%
Historical Automotive Capacity

Source: PWC Autofacts, 10/02
Projected Automotive Capacity

Cumulative Growth 2002 - 2008

North America: 0.8
Europe: -0.2
Japan: -0.4
Asia Less Japan: 6.9
ROW: 1.2
South America: 0.1

Source: CSM