

# Challenges/Opportunities in the Global Auto Industry

**Paul Ballew**

**Senior Vice President, Customer Insights  
Nationwide**

**November 30, 2007**



# 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**

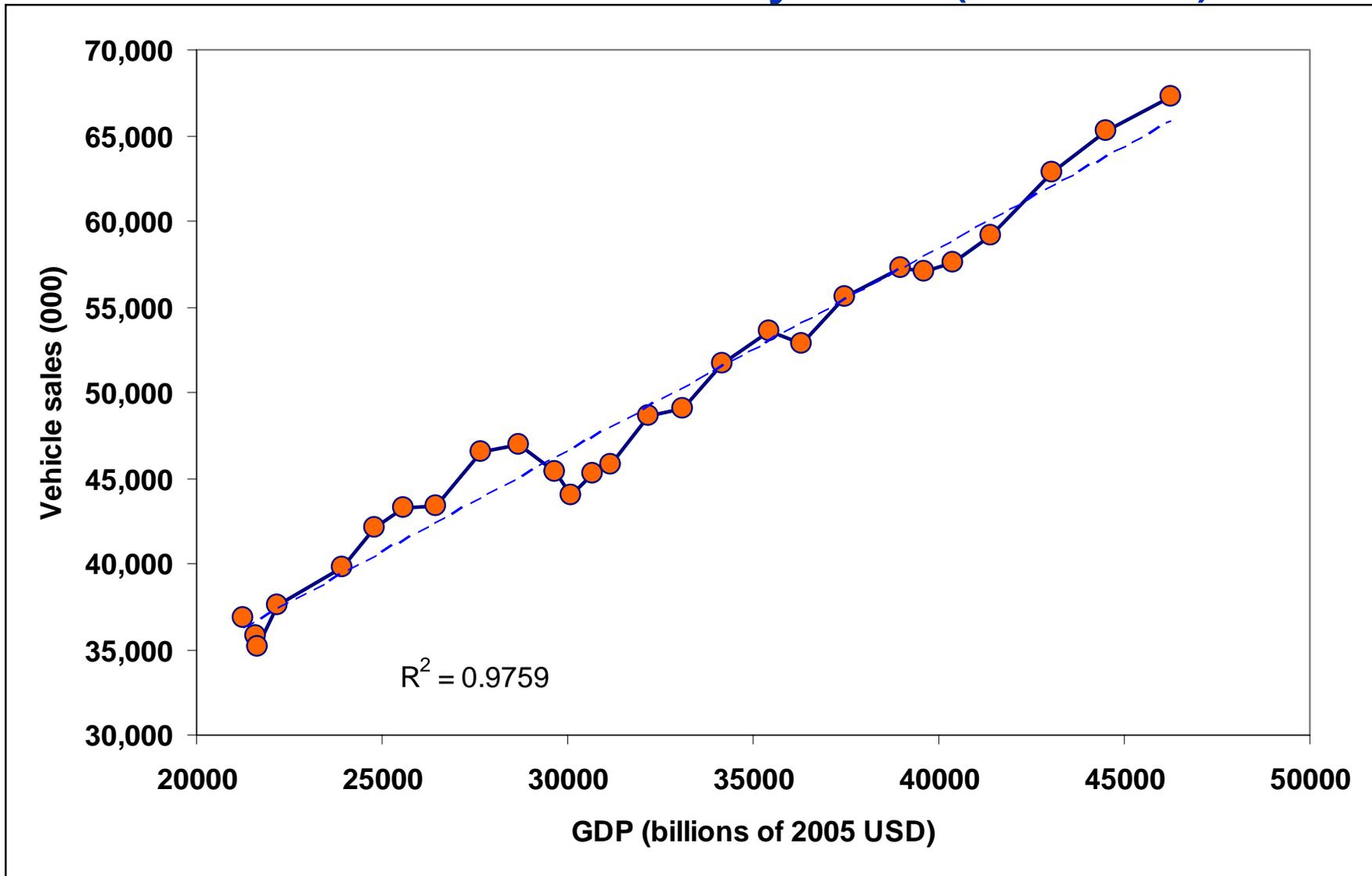


# Economic Outlook

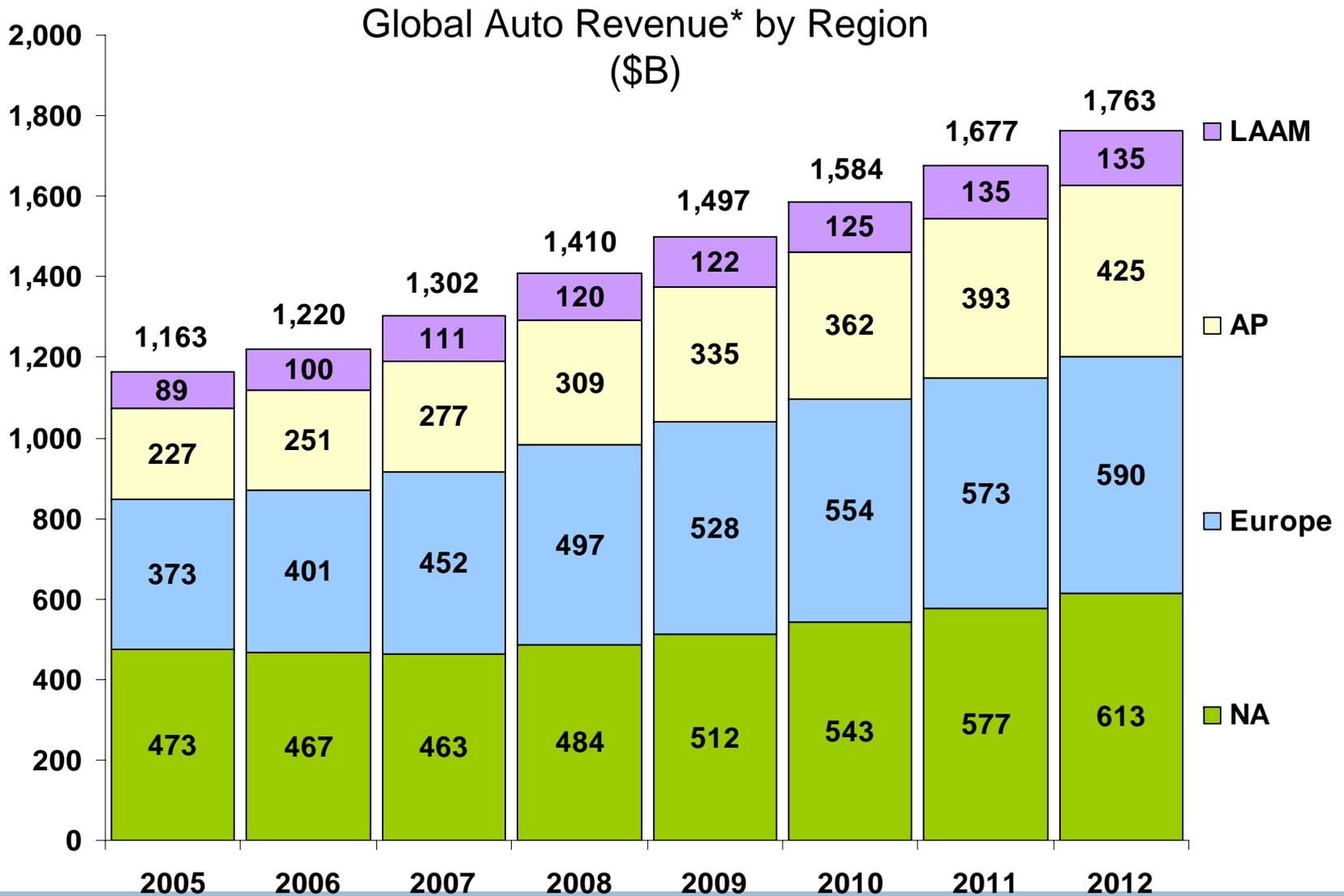
## Real GDP Growth (%)

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

# Global GDP and Industry Sales (1980 – 2006)



# Sales and Mix Shifts Impact Global Auto Revenues



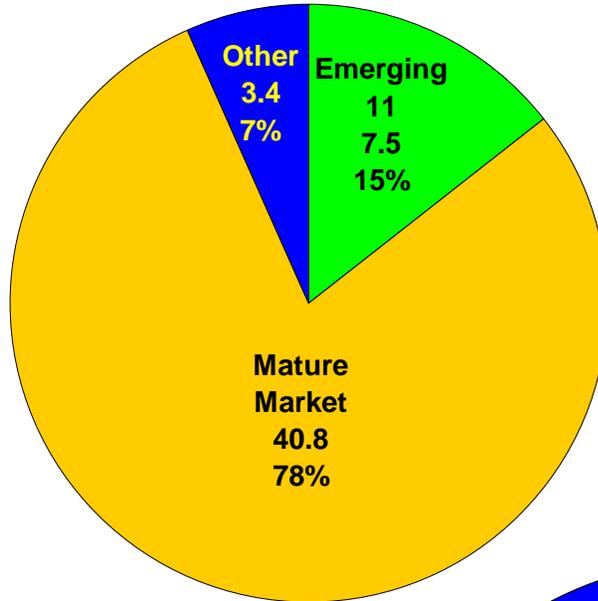
\*OEM revenue; excludes taxes, dealer gross margins, logistics and other costs on new vehicles



# A Substantial Re-Alignment of Global Sales

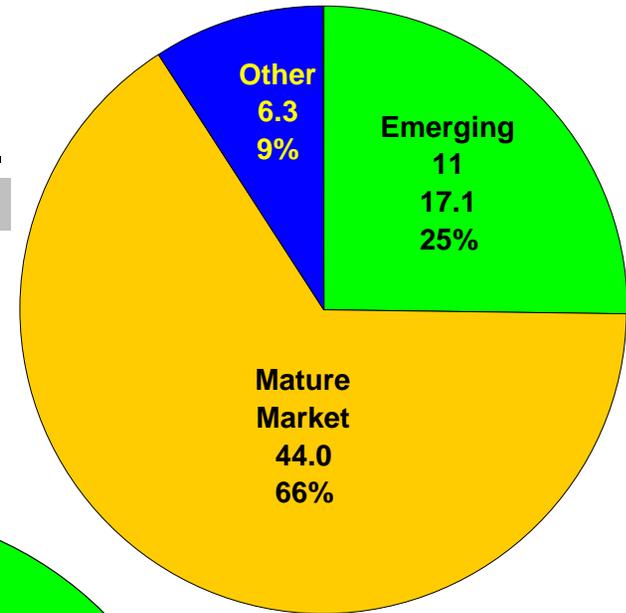
**1996**

51.7 mil.



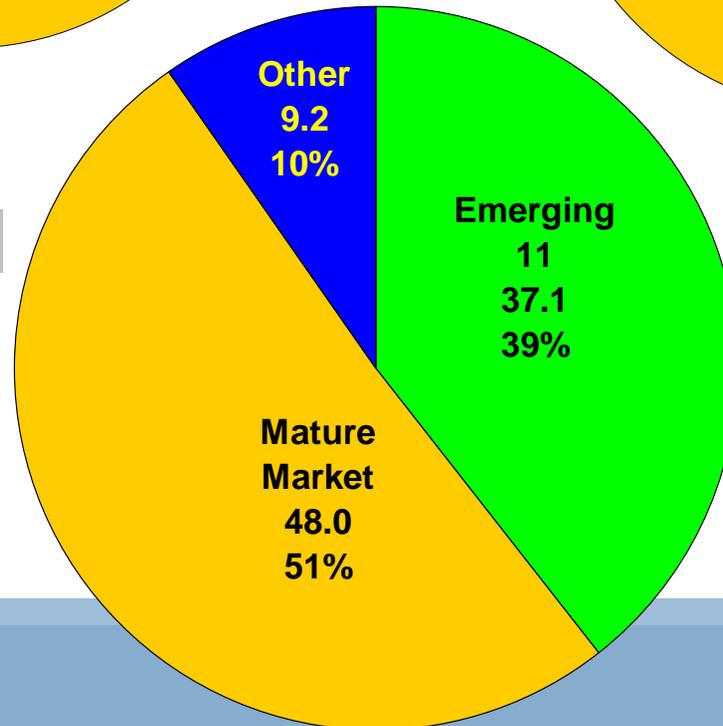
**2006**

67.4 mil.



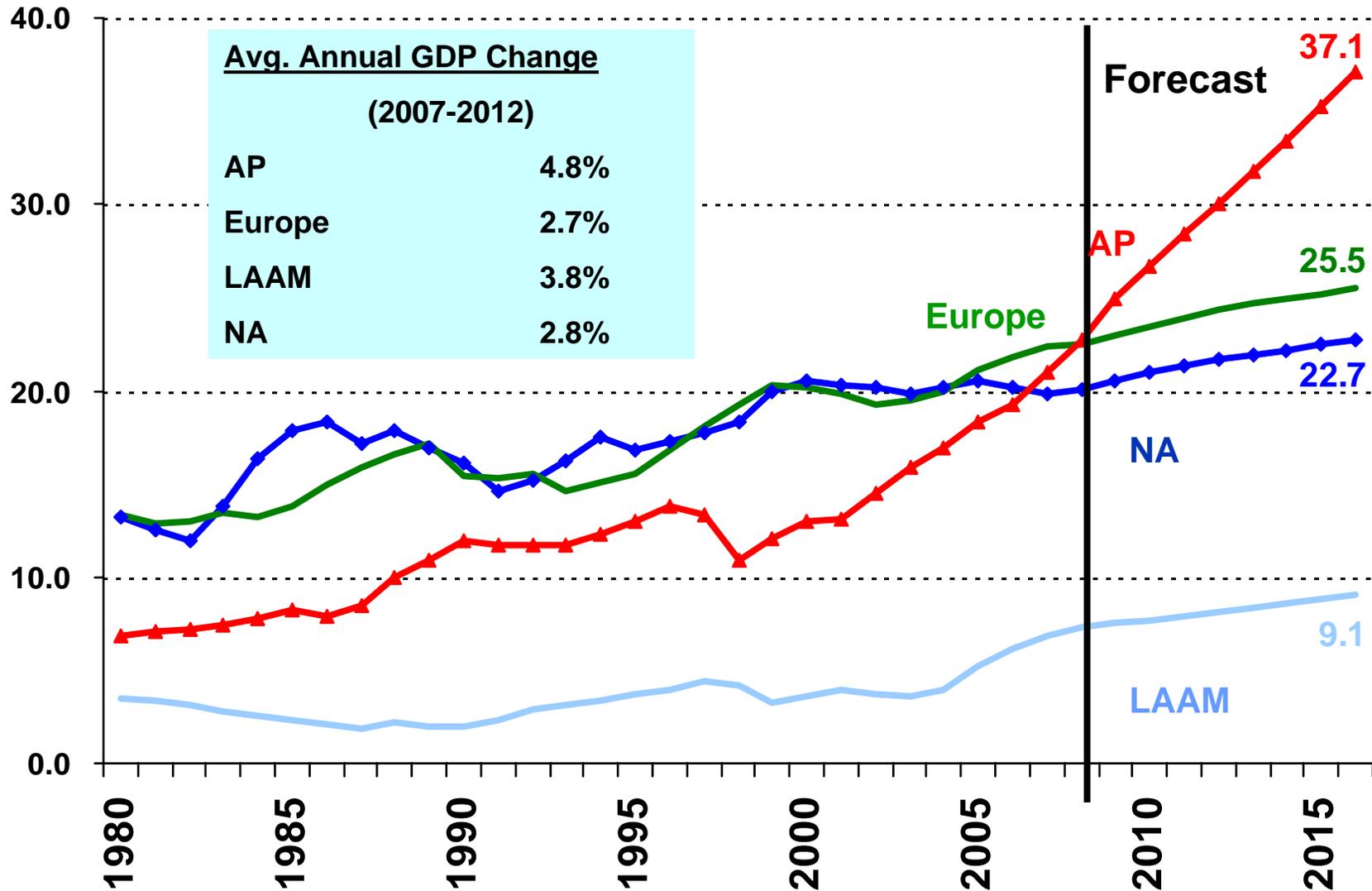
**2016**

94.3 mil.



# Realignment Should Continue Through the Next Decade

Millions – New Vehicle Sales by Region



Source: GMIA; GSRA, July 2007 Short-term Forecast, Prelim BP08

12/4/2007

# 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.

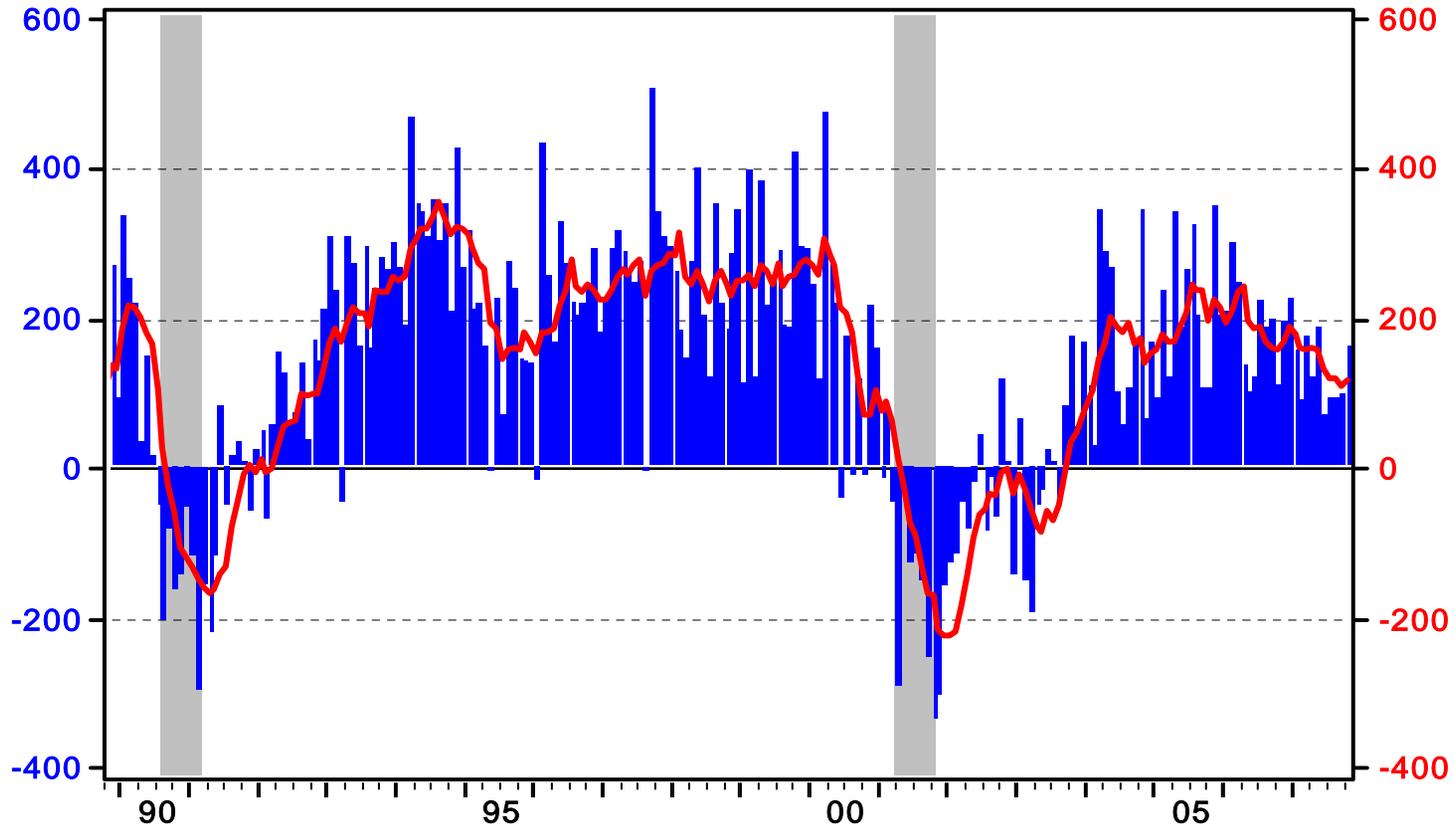
The housing market is likely to deteriorate further and energy prices remain a concern.

- 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.



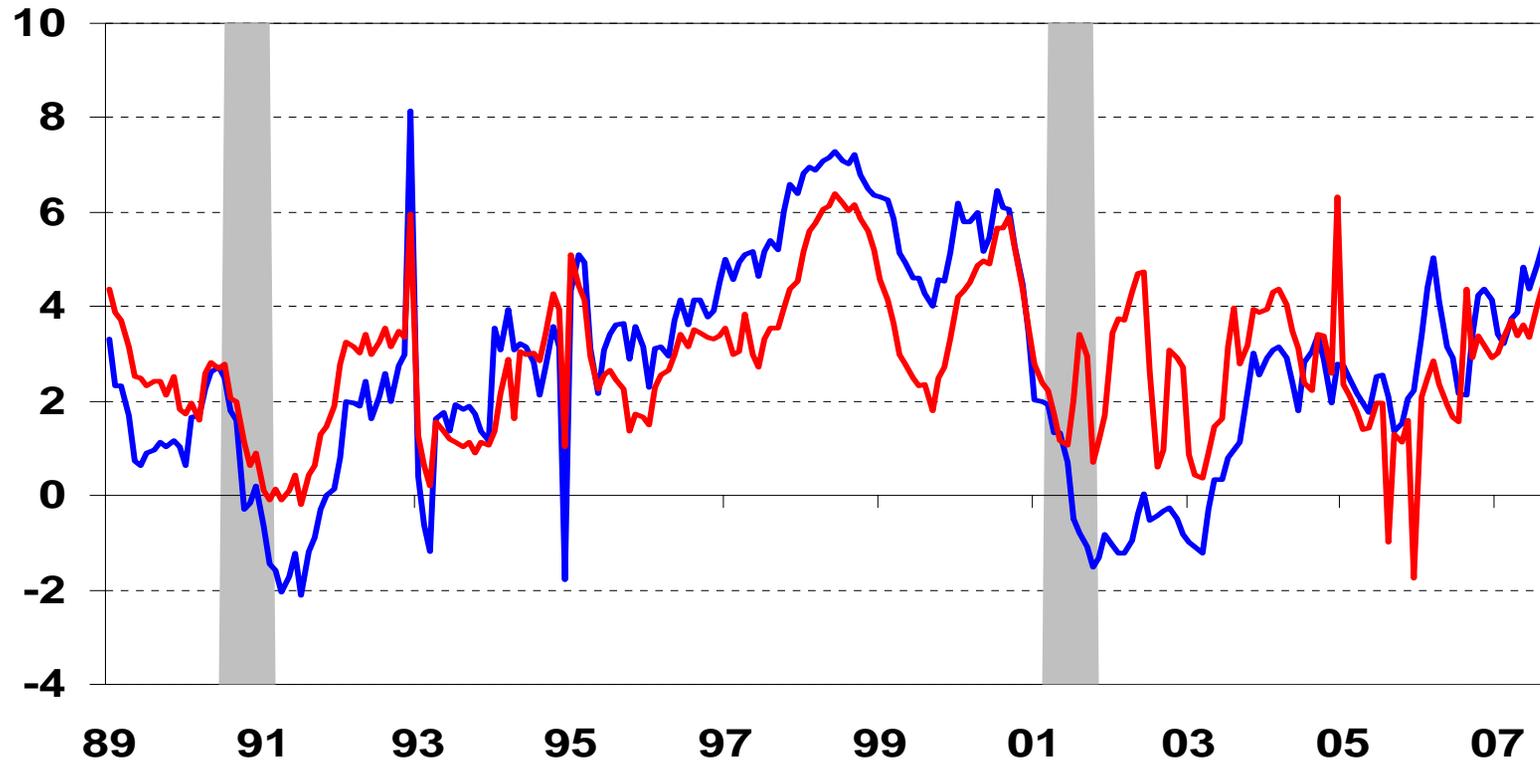
# Nonfarm Payroll Employment Monthly Change, Thousands



Source: Bureau of Labor Statistics /Haver Analytics

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

## Wages & Salaries versus Disposable Personal Income Year-Over-Year Percentage Change, Chained 2000\$



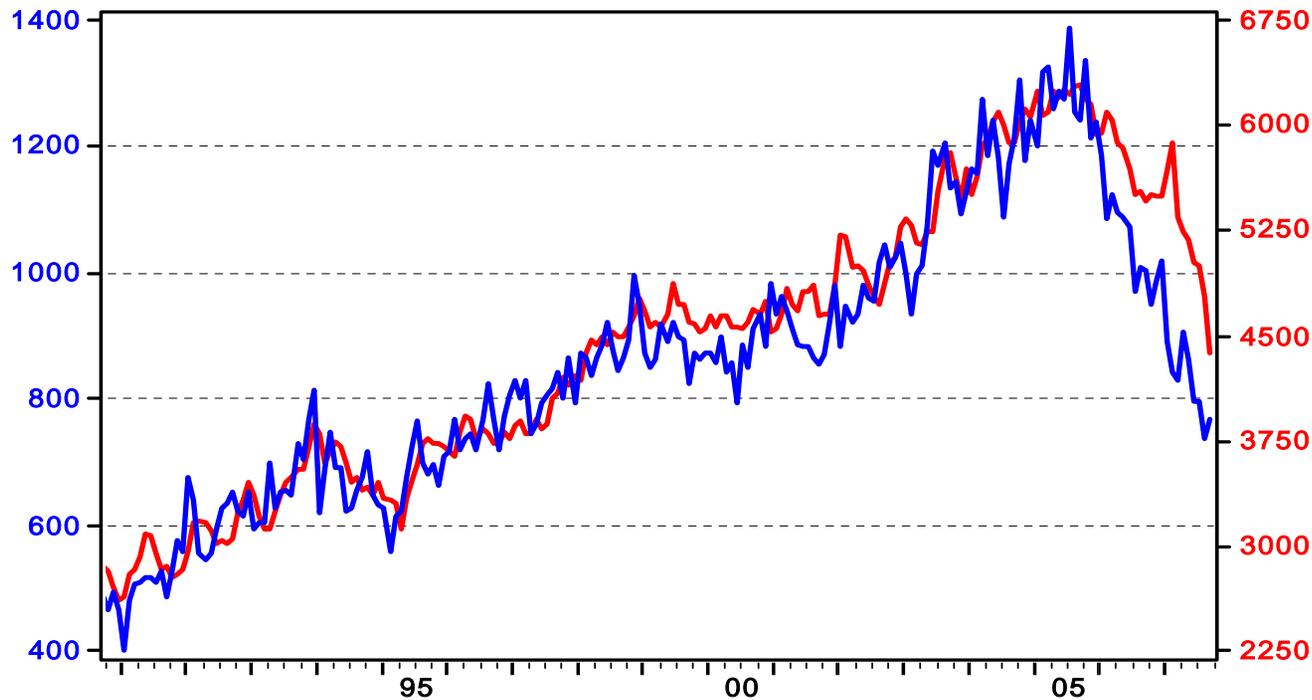
— Wage and Salary Disbursements — Disposable Personal Income

<u>Y/Y% Change, Chained 2000\$</u>	<u>Aug-06</u>	<u>Sep-06</u>	<u>Oct-06</u>	<u>Nov-06</u>	<u>Dec-06</u>	<u>Jan-07</u>	<u>Feb-07</u>	<u>Mar-07</u>	<u>Apr-07</u>	<u>May-07</u>	<u>Jun-07</u>	<u>Jul-07</u>	<u>Aug-07</u>	<u>Sep-07</u>
Wage and Salary Disbursements	1.8%	3.2%	4.2%	4.6%	4.1%	3.4%	3.2%	3.7%	3.9%	4.8%	4.4%	4.9%	5.3%	4.6%
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 and Existing Single-Unit Home Sales

New 1-Family Houses Sold: United States  
SAAR, Thous

Existing 1-Family Home Sales: United States  
SAAR, Thous



Sources: Census Bureau, National Association of Realtors /Haver Analytics

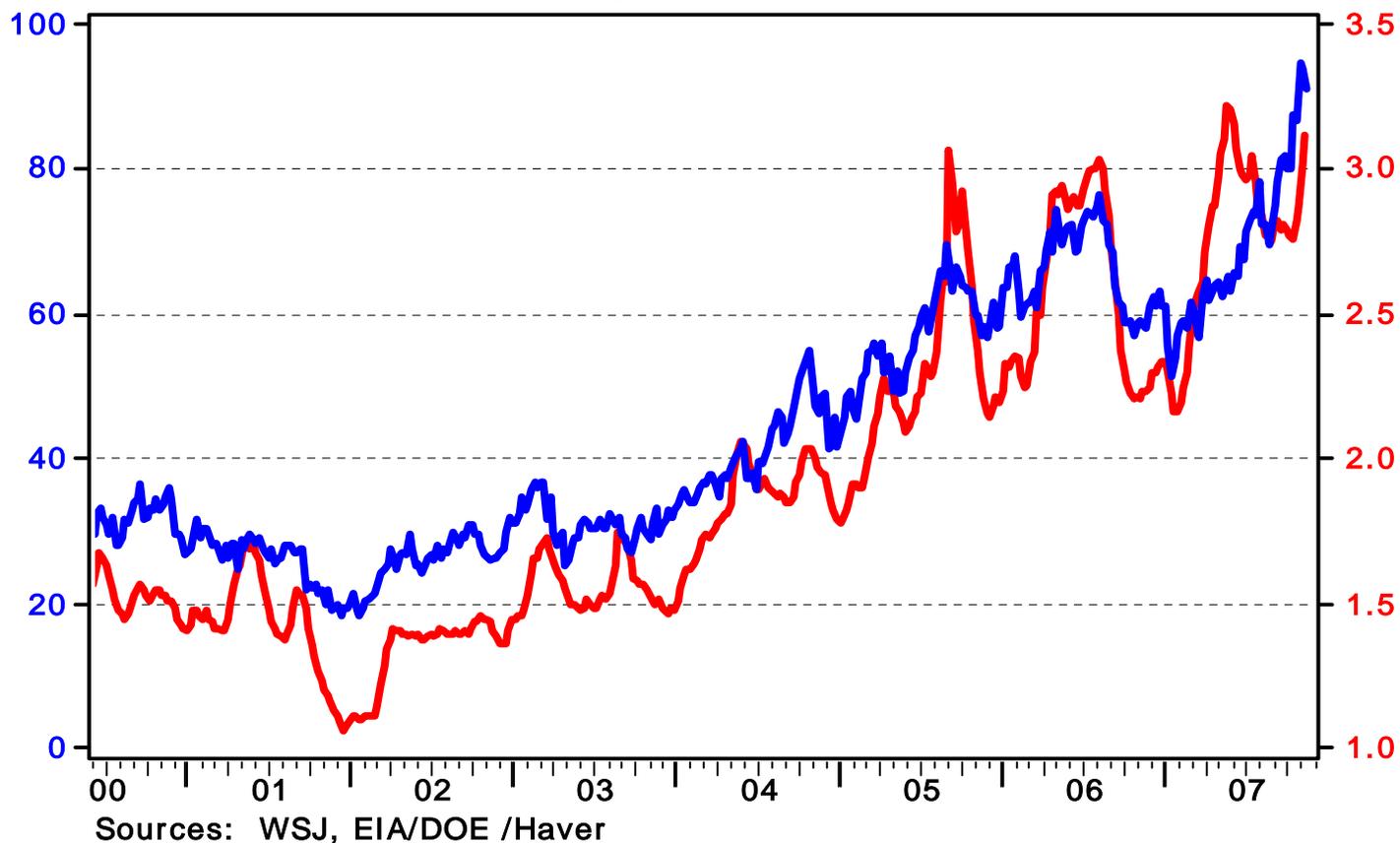
**New home sales increased from 0.735 to 0.77 million in September but the increase was because August sales was revised down.**

**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

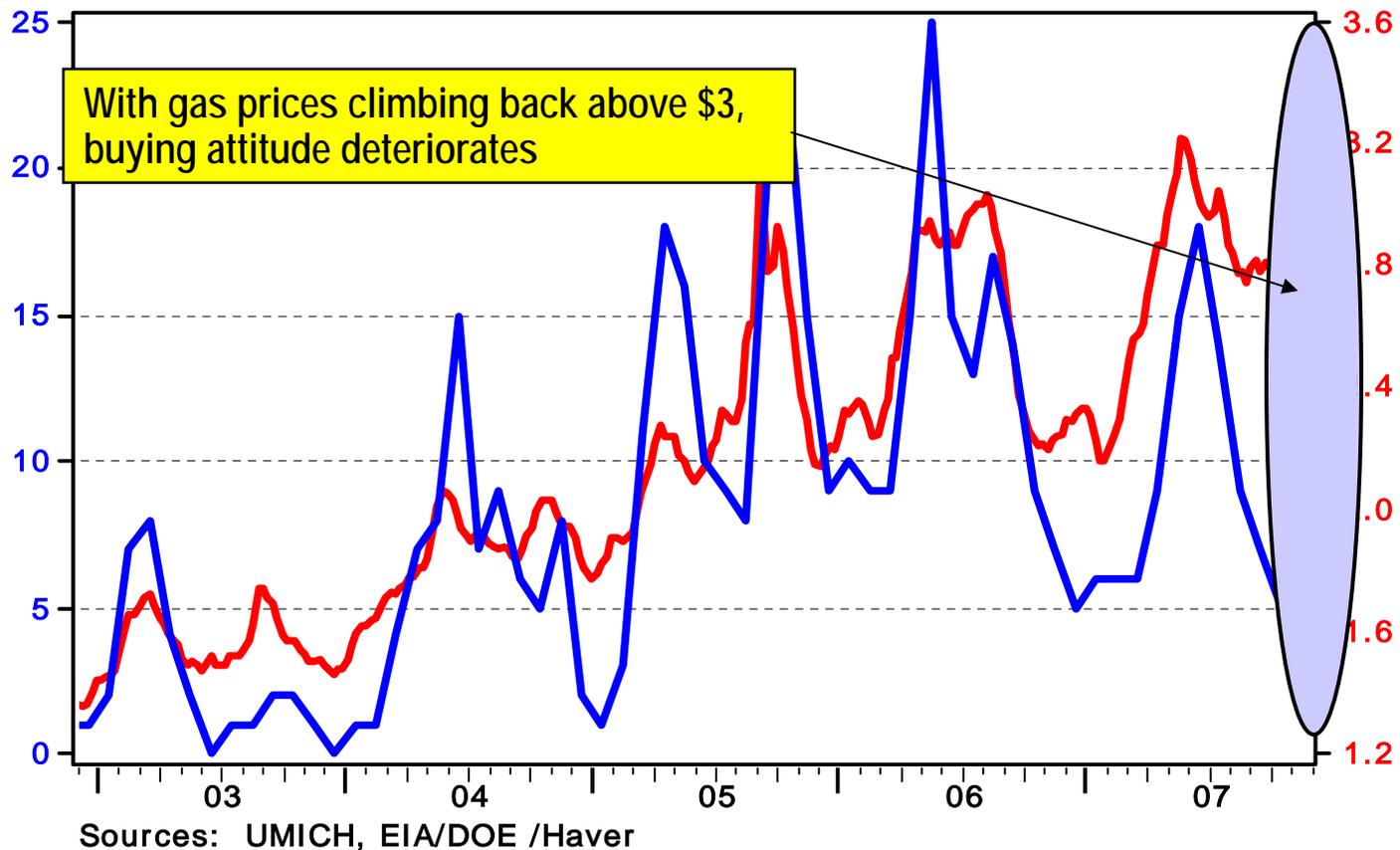
U.S. Retail Gasoline Price: Regular Grade  
Avg, US\$/Gallon



# Deteriorating buying attitude following gas prices back above \$3

Current Conditions for Buying Vehicles: Bad: Price of Fuel  
%

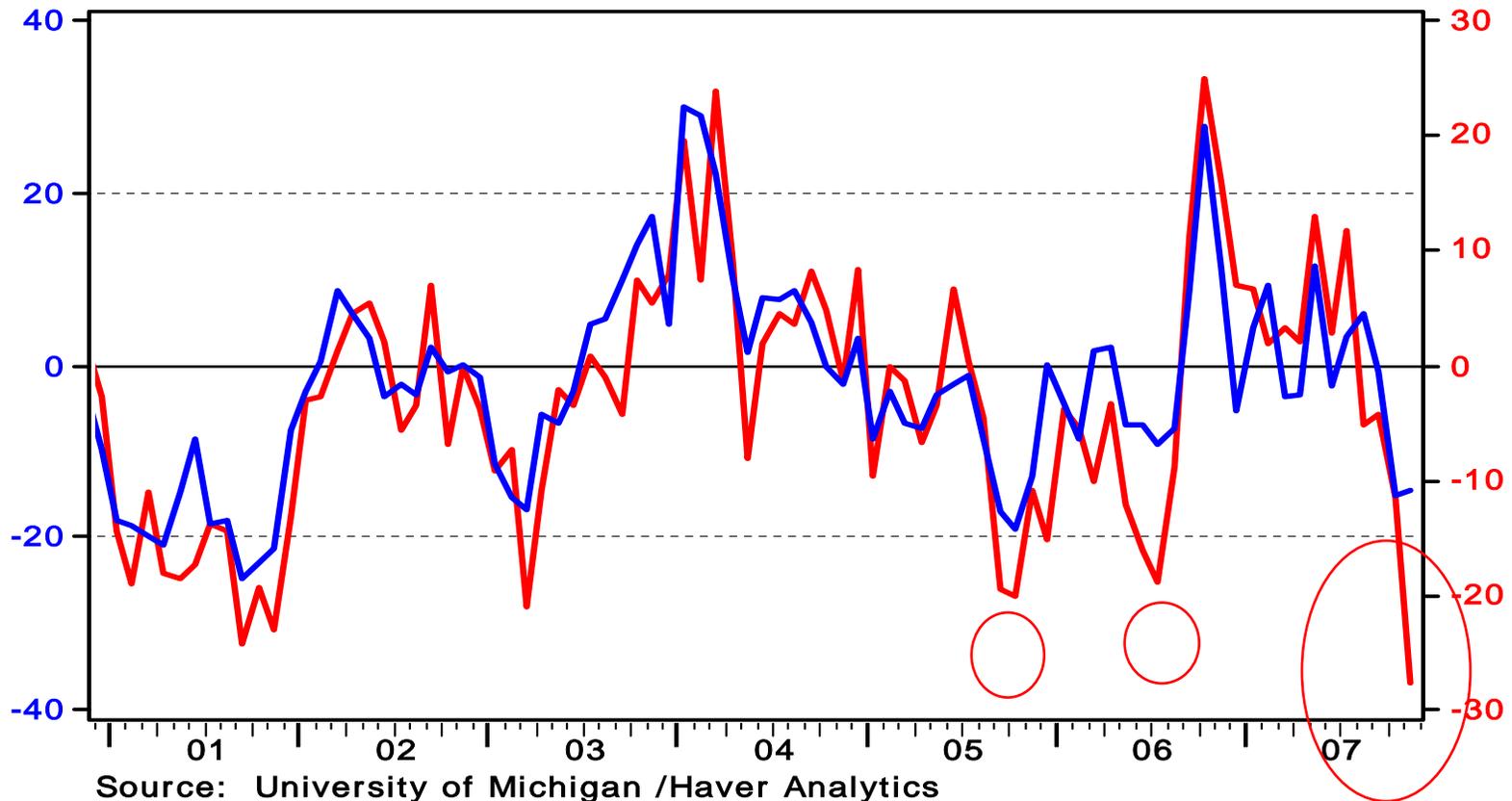
U.S. Retail Gasoline Price: Regular Grade  
Avg, US\$/Gallon



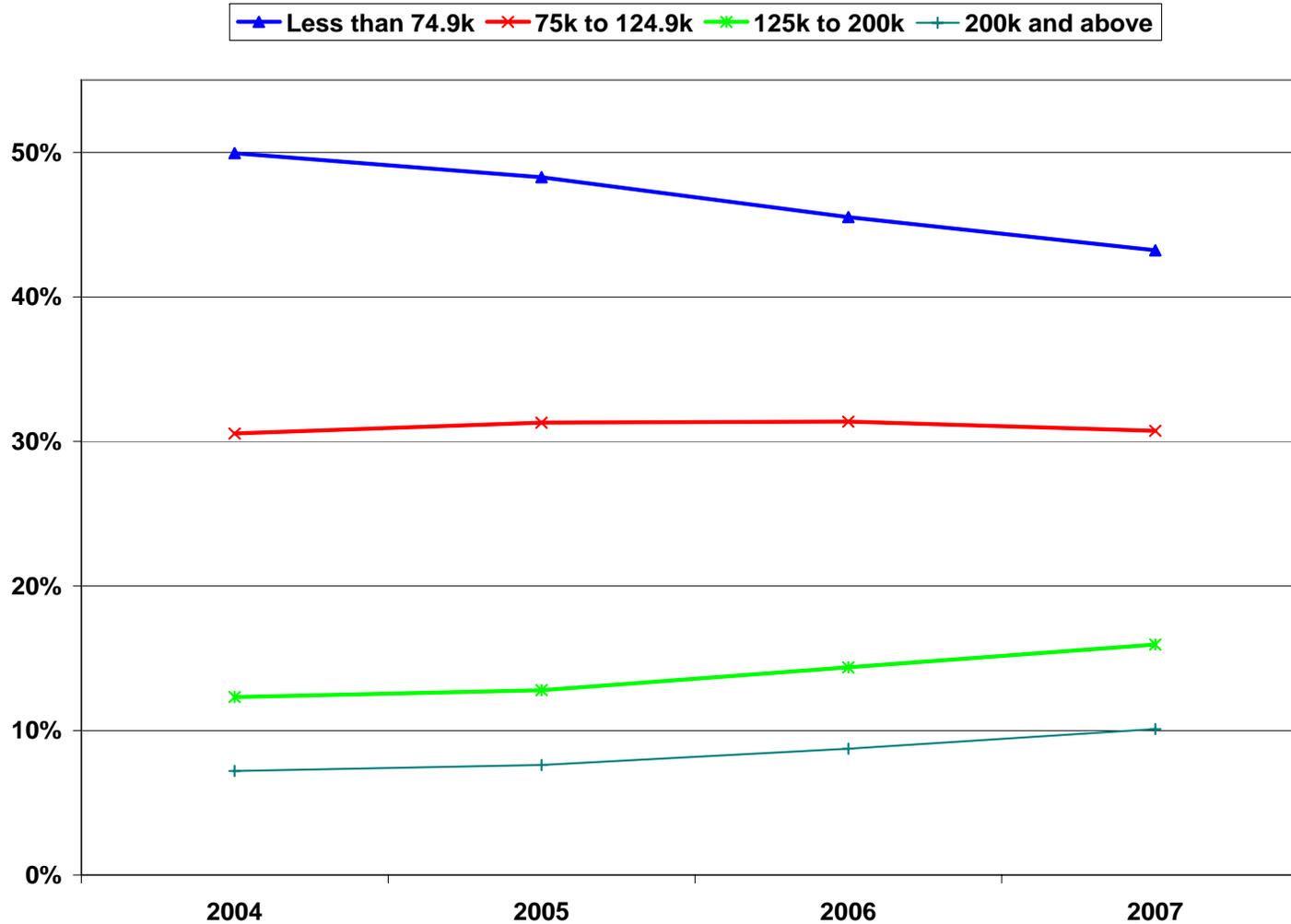
# Lower income households are hurt more due to run-up gas prices and food prices

Consumer Sentiment: Families with Income Greater than \$50,000/Year  
% Change - Year to Year Q1-66=100

Consumer Sentiment: Families with Income Less than \$50,000/Year  
% Change - Year to Year Q1-66=100

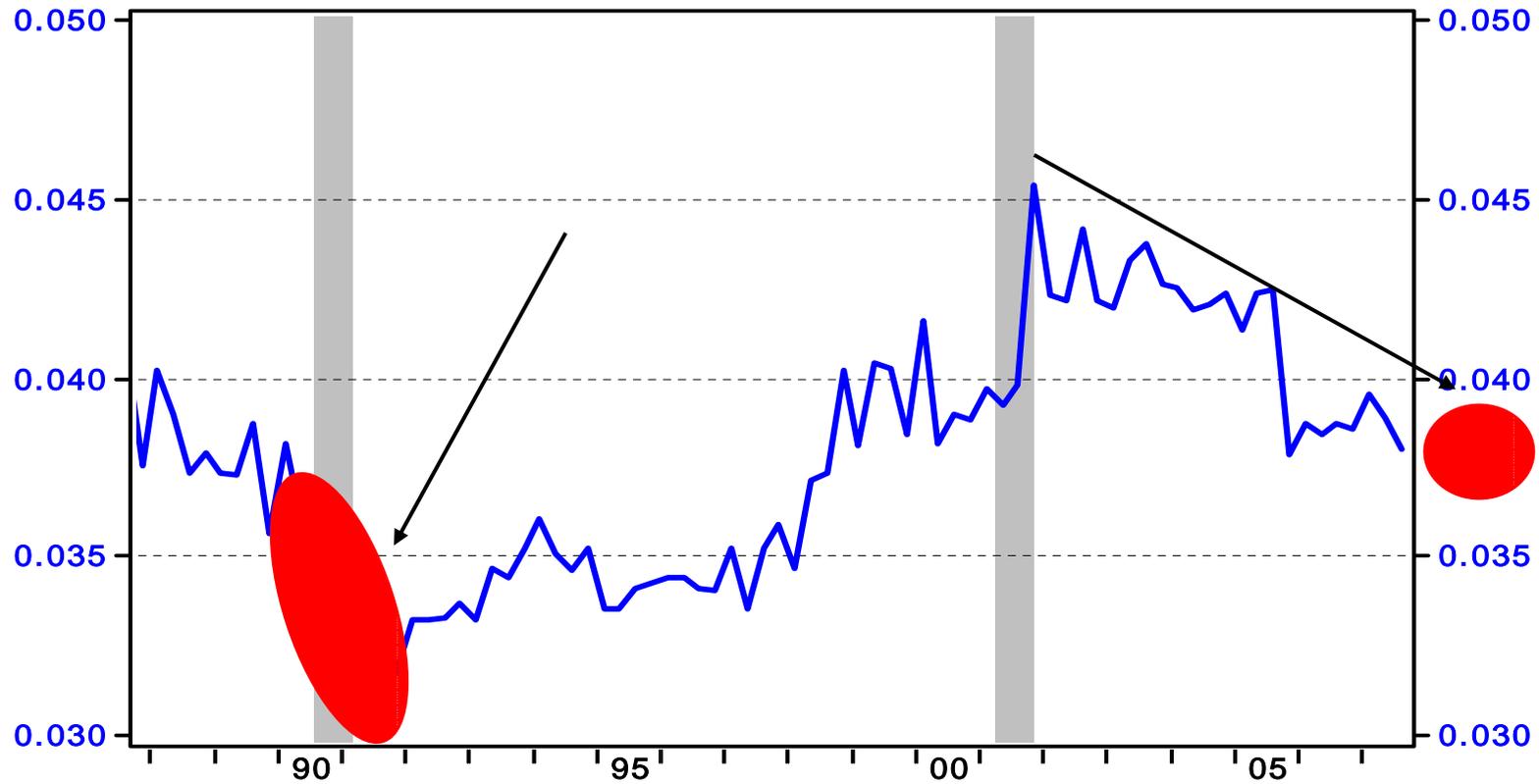


## New vehicle buyers by annual household income



# Motor vehicle and parts purchase as a % of GDP

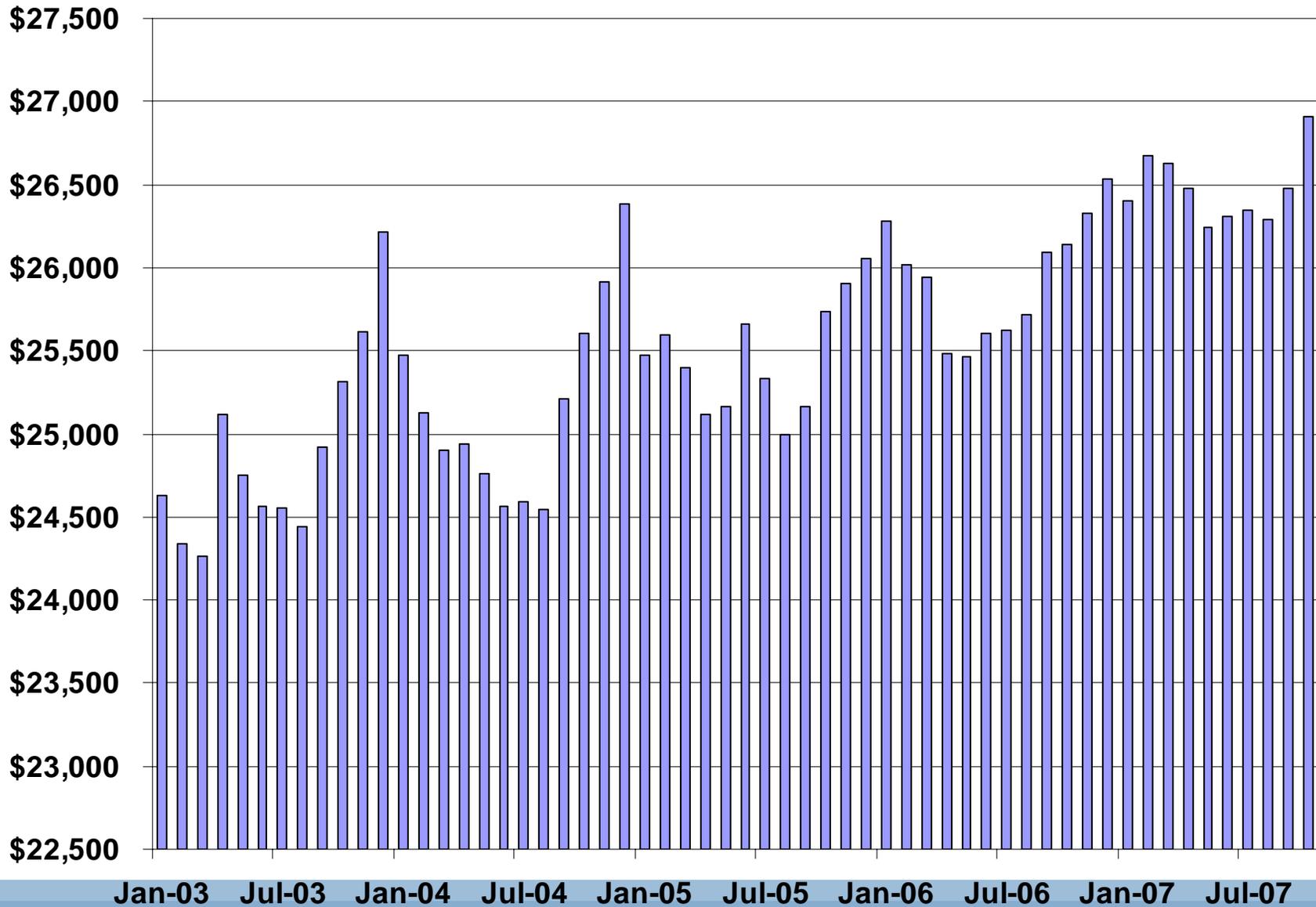
(CDVH / GDPH)



Source: Haver Analytics

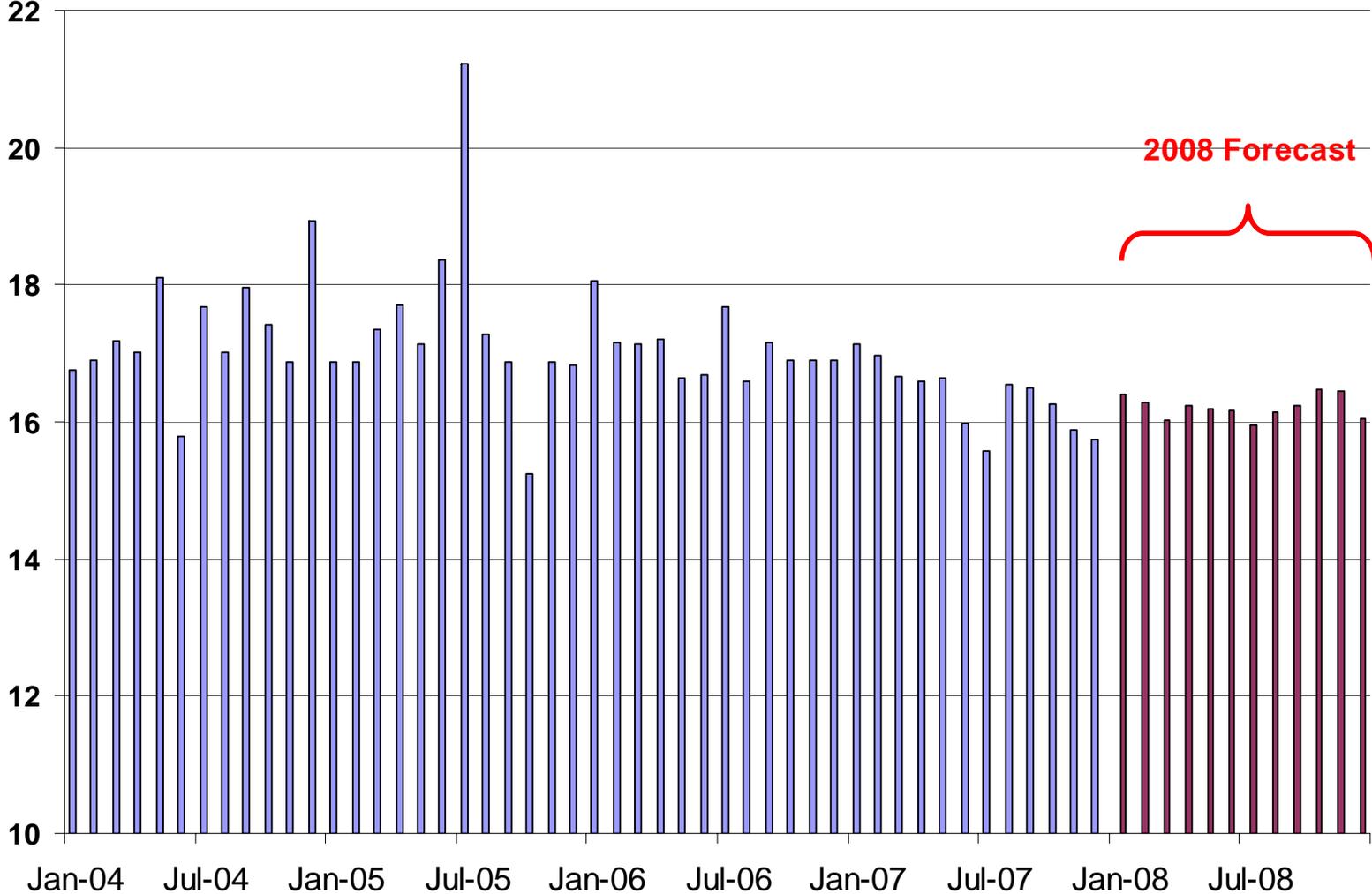


# Despite high gas prices, vehicle transaction prices continue to rise



# US Industry Annual Rates (SAAR)

Million



# 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

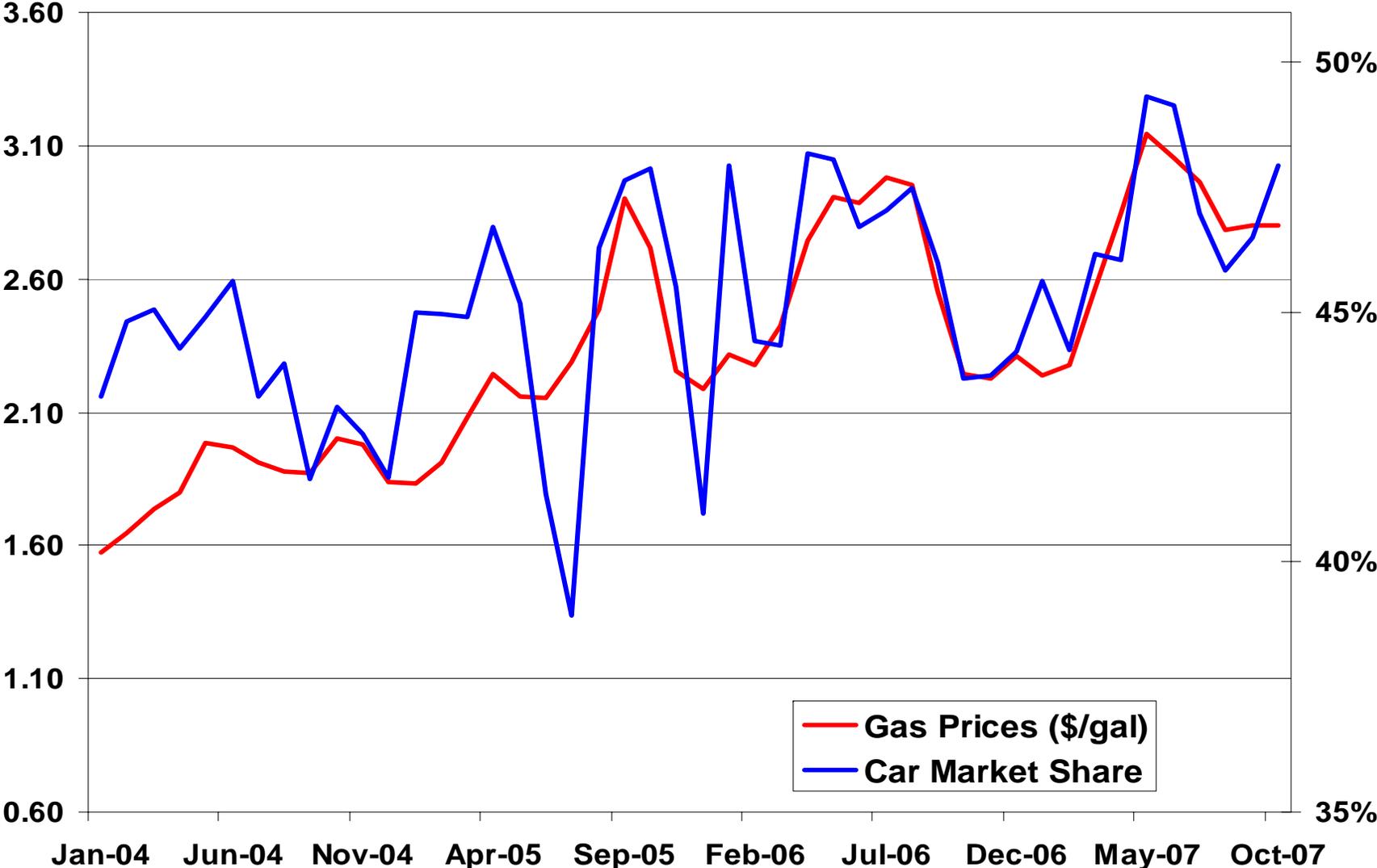
- \$100 Oil could drag GDP growth from 2.3% to 2.1% in 2008
- Unemployment rate is expected to creep up from 5.1% to 5.3%
- Headline inflation may increase from 2.8% to 3.4%
- Vehicle sales would be reduced by about 100 - 150 thousand units



# Car Market Share versus Gas Prices

Gas prices

Car Share



# 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

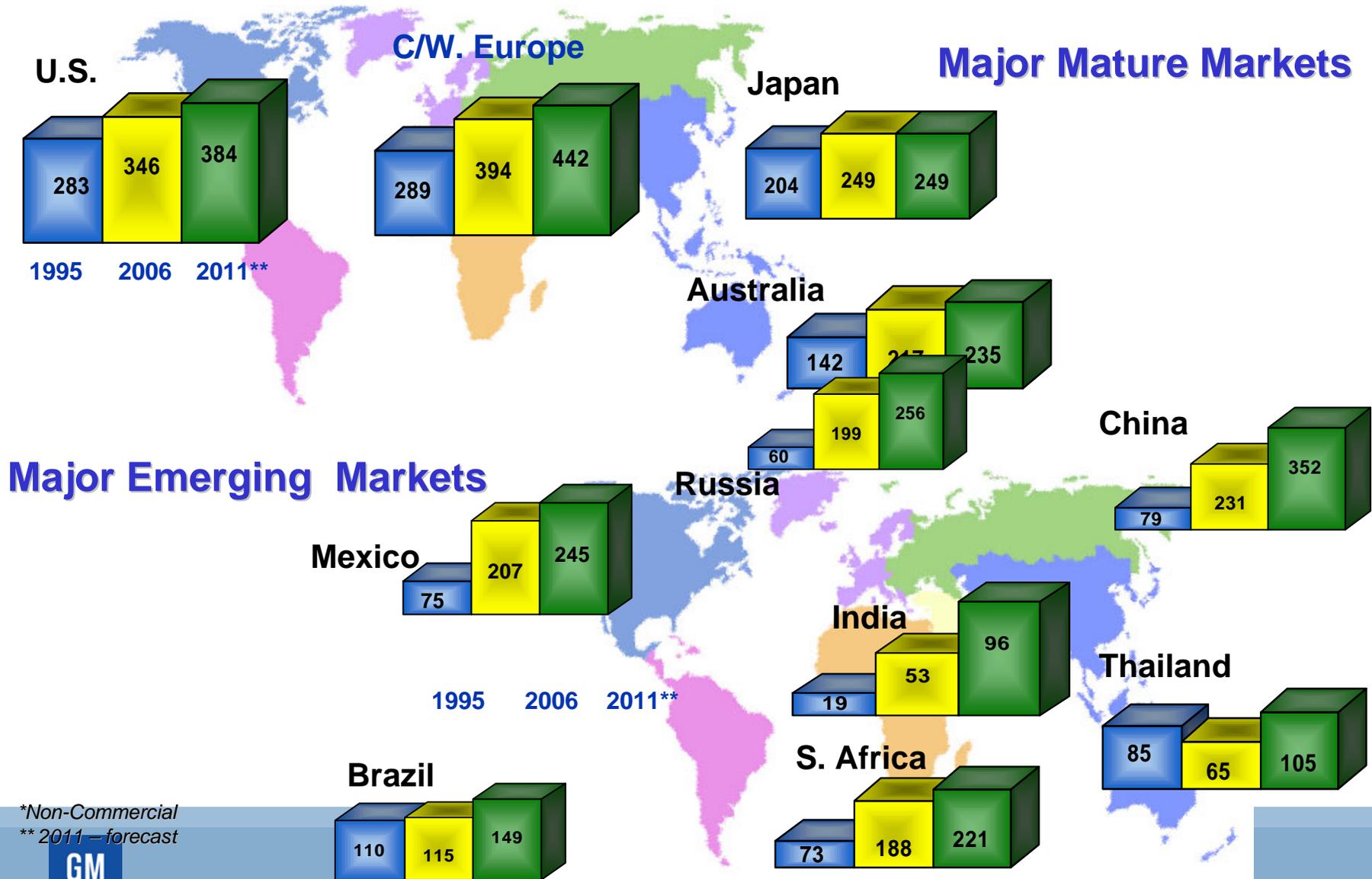
## Pressure on margins

- 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



\*Non-Commercial  
 \*\* 2011 – forecast

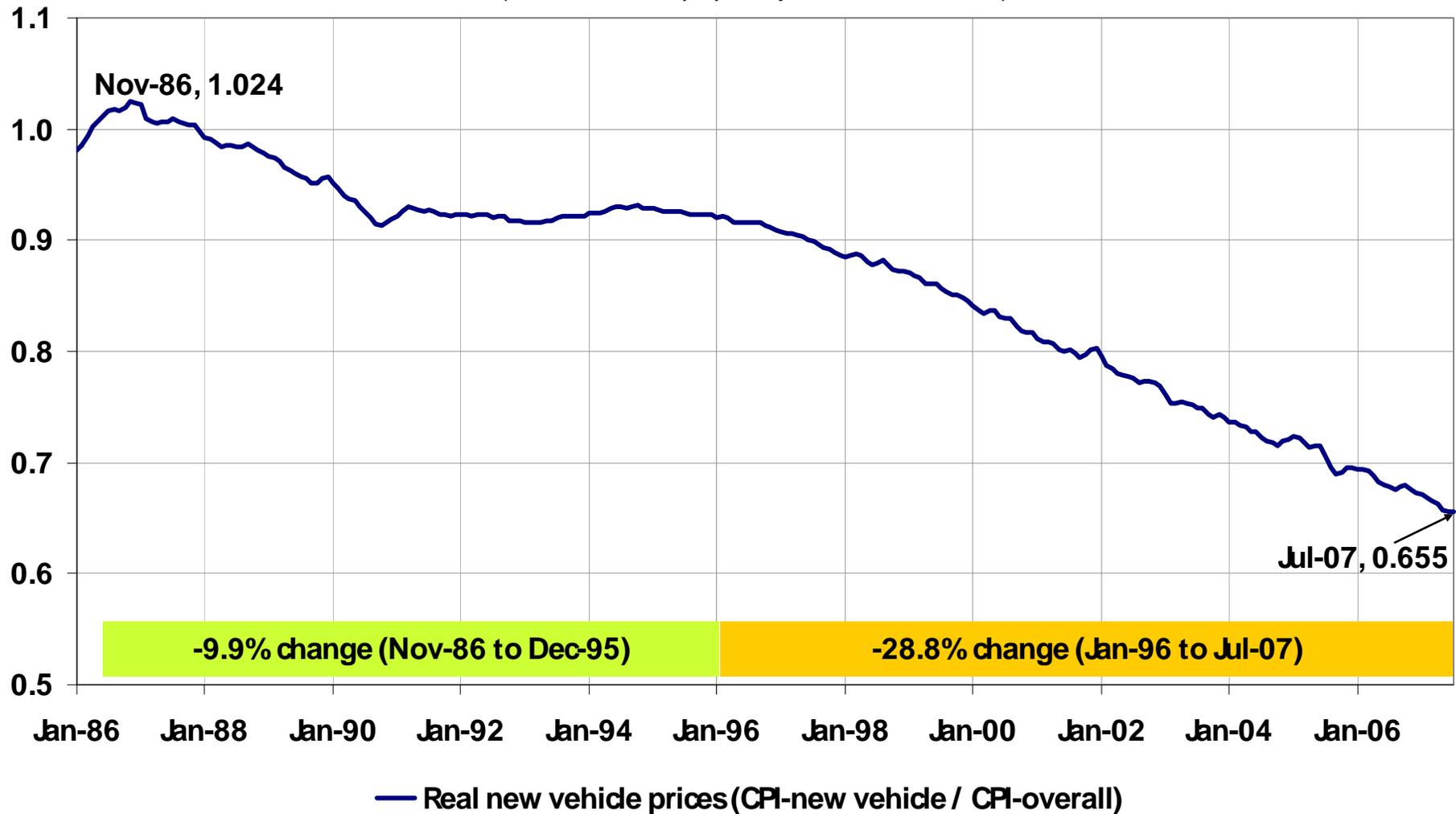


12/4/2007

Source: Historical Counts from GSRA applying .01% cutoff  
 Forecast from Global Insight

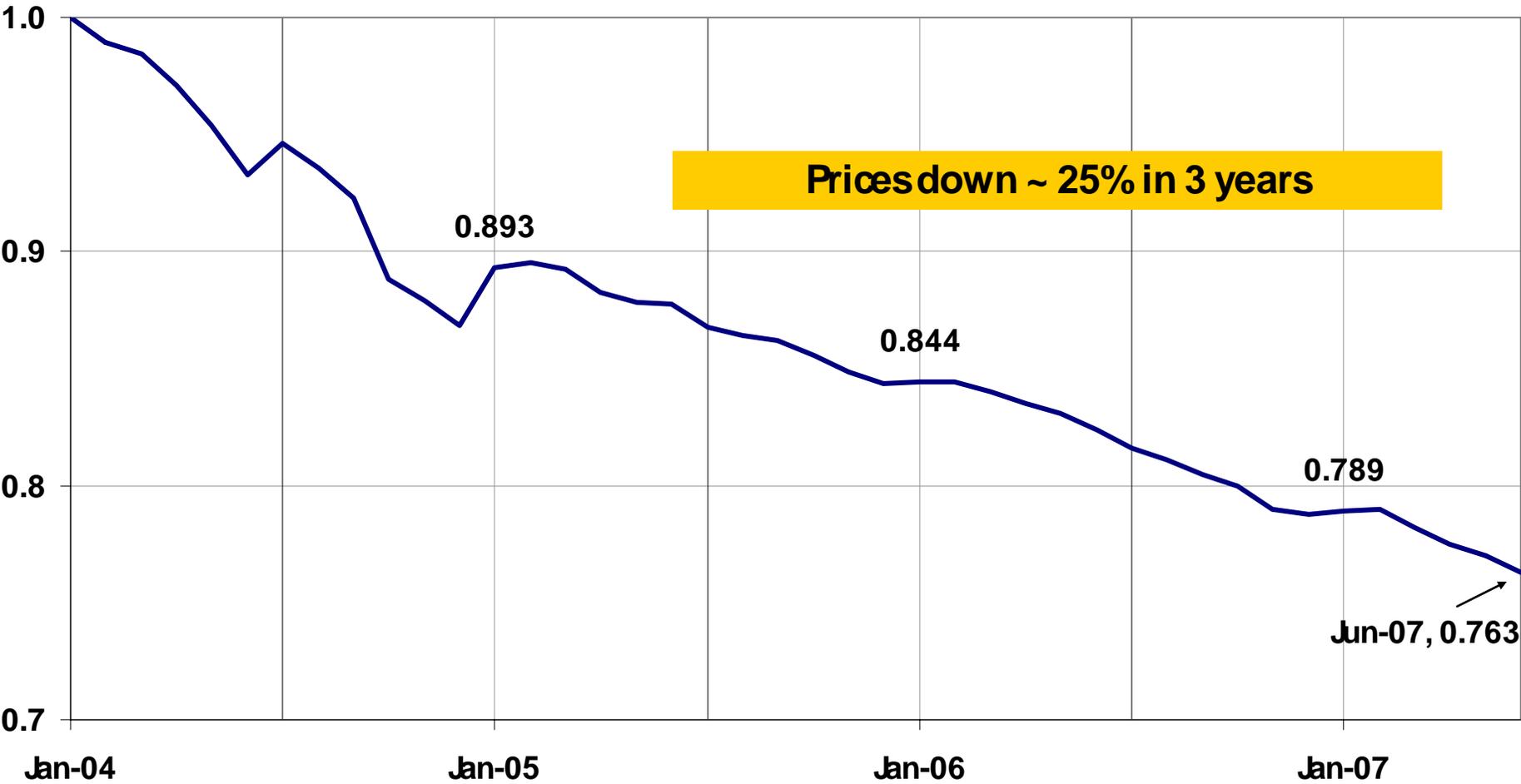
# Increasing Price Pressure Reflects Competitive Intensity

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



# Price Pressure is Not Just a U.S. Issue

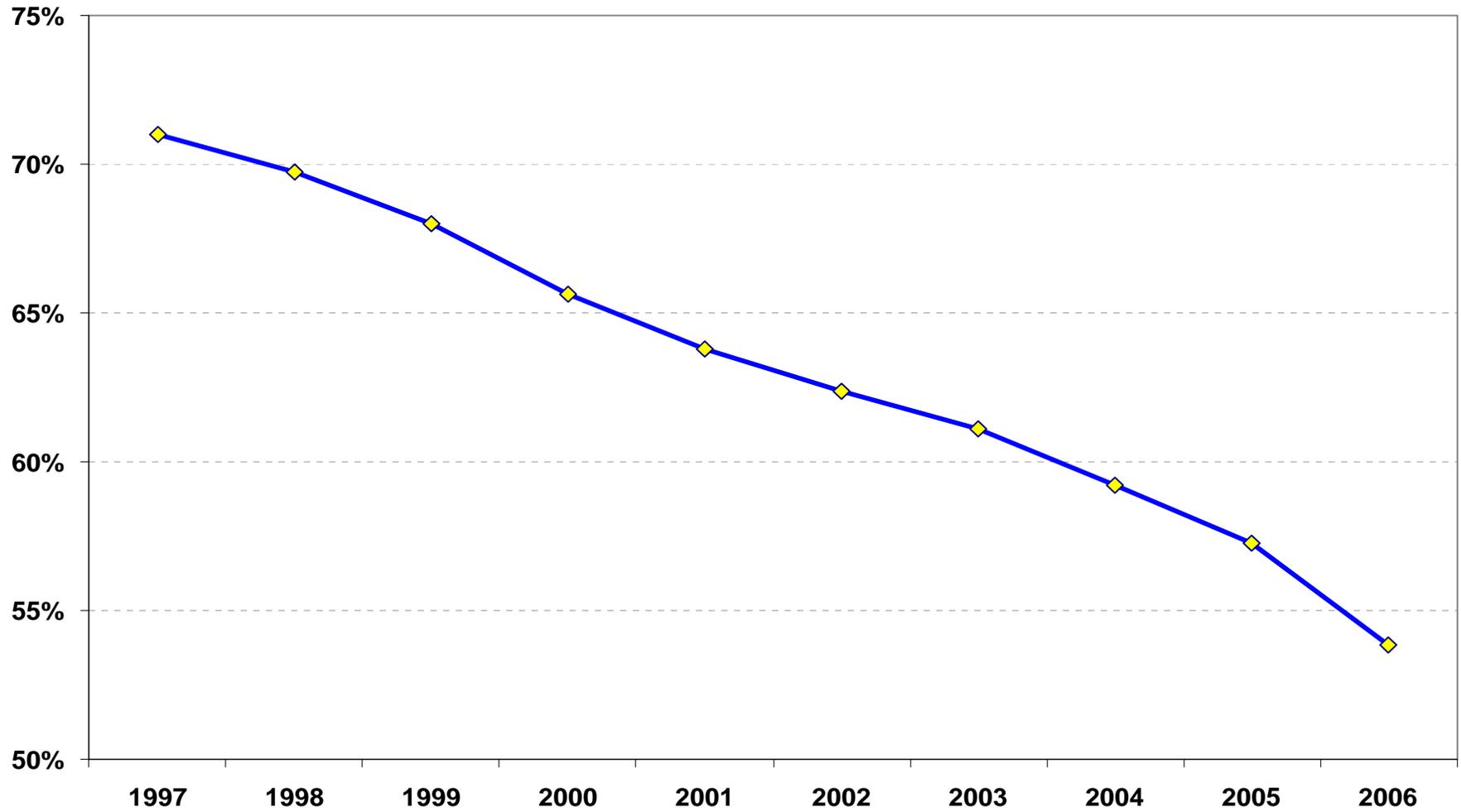
## China Passenger Car Pricing Index



Source: [www.cheshi.com](http://www.cheshi.com)



## Big Three US Market Share



Source: GSRA



12/4/2007

# 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**

