



# The New Economic Reality of the Automotive Industry

Presentation to the  
Southern Automotive Conference

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**Click on *Presentations***

**Enter passcode SAC2010 (case sensitive)**

- A Brief History Lesson
- Macro Economic Environment
- Automotive Outlook
- OEM Outlook
- Outlook for Suppliers

## The Traditional Conventional Wisdom on the Industry:

- **The automotive industry is a price-driven, commodity-oriented industry where it is extremely difficult to make money.**
- **There is significant excess capacity throughout the supplier industry, making differentiation difficult.**
- **The industry is investment-intensive with unacceptable levels of return on invested capital.**
- **The OEM/supplier relationship is dysfunctional and most of the power resides with the OEM.**
- **The traditional OEMs will continue to decline.**

# The Problem?

From a macro industry perspective, much of the conventional wisdom is correct:

- The traditional Big Three have experienced an enormous decline in the past five years.
- Many suppliers do struggle to make money.
- Certain sectors will continue to compete primarily on price.

**The good news? For top-performing suppliers, the automotive industry is one of the best places to invest and make money.**

# Why?

- **At just under a trillion dollars worldwide, the automotive industry is one of the largest industries in the world. There can still be a large number of suppliers that make money while the overall industry is struggling.**
- **It is one of the few industries where technological differentiation is still possible.**
- **Properly executed, capital investments mean huge competitive barriers.**

**We are experiencing a polarized environment where the weak are getting weaker and the strong cannot keep up with demand.**

**Rule of Thumb: 25% of the suppliers make 60-70% of the profits.**

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# **A Brief Review of 2009 and the Great Recession**

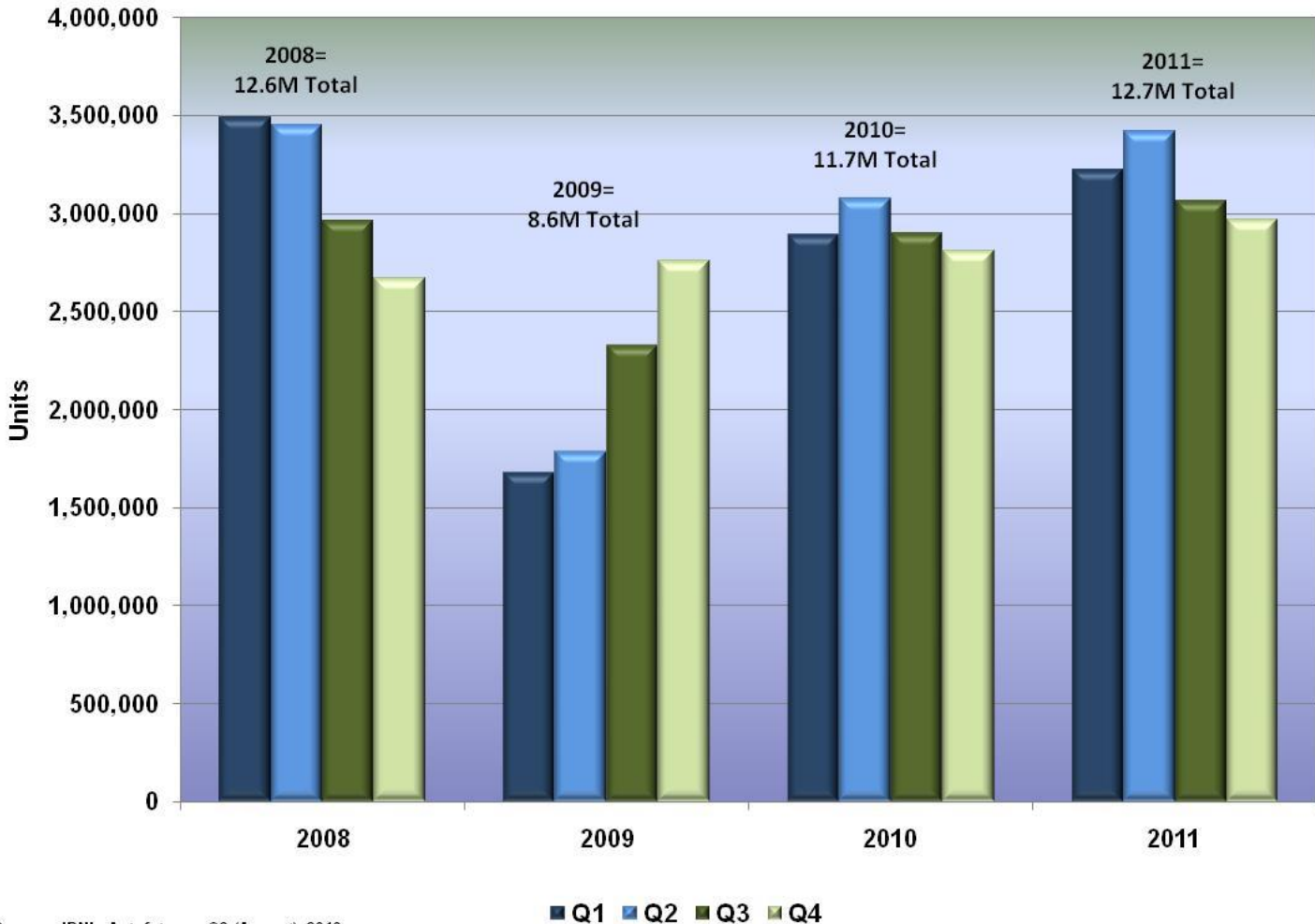
“There was no fire – this has merely been a test.” *The Office*





# Why This Downturn Was So Painful

North American Light Duty Vehicle Production

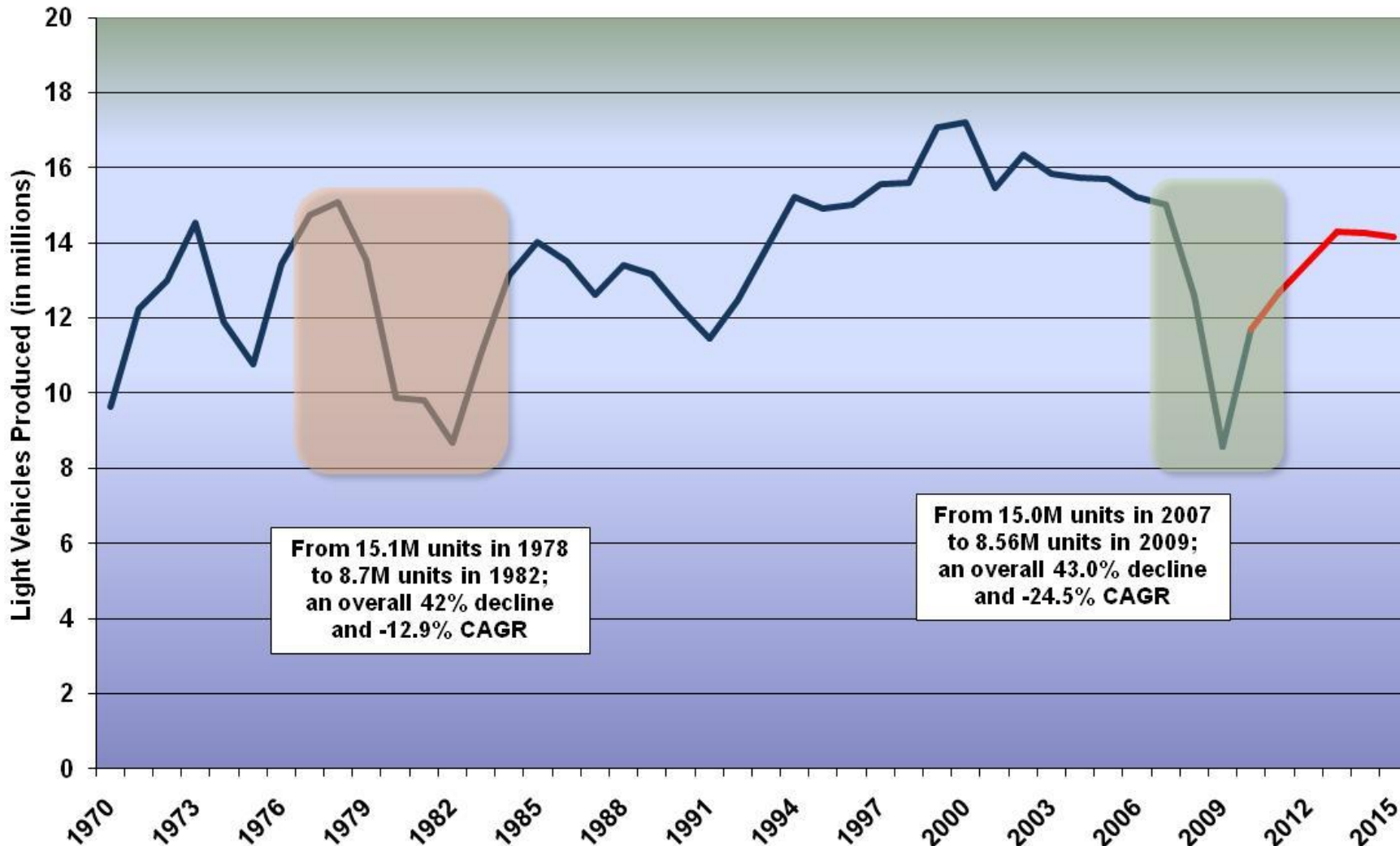


- 30% decline in production from 1<sup>st</sup> to 3<sup>rd</sup> quarter in 2008
- 57% decline in production 1<sup>st</sup> quarter of 2009 vs. 2008
- IRN projects an 8.6% increase in 2011 CY over 2010 production levels

Source: IRN's Autofutures Q3 (August) 2010

# A Twenty Year Correction in 18 Months

**NA Light Duty Vehicle Production**



**From 15.1M units in 1978 to 8.7M units in 1982; an overall 42% decline and -12.9% CAGR**

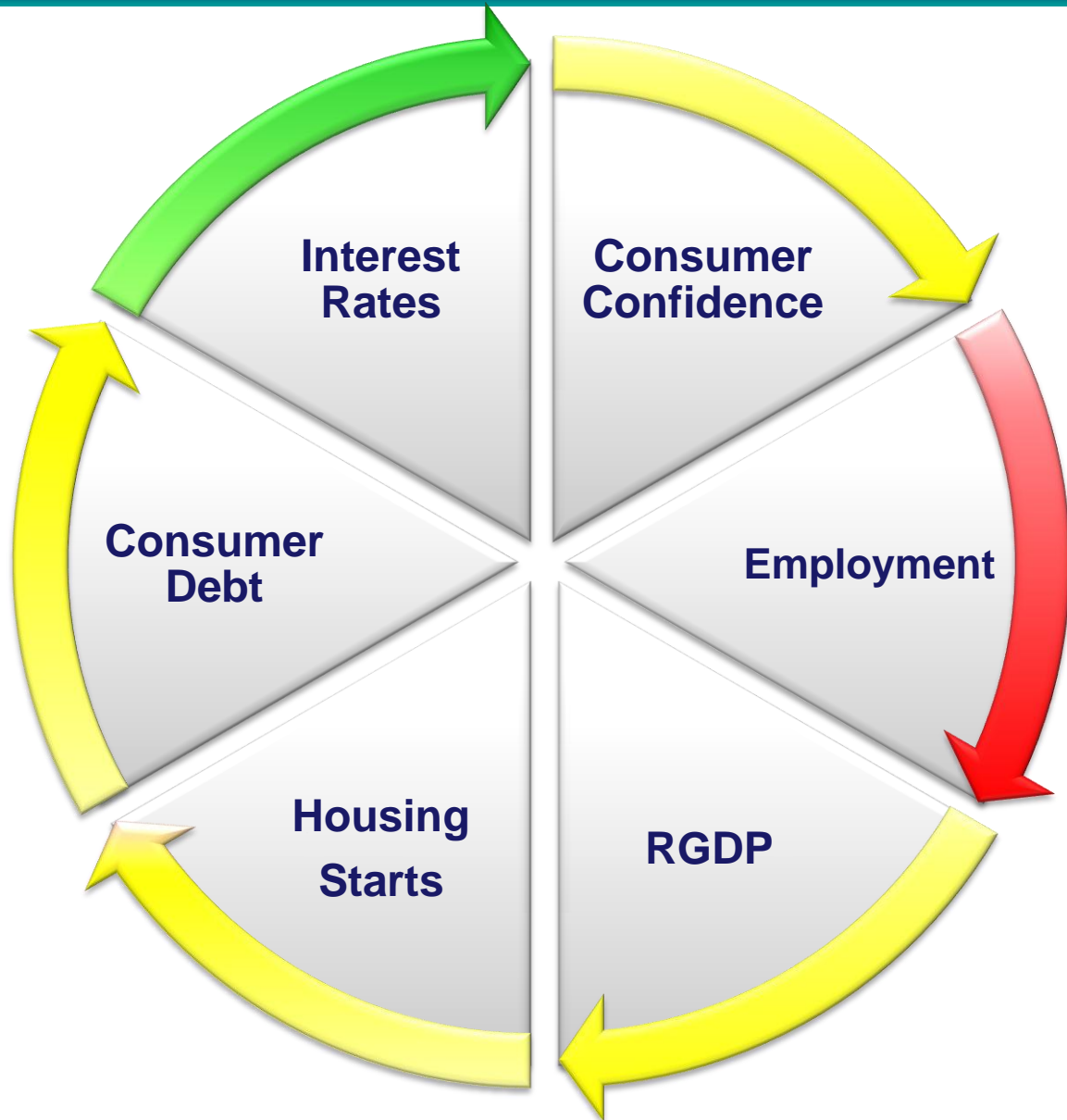
**From 15.0M units in 2007 to 8.56M units in 2009; an overall 43.0% decline and -24.5% CAGR**

Source: IRN's Autofutures Q3 (August) 2010 Forecast

# Macro Economic Environment



# Economic Indicators – Bottoming Out??



## Actual RGDP (vs. previous period)

Source: US Bureau of Economic Analysis

2009	Q1	Q2	Q3	Q4	Full Year
	(6.4%)	(0.7%)	2.2%	5.7%	(2.4%)
				Advance Estimate 1/29/10	

## 2010 RGDP Forecast

Source: WSJ Forecasting Survey of Economists, 2/10

2010
------

Average estimate – 3.0%

Range of estimates – (1.8%) to 4.5%

## Actual RGDP (vs. previous period)

Source: US Bureau of Economic Analysis

2009	Q1	Q2	Q3	Q4	Full Year
	(6.4%)	(0.7%)	2.2%	5.9%	(2.4%)
					Second Estimate 2/26/10

## 2010 RGDP Forecast

Source: WSJ Forecasting Survey of Economists, 9/3 - 9/7/10

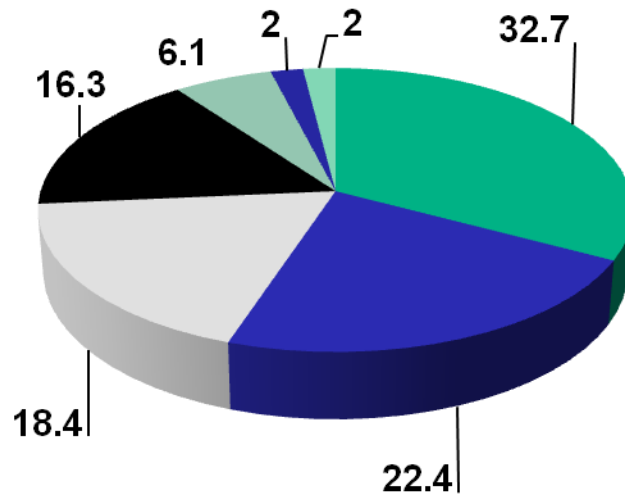
2010
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**Average estimate – 2.5%**

**Range of estimates – 1.4% to 3.2%**

# Why is the US recovery so disappointingly slow?

Here's what economists surveyed by the *Wall Street Journal* say:



- 32.7% ■ Inevitable lingering effects of financial crisis, credit crunch
- 22.4% ■ Lack of business certainty about regulation, taxes
- 18.4% ■ Consumer reluctance to spend
- 16.3% ■ Other
- 6.1% ■ Lack of business confidence in demand
- 2.0% ■ Weakness overseas
- 2.0% ■ Persistent weakness of housing market

## Selected Comments

**“Nobody knows. Sorry. Short term growth follows a chaotic path.”**

**“There has been a post-WWII unprecedented contraction in bank credit.”**

**“Elevated urge to hoard cash by banks, businesses and consumers.”**

Source: Economic Forecasting Survey, *WSJ*, 9/3-9/7/10

- **The unemployment rate has remained stuck at 9.6% to 9.8% for months.**
- **A 9.6% unemployment rate equals just under 15 million people unemployed.**
- **In August, 42% of unemployed were considered long-term unemployed. That means they have been looking for work for more than 27 weeks.**

***The Good News? The Economy added 67,000 private sector jobs in August.***

***The Bad News? If the economy were to add 100,000 jobs per month starting in September, it would take over 3 years to get back to pre-recession employment levels.***

## August 2010:

September data to be released Fri. 10/8

Total unemployment – **9.6%**

- Plus those who have stopped looking – **10.3%**
- Plus those who are employed part-time but want full-time work – **16.7%**

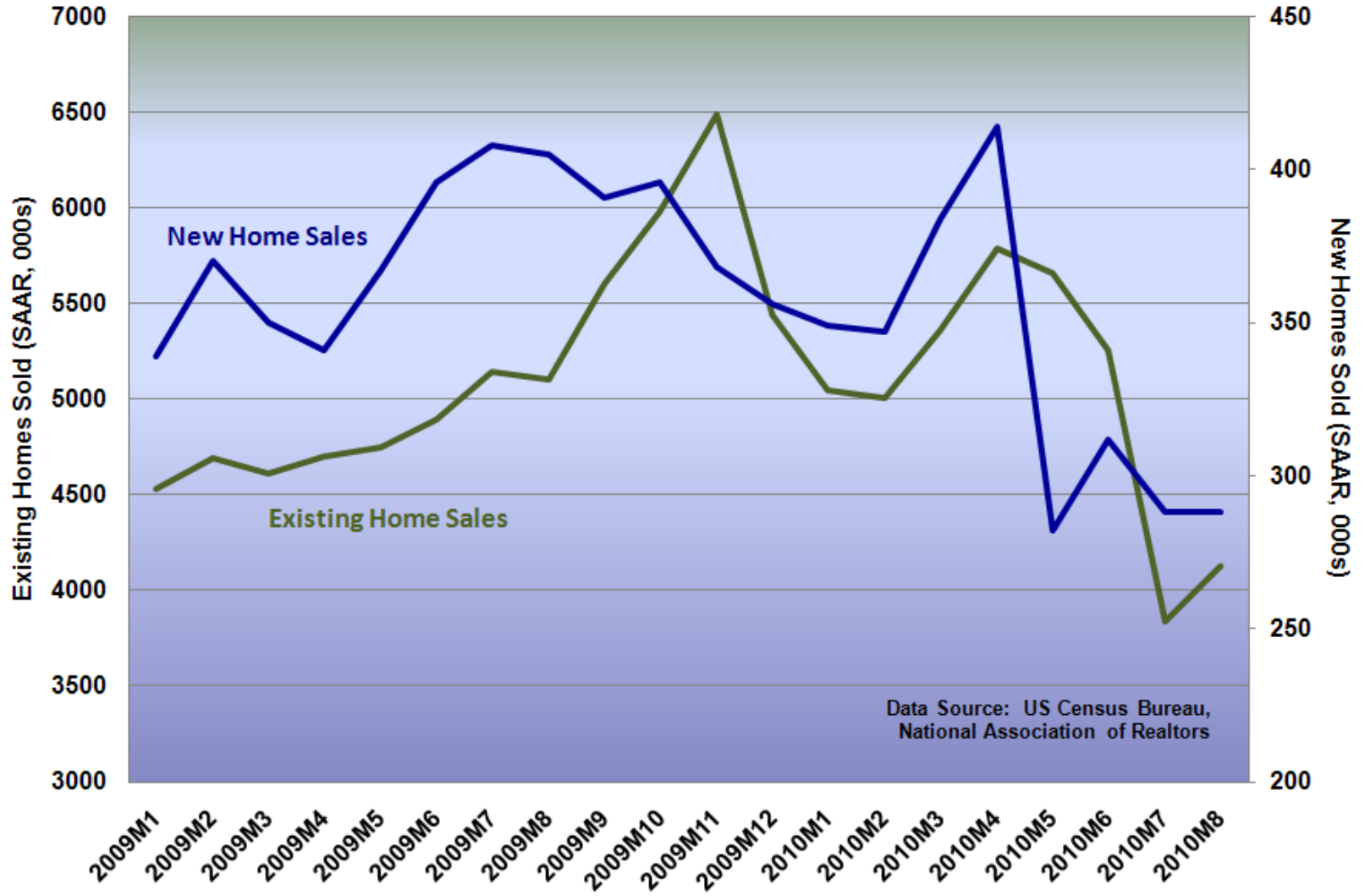
Data Source: US Bureau of Labor Statistics

“The labor market is improving, but at a glacial pace.”

*Tom Porcelli, senior economist,  
RBC Capital Markets*

# Housing Sales Modestly Improving

**New and Existing Home Sales**  
(seasonally adjusted annualized rates)



# Home Prices Starting to Stabilize in Midwest

Q1 2010 Home Prices by Metropolitan Area (in 000's):

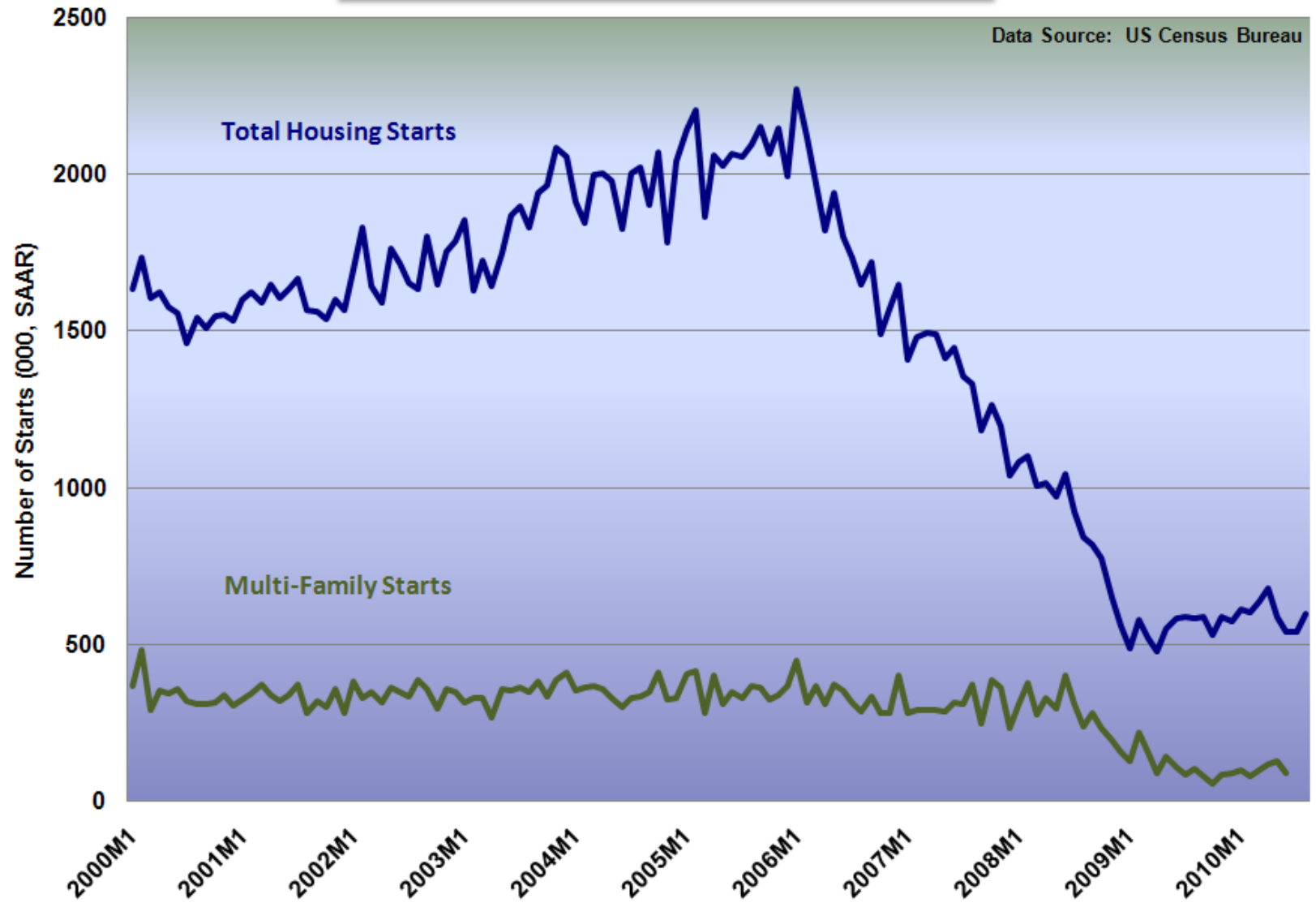
Area	2009 Q1	2010 Q1	% Change from 2009 Q1
US	\$167.3	\$166.1	-1%
Midwest	\$131.6	\$130.6	-1%
Northeast	\$235.2	\$256.3	9%
South	\$146.6	\$148.2	1%
West	\$229.2	\$210.2	-8%
Akron, OH	\$50.1	\$95.3	90%
Columbus, OH	\$118.3	\$125.8	6%
South Bend, IN	\$61.8	\$69.5	13%
Spartanburg, SC	\$109.1	\$117.1	7%
Toledo, OH	\$65.5	74.2	13%

Source: WSJ, National Association of Realtors

In some areas (i.e. Akron, OH) the supply of foreclosed homes is primarily gone and buyers are purchasing non-distressed properties again.

# Housing Construction – Struggling without tax credit

**Housing Starts - Total vs Multi-Family**



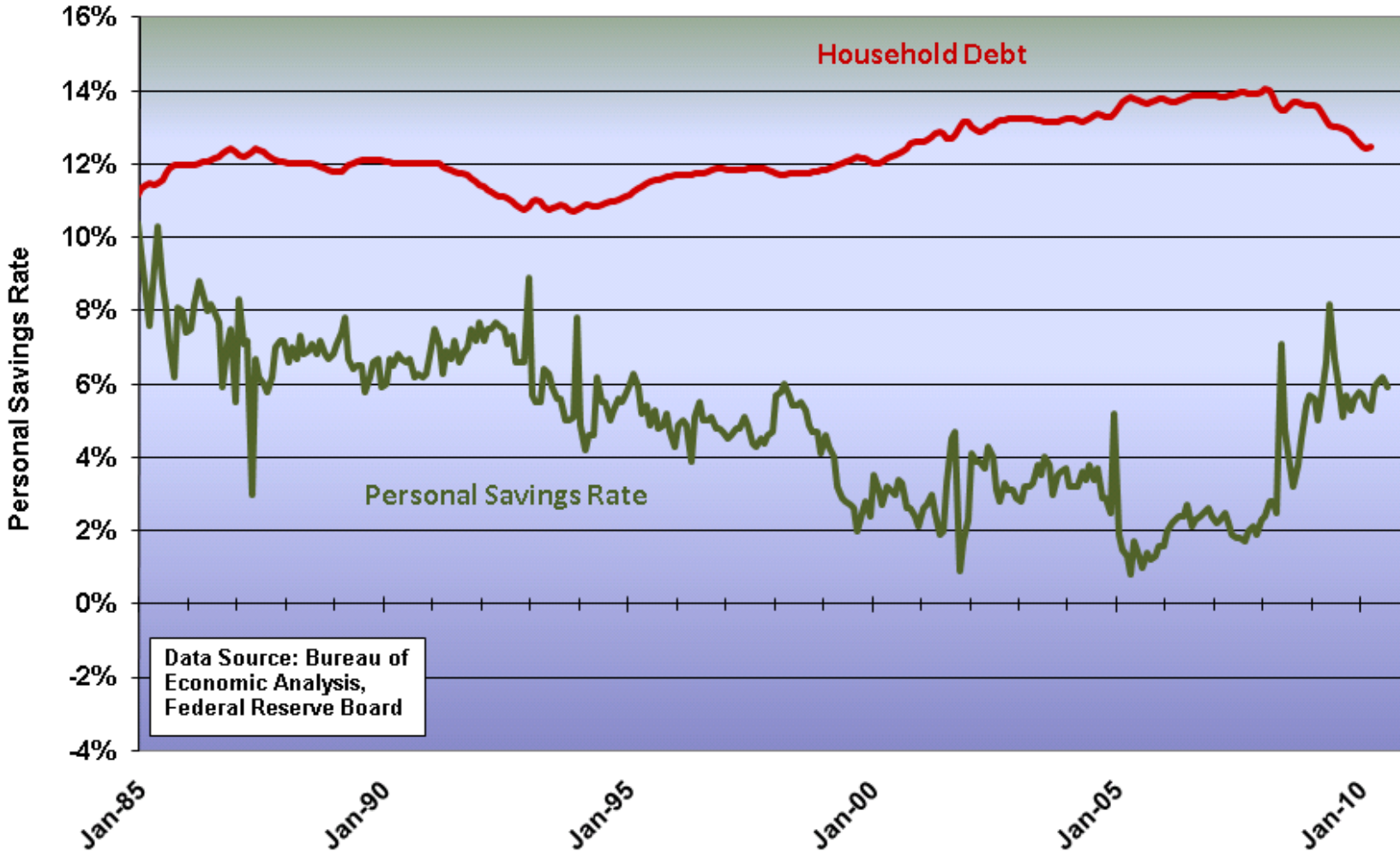
## **Trouble ahead, according to the Congressional Oversight Panel for TARP:**

- **Commercial real estate loans made over the last decade totaling \$1.4 trillion will require refinancing in 2011-2014.**
- **Nearly half are presently ‘underwater’– borrower owes more than property is worth.**
- **Community banks face the greatest risk of insolvency due to commercial real estate exposure.**

**Source: “Commercial Real Estate Losses and the Risk to Financial Stability,” <http://cop.senate.gov/>**

# Consumer Spending - 70% of US Economy

**Personal Savings Rate and Household Debt Service  
(As A % Of Disposable Income)**



# Change in Buying Patterns - Not the Same Reaction

## Buying Pattern Change between 2007-2009

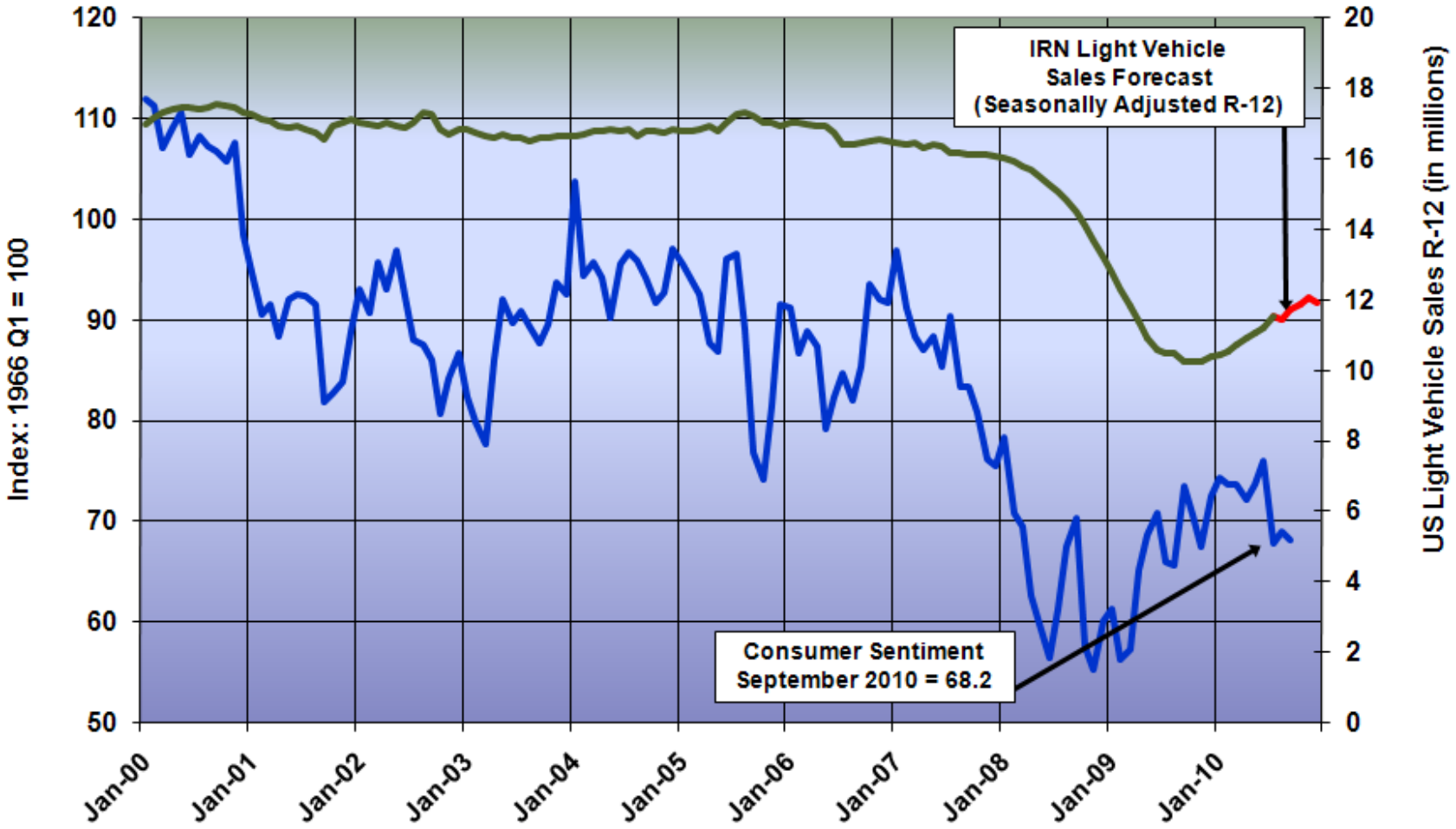
Consumer Category	Avg. Annual Spending	Apparel & Services	Food Away From Home	Entertainment
Highest 20% (above \$91,000)	-2.59%	-13.25%	-0.54%	-7.55%
Next 20% (\$58-91,000)	-0.71%	-11.66%	-1.72%	+7.21%
Middle 20% (\$36-58,000)	-3.06%	-15.24%	-9.45%	-2.05%
Next 20% (\$19-36,000)	+0.74%	+11.42%	+3.29%	+10.83%
Lowest 20% (Below \$19,000)	+5.57%	+14.12%	+0.78%	+9.61%

Wall Street Journal  
October 6, 2010

# Consumer Confidence – Still Schizophrenic

**University Of Michigan Consumer Sentiment vs US Light Vehicle Sales (R-12)**

Data Source: Univ. of Michigan, IRN

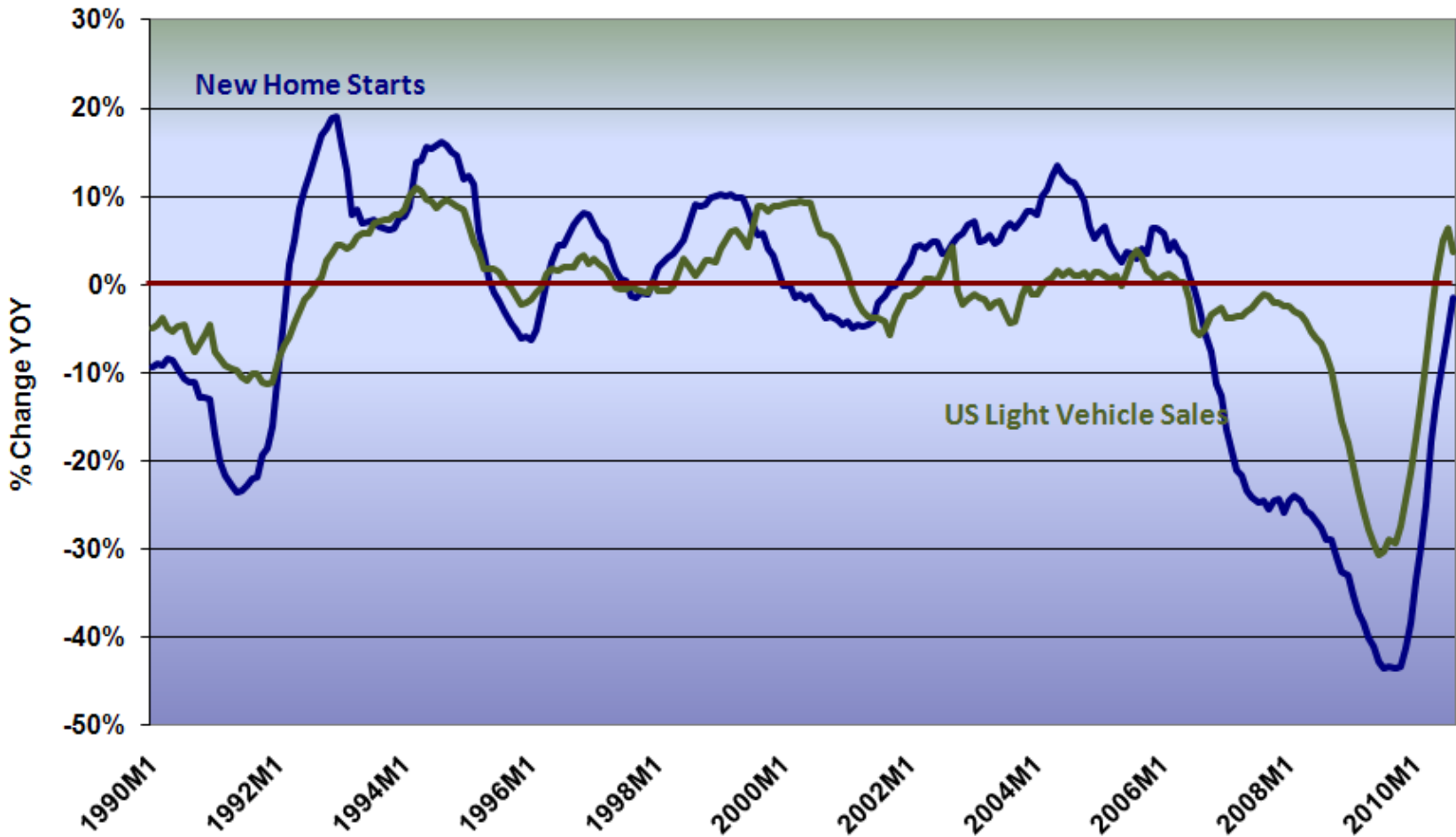


# Increasing Disparity Between Segments

- **Virtually all of the decline in the September consumer confidence index was in the upper income segment.**
- **The other three segments showed improvement, with the *lowest* economic segment showing the highest degree of optimism.**
- **Upper income earners are clearly worried about taxes and the significant increase in government spending.**

# Auto Sales – A Downturn Was Waiting to Happen in 2008

**New Home Starts vs US Light Vehicle Sales**

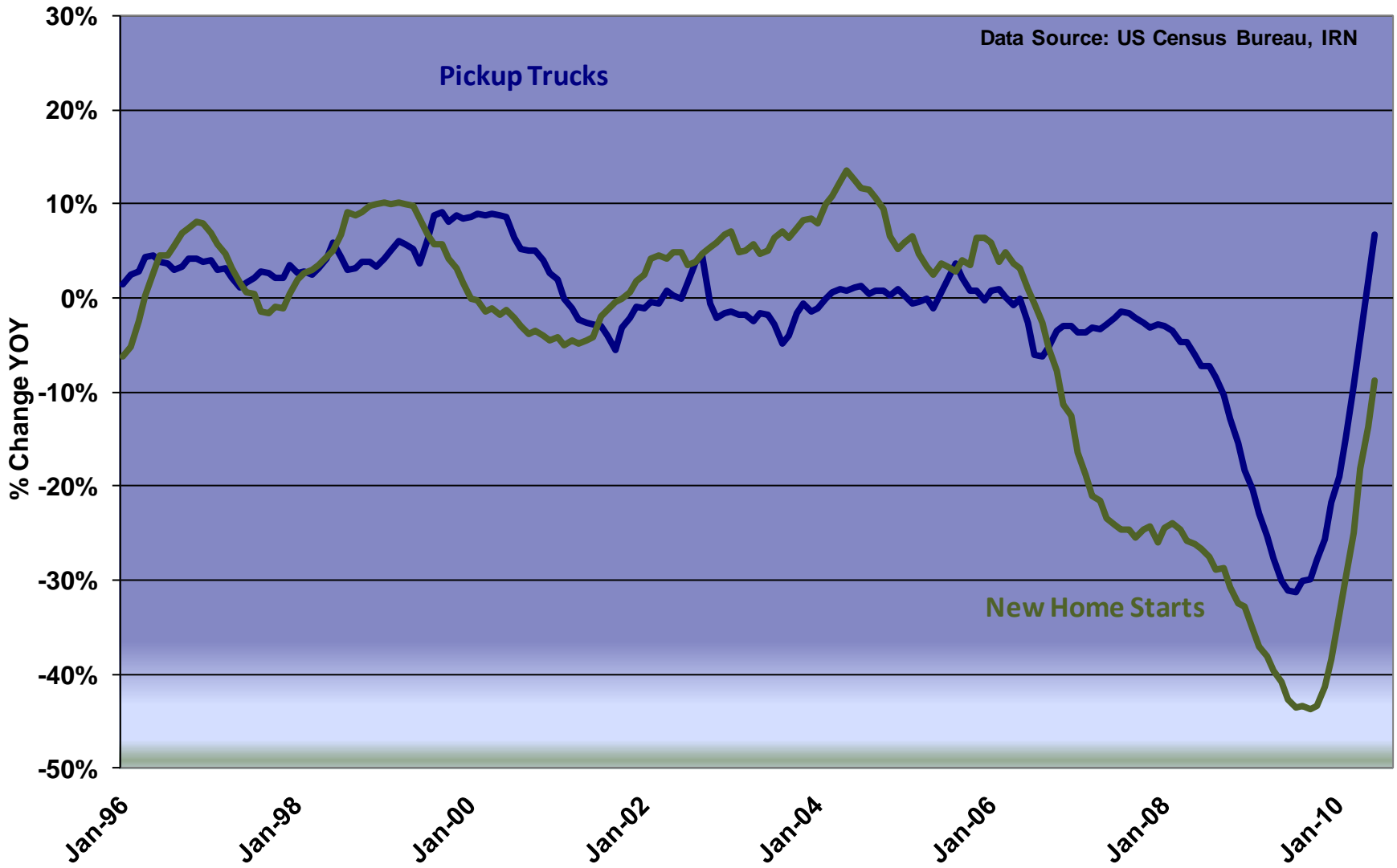


Data Source: US Census Bureau, IRN

# Pickup Trucks – Starting to See Glimmer of Recovery



## US Pickup Truck Sales vs US New Home Starts (R-12)



# Oil Prices – Inching Back Up

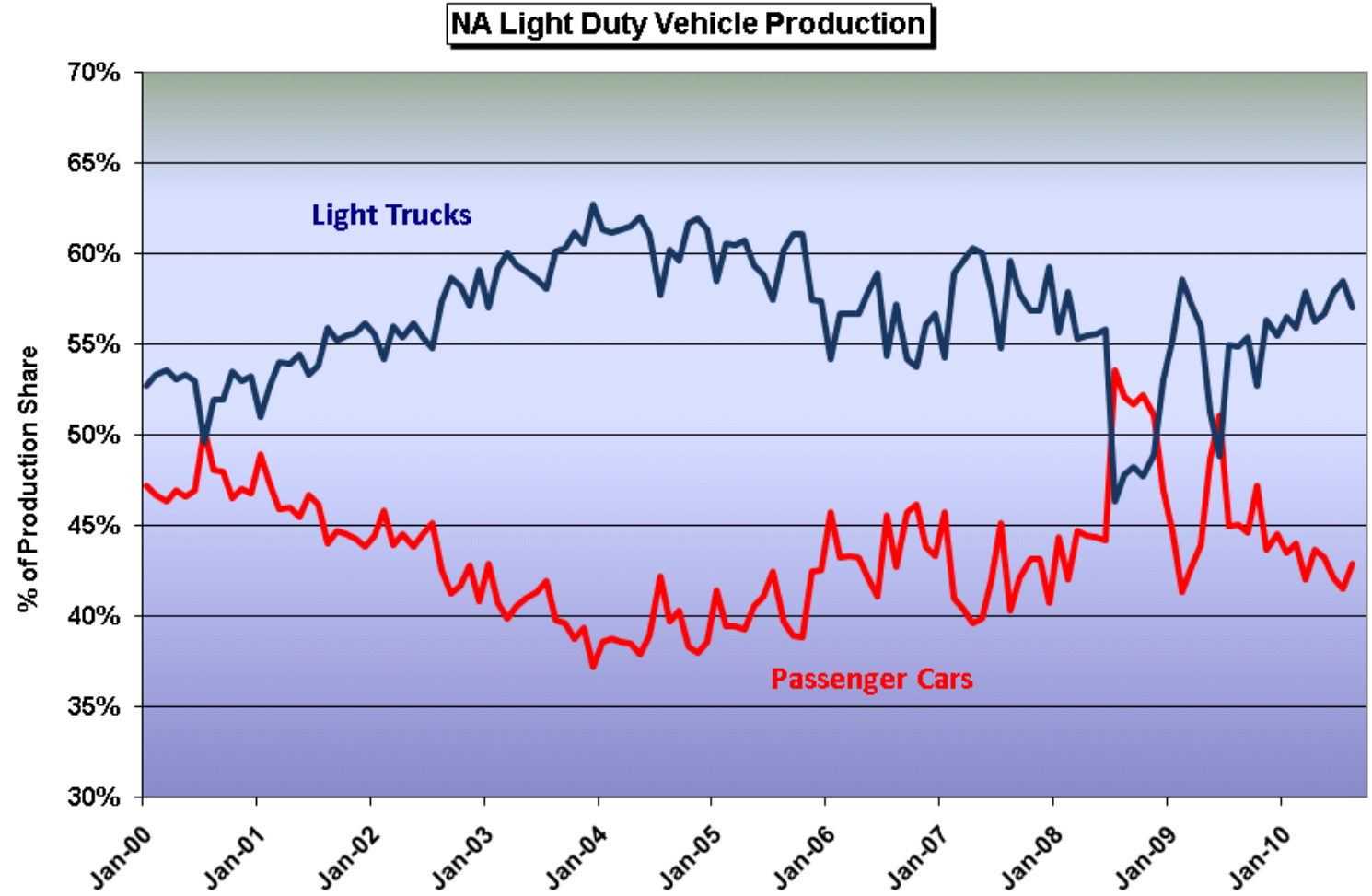
**Oil Prices**  
**Weekly United States Spot Price Weighted by Import Volume**



Data Source: Energy Information Administration

# Oil Prices – Temporary Impact on Vehicle Segments

Light trucks dove in 2008 but came back; passenger cars did the reverse – message? Consumers still like things “their way”.



Source: IRN's Autofutures Q3 (August) 2010 Forecast

# Pickup Trucks - Buyer Criteria Changing

Primary Use Sales Share	Appearance	Contractor	Fleet	RV Tow	Farm/Ranch
1985	10.5%	51.7%	11.8%	5.2%	20.8%
2001	28.1%	36.9%	11.1%	13.6%	10.3%
2002	27.4%	38.1%	10.6%	13.5%	10.4%
2003	26.4%	38.8%	10.2%	13.2%	11.4%
2004	24.8%	39.7%	10.9%	13.3%	11.3%
2005	21.7%	40.2%	12.4%	12.6%	13.1%
2006	19.1%	41.8%	12.7%	11.8%	14.5%
2007	16.2%	42.6%	14.7%	11.6%	14.9%
2008	13.1%	39.4%	19.2%	6.1%	22.2%
2009	8.6%	43.1%	19.3%	5.5%	23.5%
1 <sup>st</sup> Half 2010	7.1%	43.2%	22.8%	4.7%	22.2%

Source: CNW Research

At its peak, consumers who purchased pickup trucks for **Appearance** sake represented 28.1% of total purchases (in 2001). During 2009, those buyers only made up 8.6% of the market. IRN does not expect Appearance buyers to ever return to the levels seen earlier in this decade.

# Can Smaller Really Work? Not For Everyone!



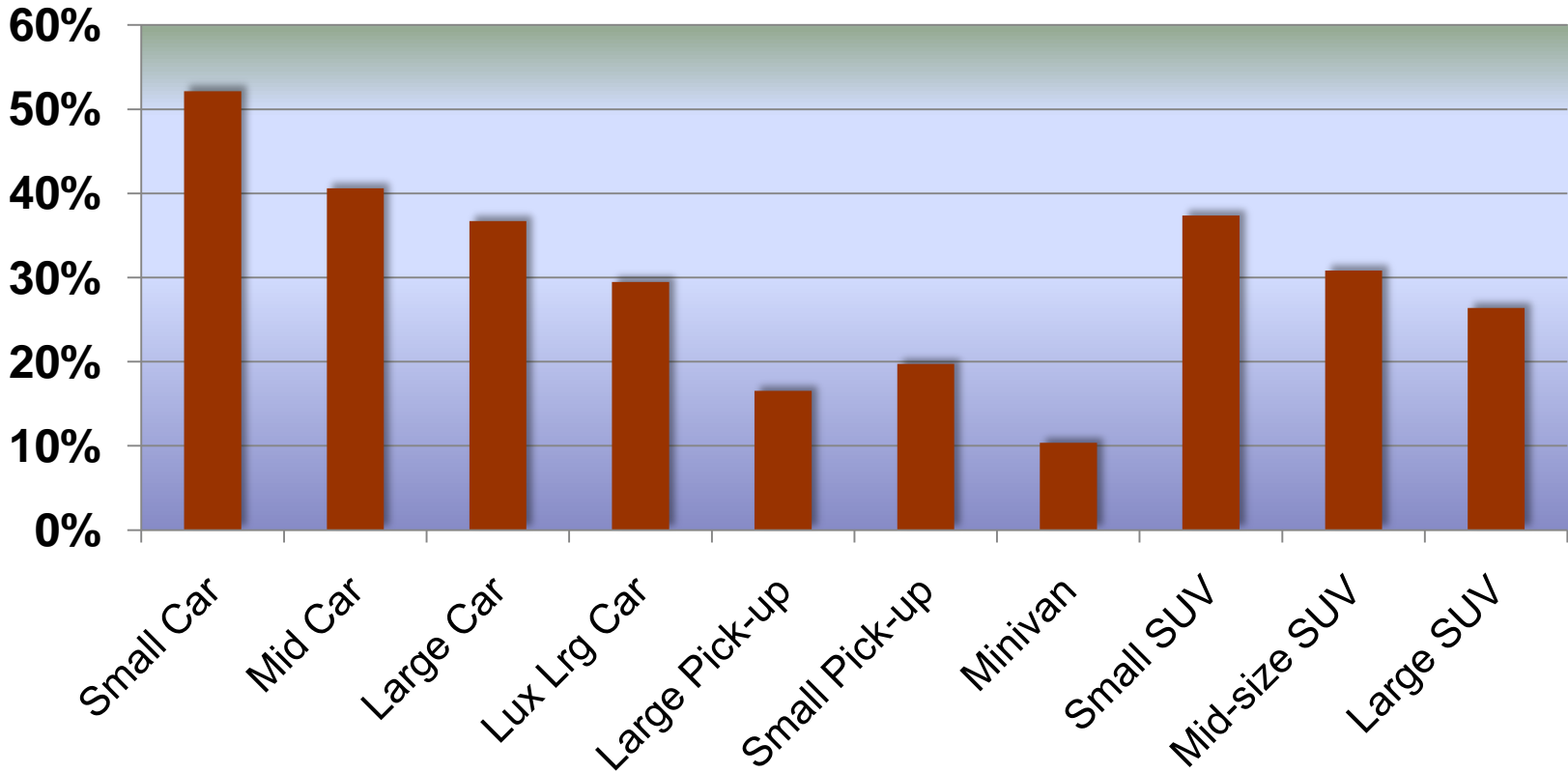
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# Not Everyone Is Going to Be Driving a Mini

**Definition:** To meet your transportation needs, how practical would it be to replace your existing (type) vehicle with at least a size smaller?

## National Opinion – Practicality of Downsizing

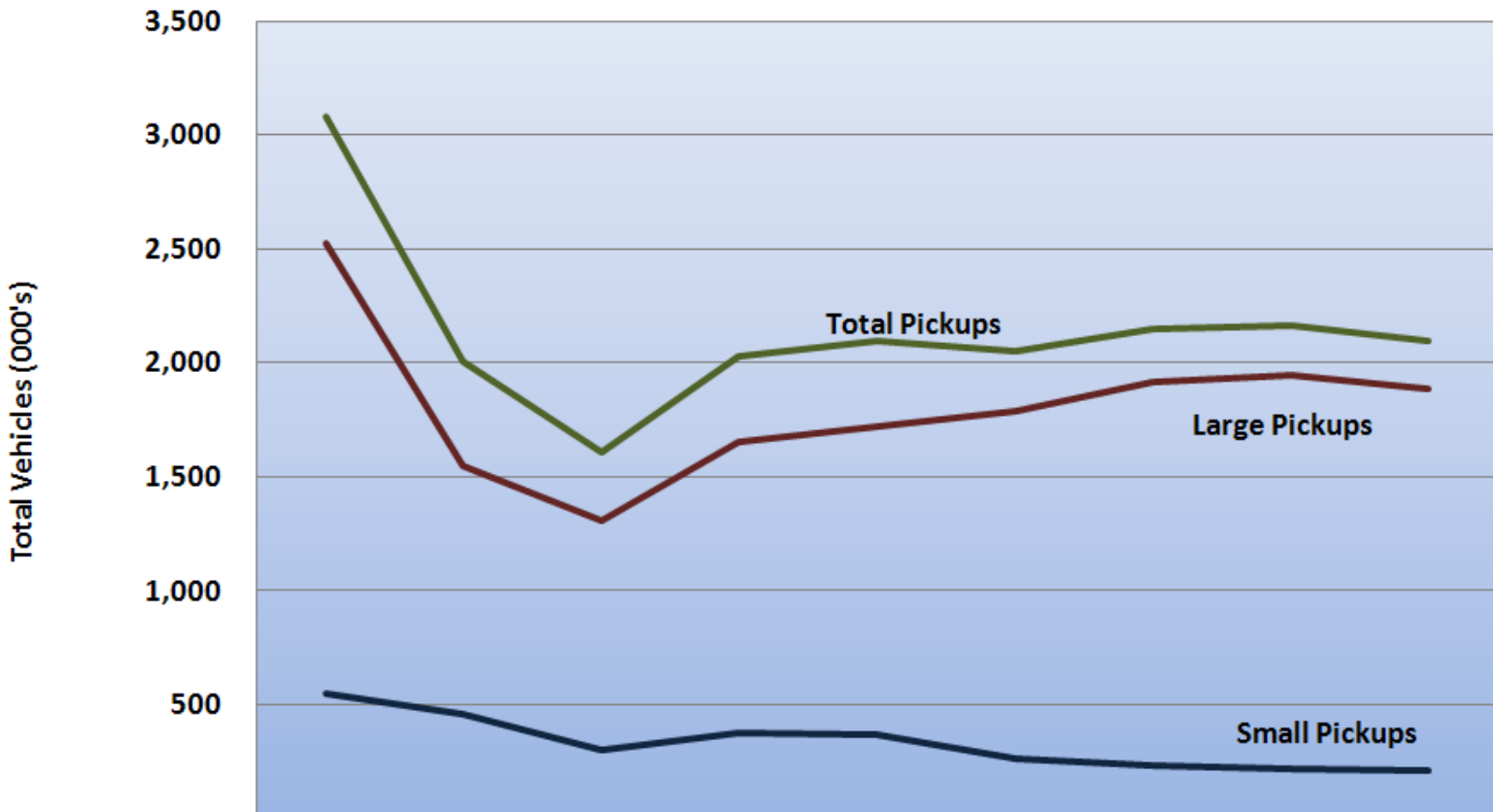


Percentages show the number of respondents driving this type of vehicle who said it would be practical to downsize and still meet existing transportation needs.

Source: CNW Research

# Pickups Still Largest Single Vehicle Segment

N. American Pickup Truck Production Forecast  
(in thousands)

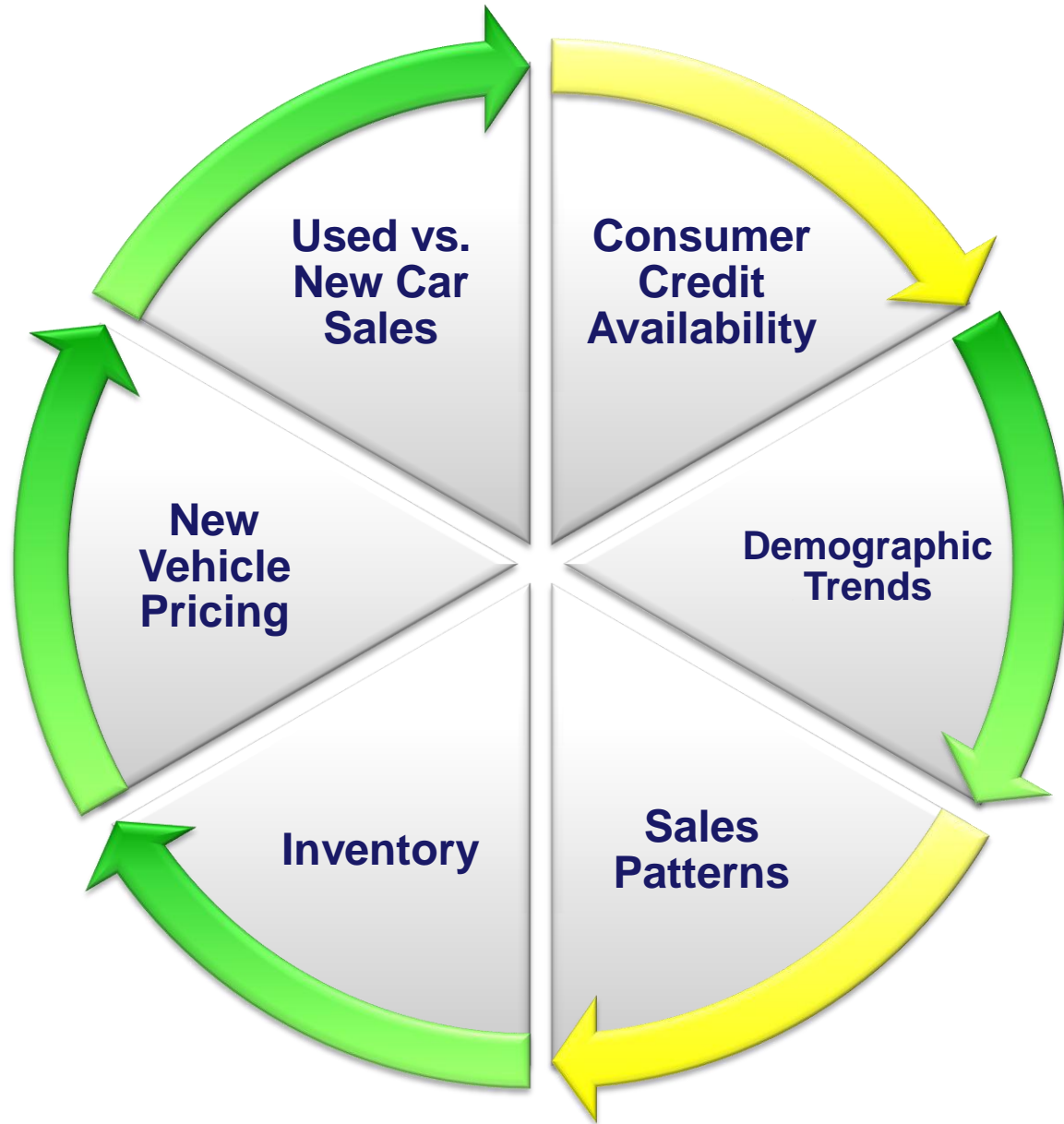


	2007A	2008A	2009A	2010F	2011F	2012F	2013F	2014F	2015F
Small Pickups	552	461	299	376	372	265	233	220	211
Full-Size Pickups	2,525	1,545	1,311	1,654	1,724	1,790	1,915	1,945	1,885
Total Pickups	3,077	2,005	1,609	2,030	2,096	2,055	2,148	2,165	2,096

Source: IRN Inc. Autofutures® Forecast

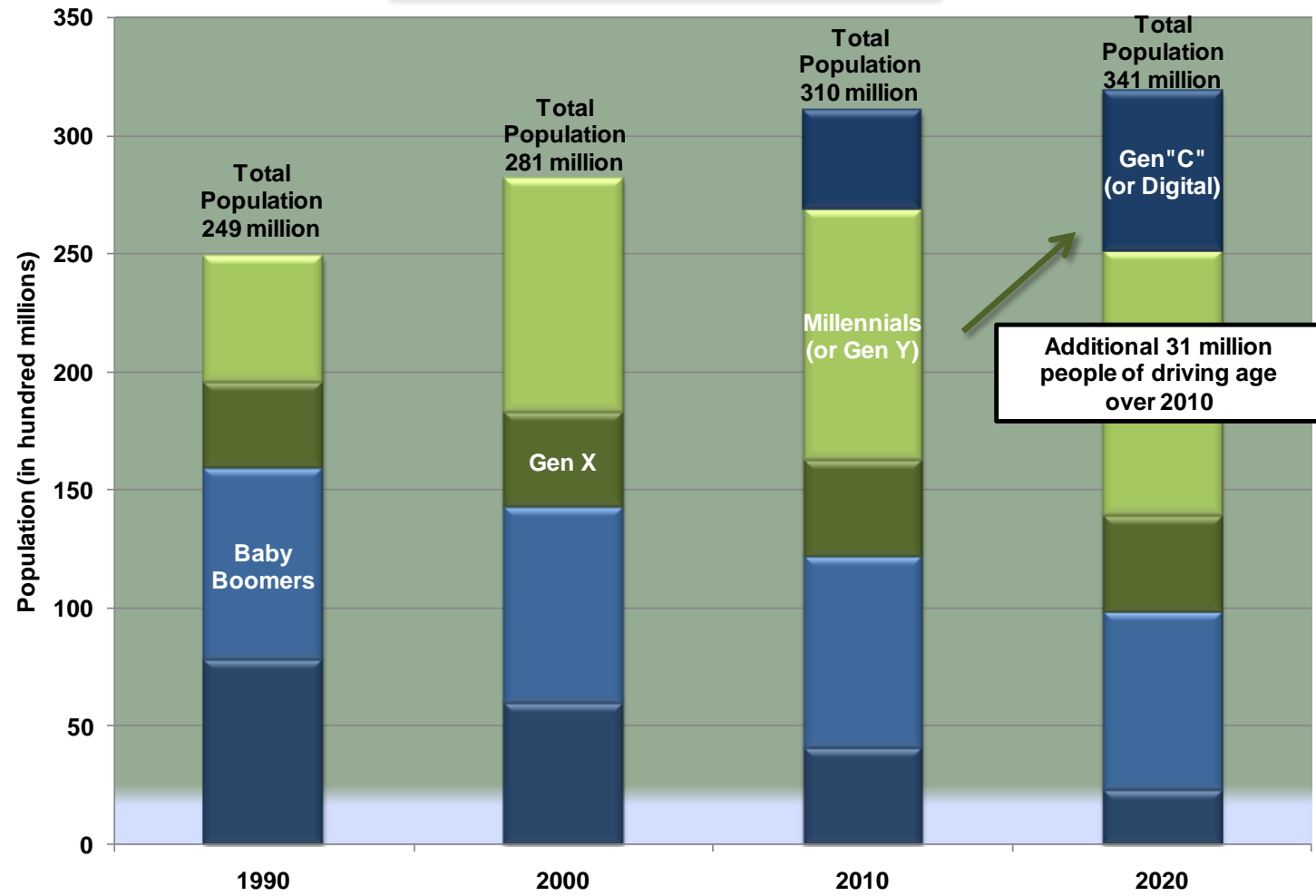
A large, light gray circular graphic centered on the page. Inside the circle, the letters 'IRN' are written in a large, white, sans-serif font. Below the letters are three horizontal white lines of varying lengths, stacked vertically, which are part of the IRN logo design.

# Automotive Outlook



# US Demographics-A Positive Trend

**US Total Population 1990 - 2020**



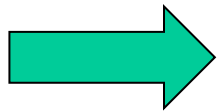
**People of Driving Age:**

**192 Million**

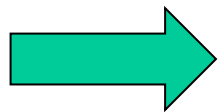
**281 Million**

**310 Million**

**341 Million**



**Consumer purchase cycle is likely to extend. Buying a new vehicle every 3-4 years vs. 2-3.**

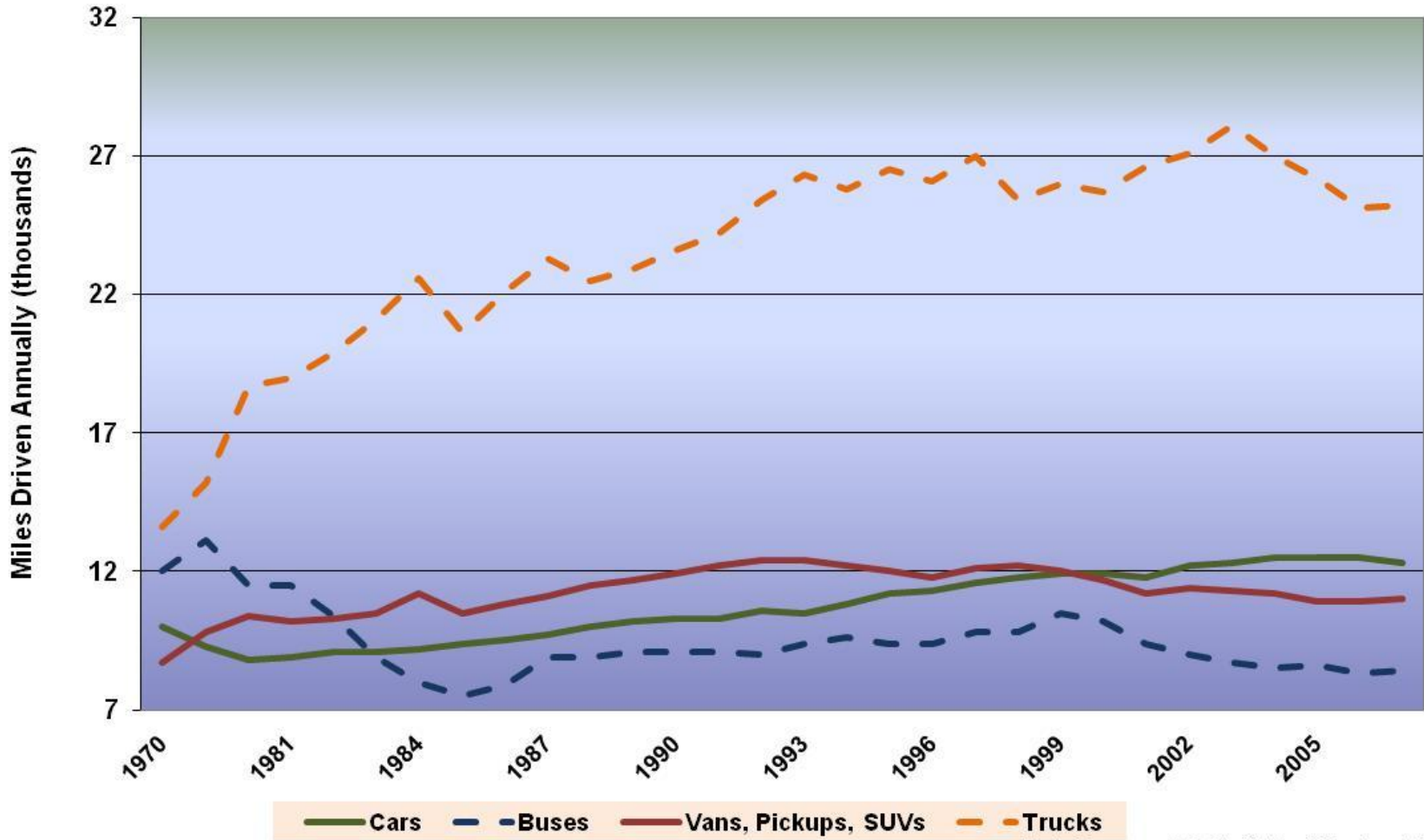


**Average number of vehicles per household will decline**

**Result?** North American vehicle sales and production will return to “normal” levels within 2-3 years.

# Miles Driven Remains Fairly Steady

Average Miles Traveled by Vehicle Type  
(in thousands)



Data Source: US Statistical Abstract, IRN

# New Vehicle Purchases – As % of Gross Income

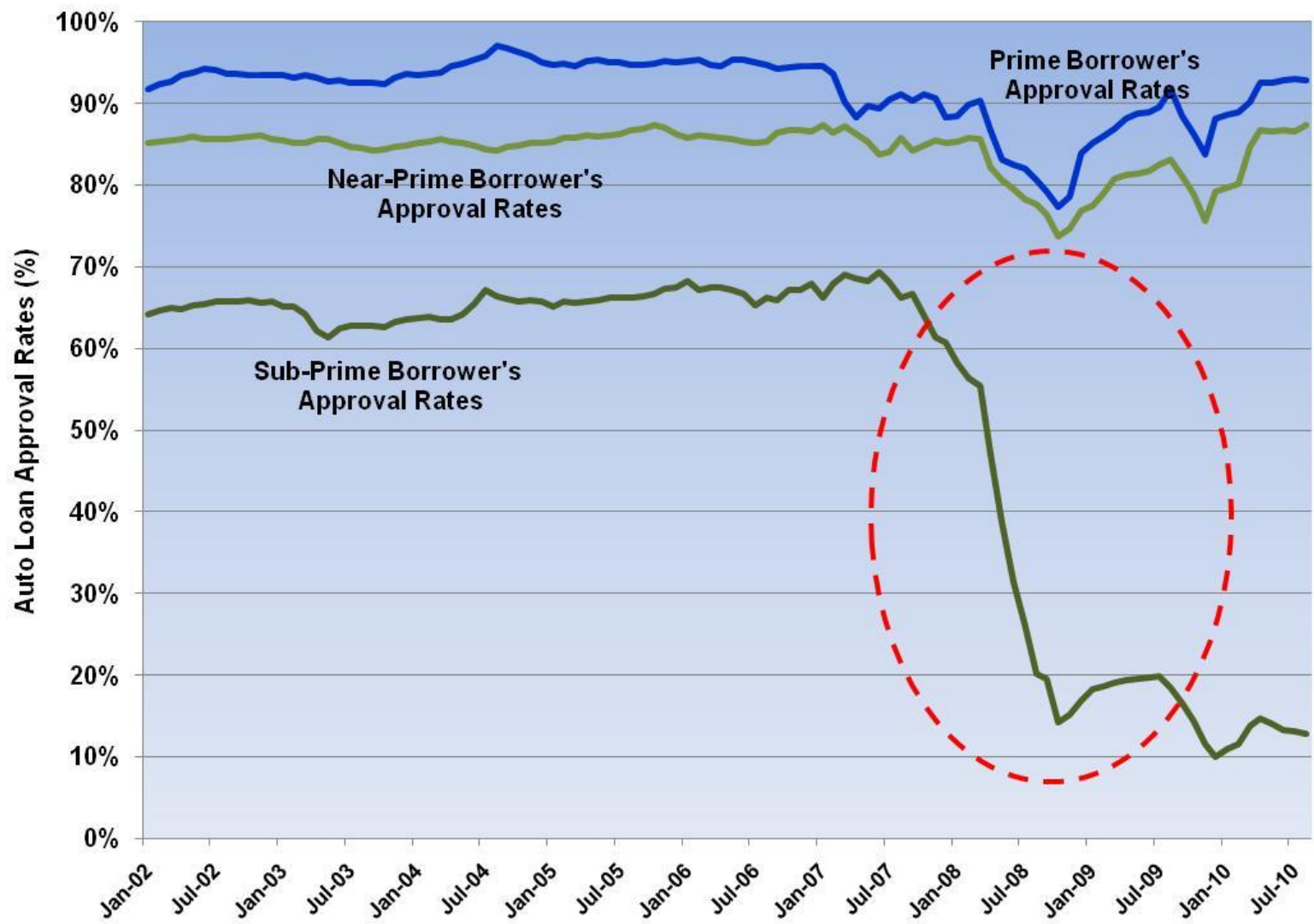
Vehicle Purchases (net outlay)	Avg	<25 years	25-34 years	35-44 years	45-54 years	55-64 years	>65 older
2007	<b>2.5%</b>	3.4%	2.7%	2.6%	2.0%	2.4%	3.0%
2006	<b>3.0%</b>	3.2%	3.4%	2.6%	2.7%	2.9%	3.6%
2001	<b>3.4%</b>	3.4%	1.6%	3.9%	3.1%	3.9%	3.2%

Data Source: US Statistical Abstract, IRN

**As incomes rose from 2006 to 2007, the average consumer actually spent less for new vehicle purchases. Overall, the trend has been for consumers to spend less on new vehicle purchases each year - - due primarily to attractive used vehicle availability and longer vehicle life expectancy overall.**

# Consumer Loan Approval Rates

## Consumer's New Vehicle Loan Application Approval Rates



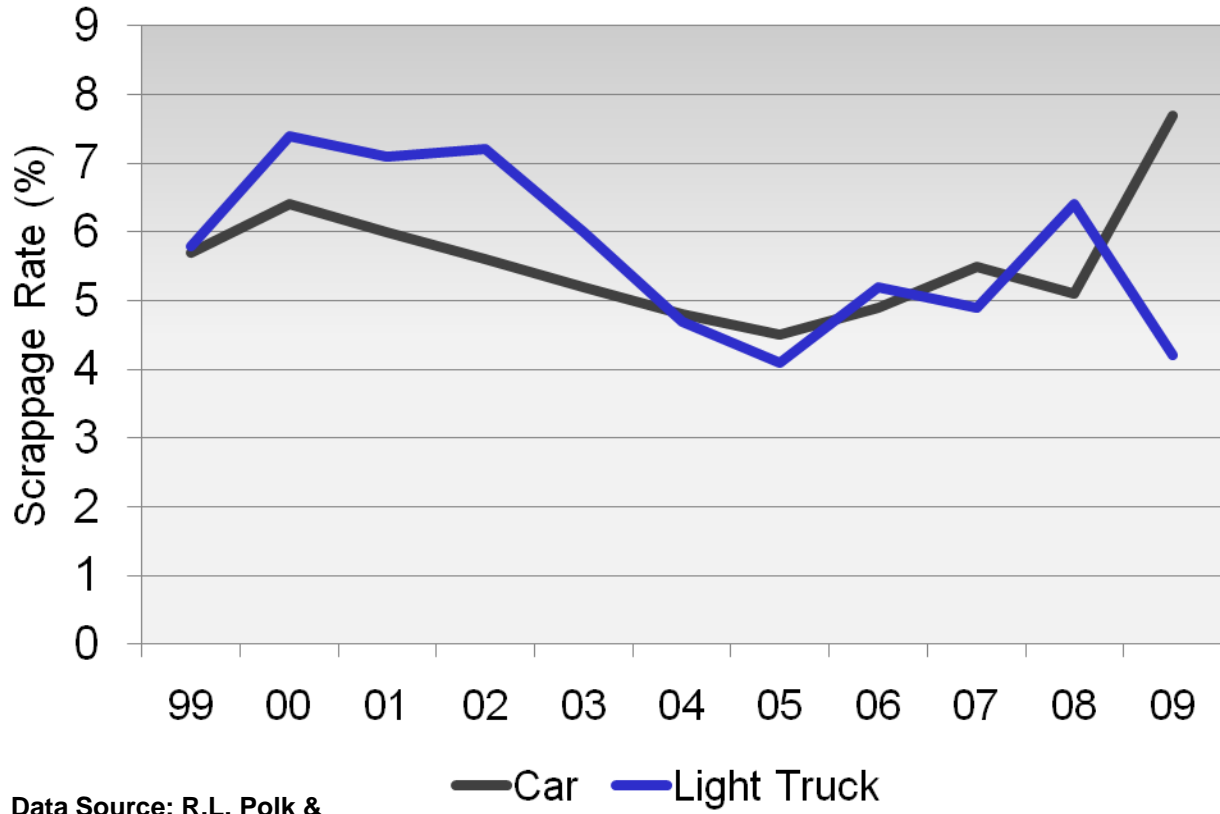
Source: CNW Research (August 2010)

7-1-08

14.8 million cars and light trucks retired from fleet  
New registrations totaled 13.6 million

9-30-09

### Car vs. Light Truck Scrappage Rates

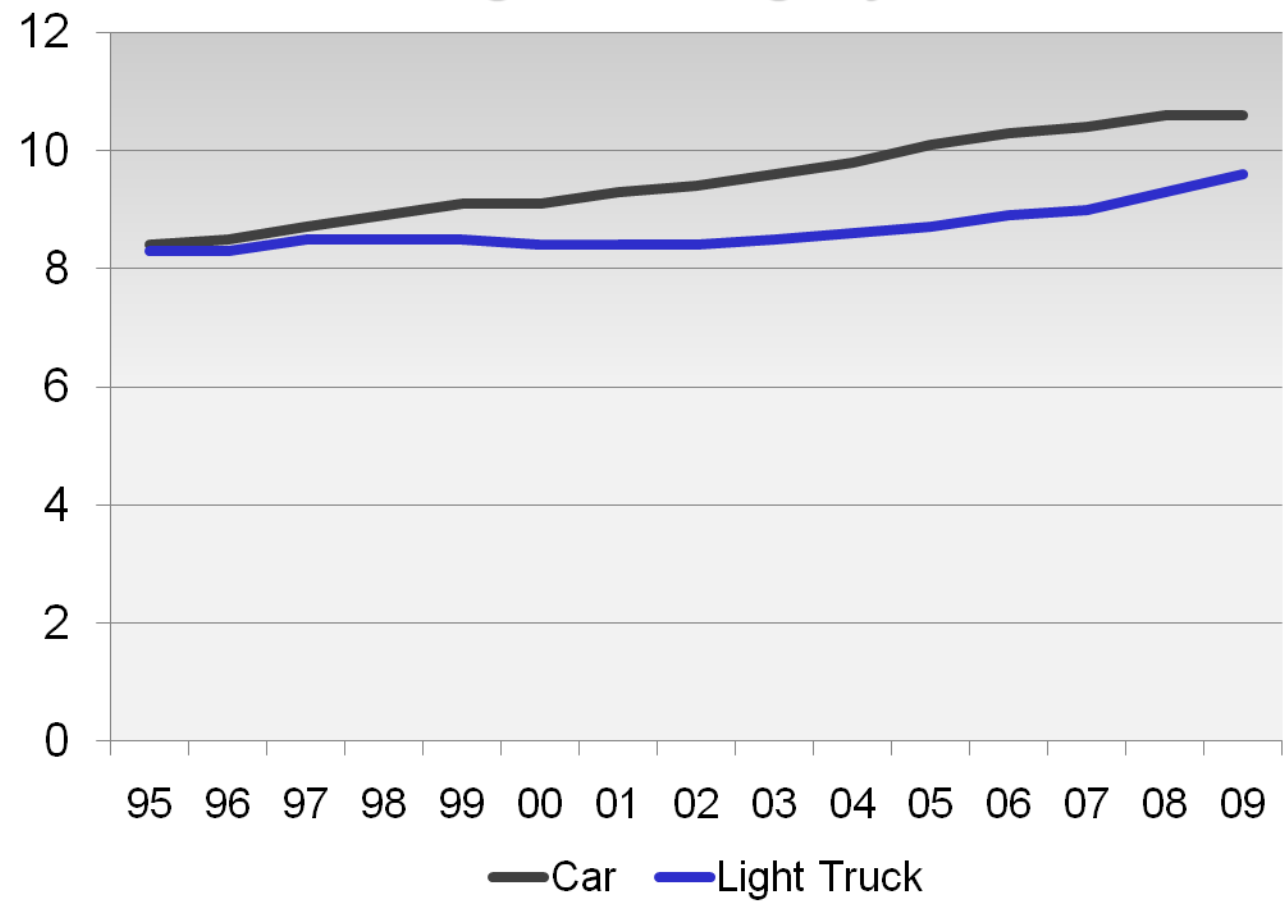


Data Source: R.L. Polk & Co.

- Includes units scrapped through Cash for Clunkers
- First time scrappage has exceeded purchases since 1948
- Signifies a high level of pent-up demand

# Fleet Continues to Age

**Average Vehicle Age by Year**



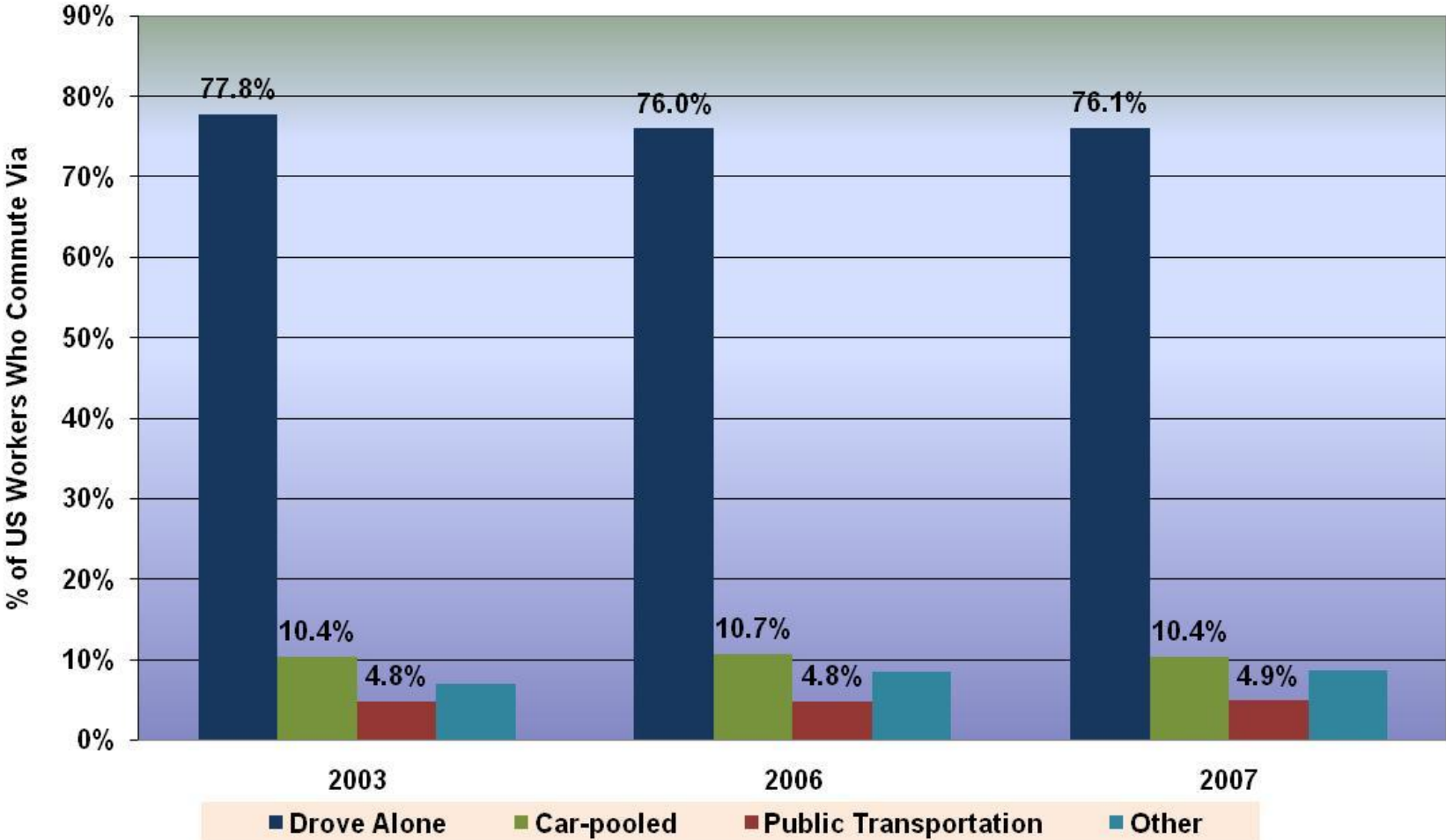
*Likely causes of this trend include:*

- **Economic recession**
- **Limited financing and leasing options available**
- **Trend toward longer OEM warranties**
- **Increased vehicle quality and durability**

Data Source: R.L. Polk & Co.

# No Major Shifts Seen In Public Policy or Habits

## Commuting to Work



Data Source: US Statistical Abstract, IRN

# US Vehicle Sales – A Cyclical Picture

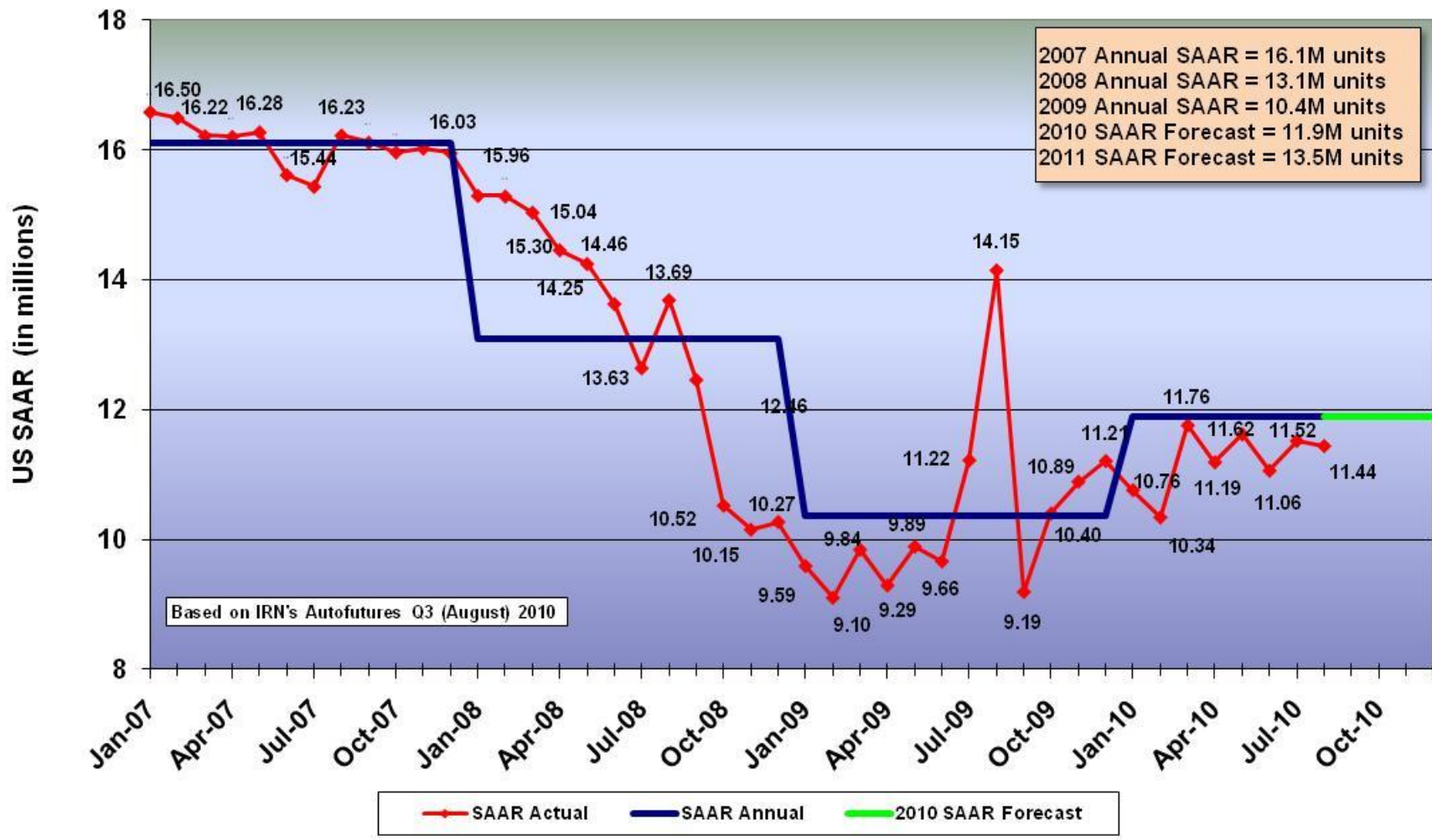
**US Light Duty Vehicle Sales (R-12)**



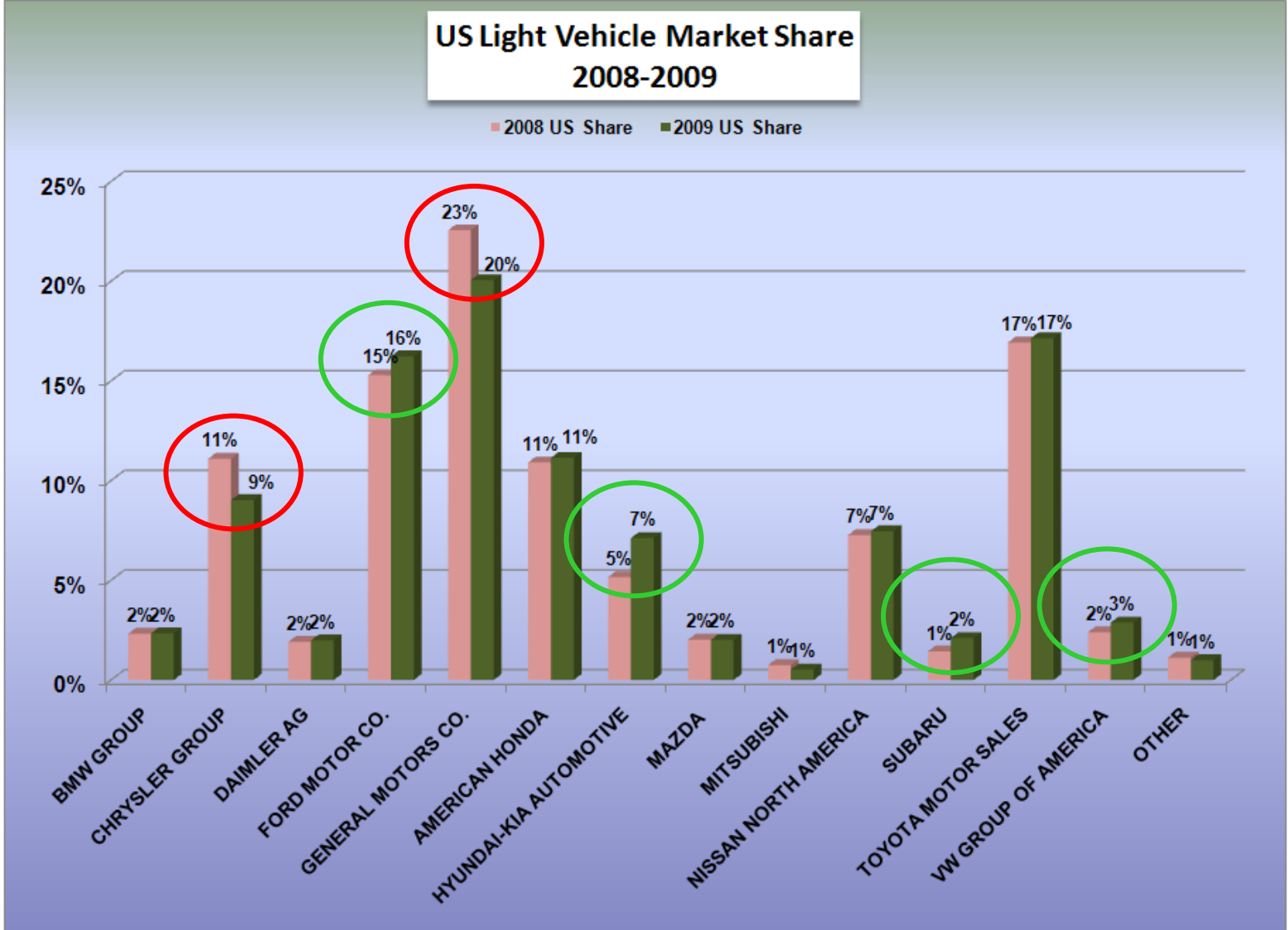
Source: IRN's Autofutures Q3 (August) 2010

# US Vehicle Sales - Bottoming Out

**US Light Duty Vehicle SAAR**  
**Actual Monthly SAAR Compared to Actual & Forecasted Annual SAAR**



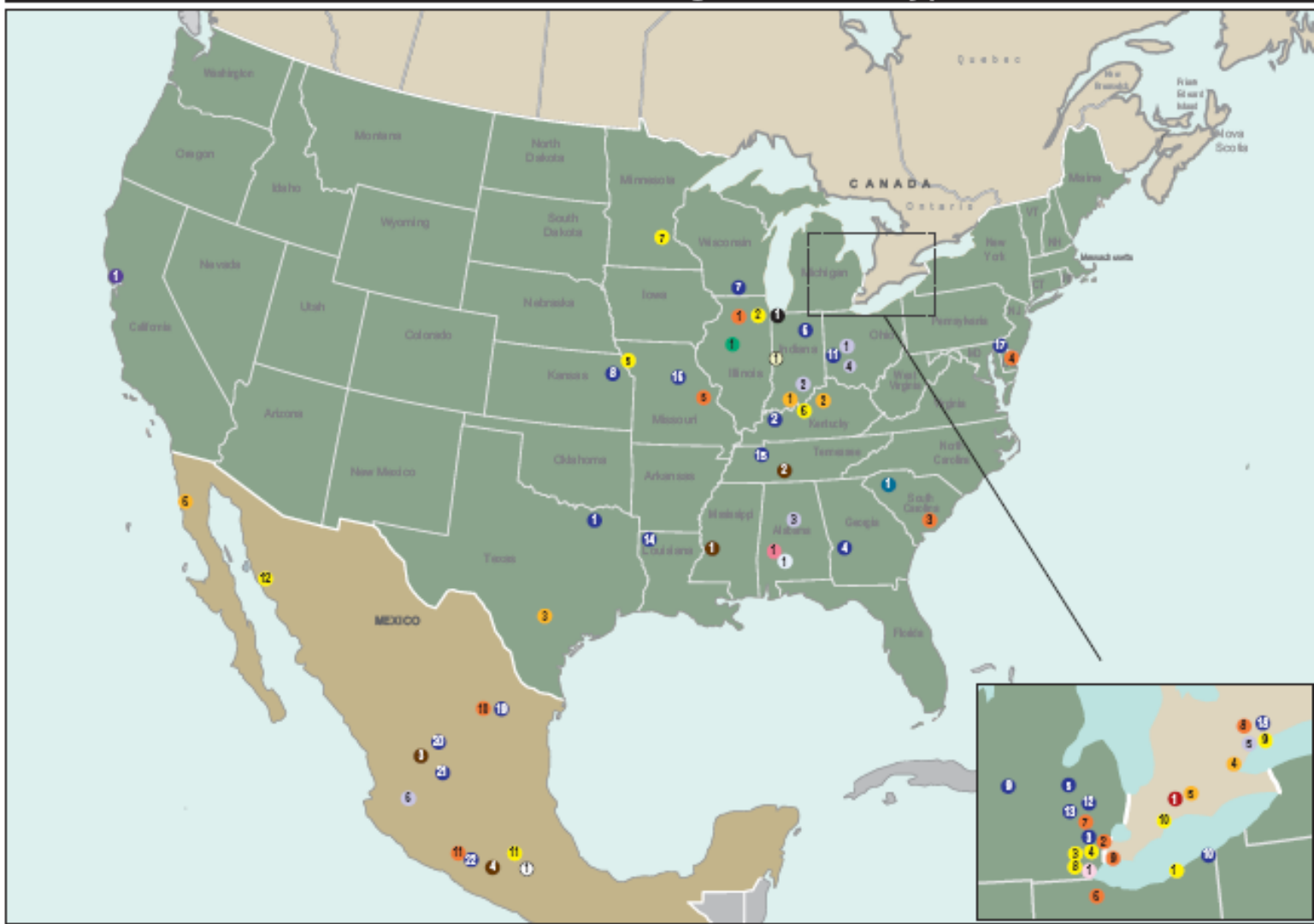
# Market Shares are Shifting



Data Source: *Automotive News*

# A Shift to the South

2007 North America car and light-truck assembly plants

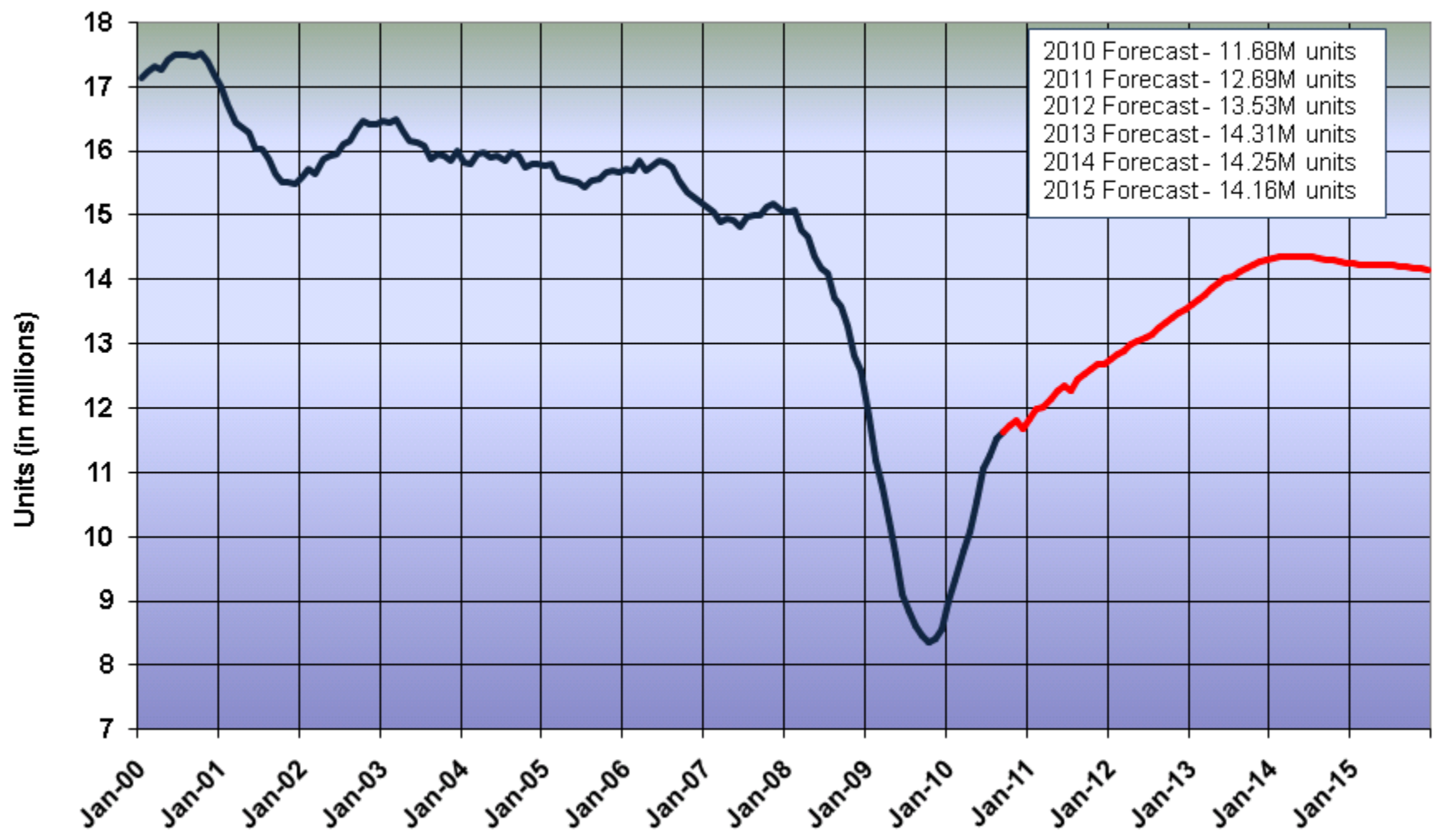


www.autonews.com/2008marketdata

Automotive News

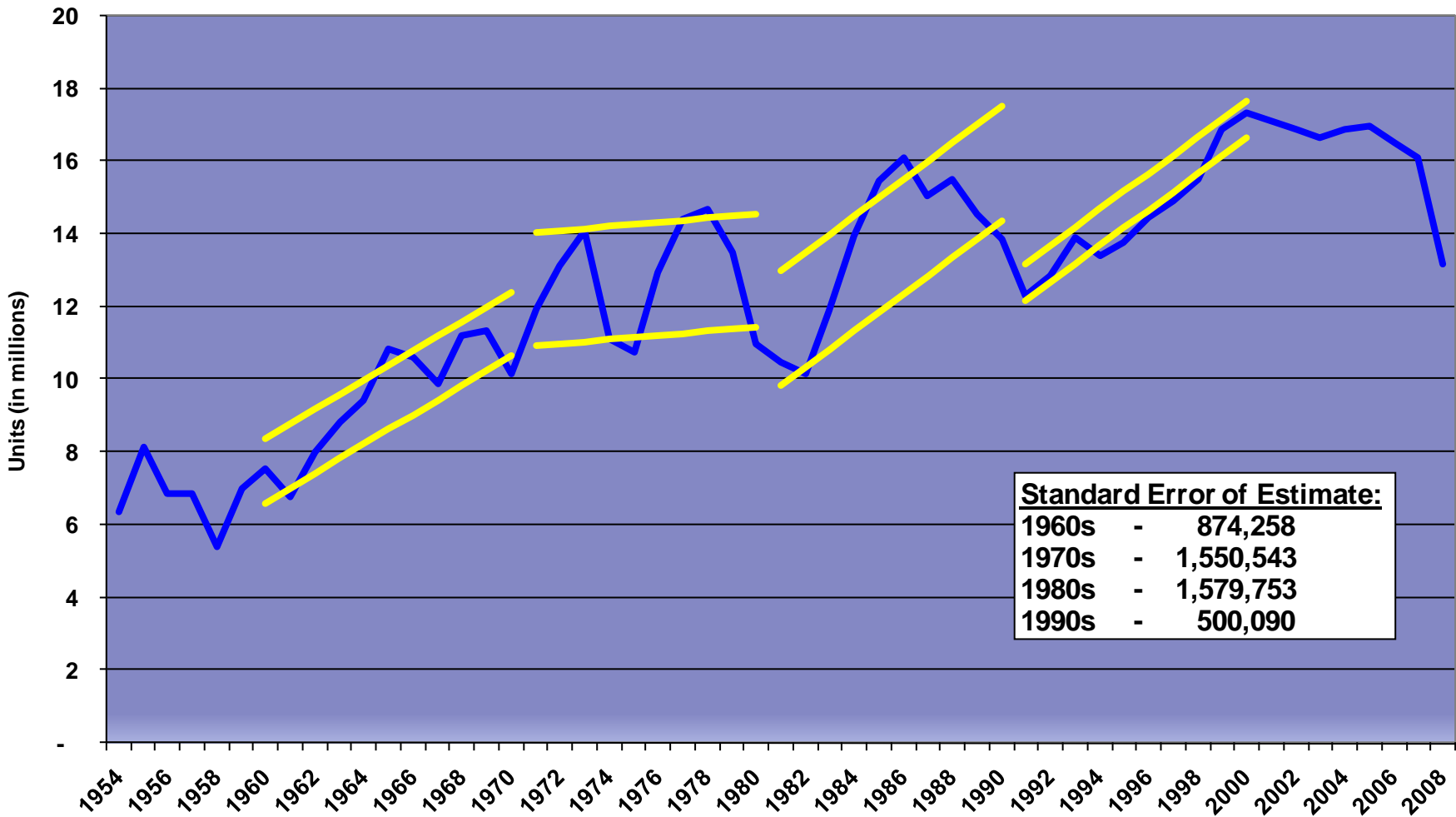
# NA Production – Reaching the Trough

**NA Light Duty Vehicle Production (R-12)**



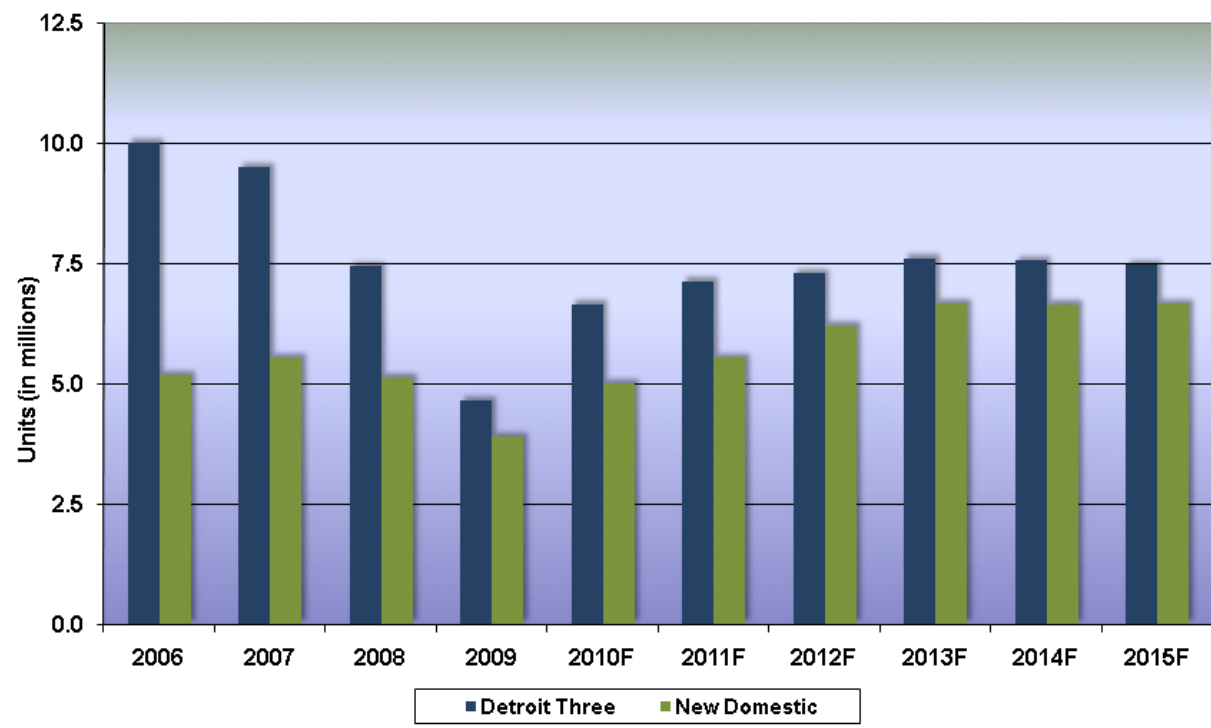
Source: IRN's Autofutures Q3 (August) 2010 Forecast

**US Total Light Vehicle Sales Trend:  
Volatility By Decade**



# NA Production – Detroit 3 Stabilizing After Big Losses

**North American Production  
Detroit Three vs New Domestics**



Source: IRN's Autofutures Q3 (August) 2010 Forecast

CAGR	2005 -2010F
Detroit 3	-9.1%
New Domestics	0.3%
<b>Total Industry</b>	<b>-5.7%</b>

CAGR	2010F – 2015F
Detroit 3	2.3%
New Domestics	5.9%
<b>Total Industry</b>	<b>3.9%</b>

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## Alternative Vehicles / Powertrains

# Dummies headed to Washington

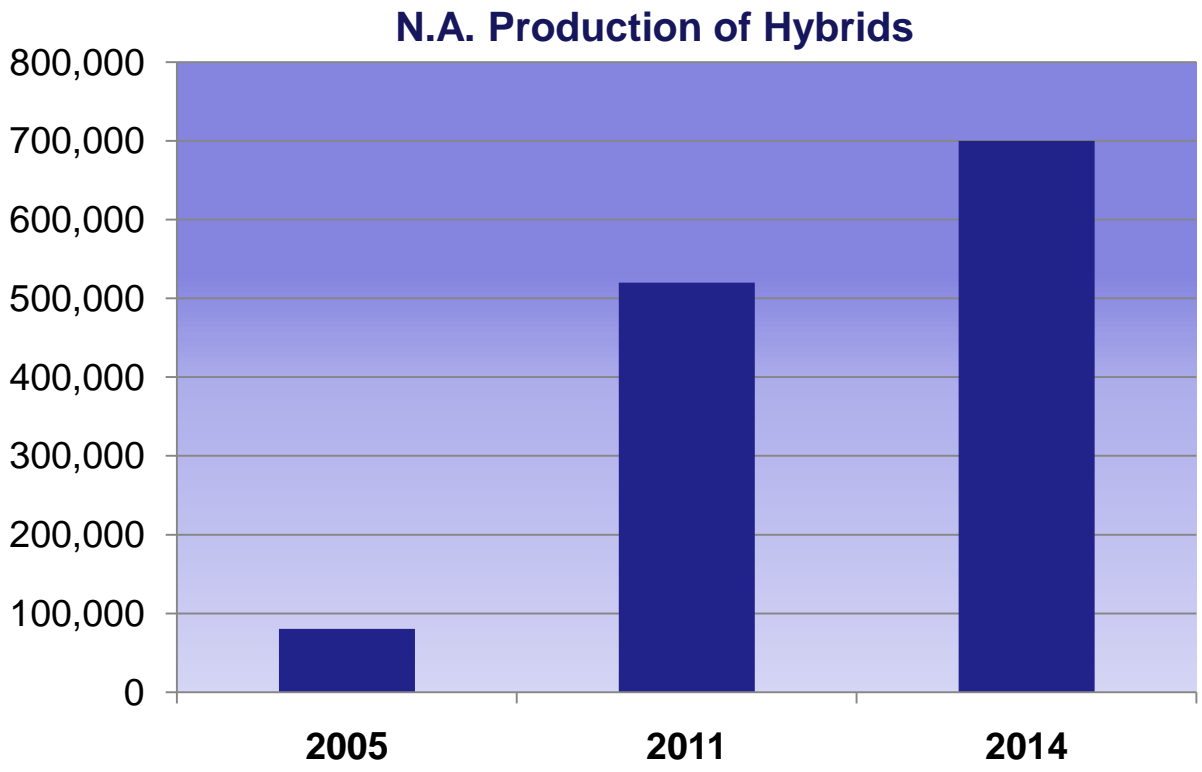


ConsortiumInfo.org

- **Vince and Larry from the Department of Transportation are headed to the Smithsonian Museum of American History after starring in the second most popular Ad Council campaign (after Smokey the Bear).**
- **Started in 1985 and retired in 1998, the campaign coined the popular phrase “you could learn a lot from a dummy”.**

# Outlook for Alternative Vehicles

IRN projects that by 2014 vehicles with **alternative powertrains** will account for **5-7%** of North American vehicle production.



Source: IRN Autofutures®

*For this timeframe:*

- Hybrids will continue to dominate the alternative segment
- Pure electrics will make up less than 1% of total production
- The EV segment will be very fragmented

# The Hybrid Vehicle Spectrum



**Micro Hybrid**

**Mild Hybrid**

**Full Hybrid**

**Plug-in Hybrid**



Engine shuts off during idling

Relatively inexpensive

Boosts fuel economy up to 10 mpg

Engine shuts off in stop-and-go traffic

Regenerative braking

Electric motor assists gas engine

All features of mild hybrid

Can be driven at times using only electric motor

Rechargeable with wall plug

Can be driven on electricity alone for at least 20 miles

Gas engine serves only as backup to electric motor

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# The New Rules for Success and Survival

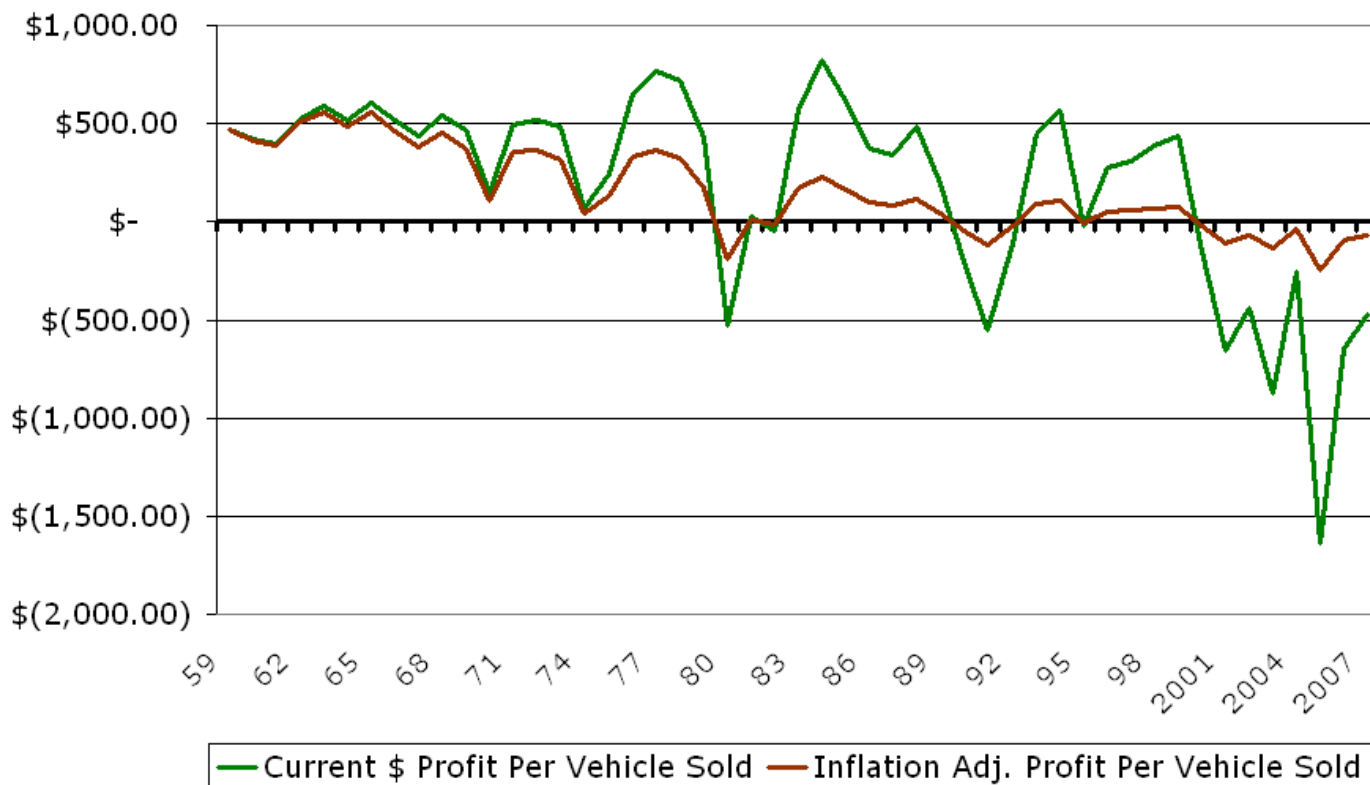
# #1 Learn to Deal with Greater Complexity

- Platform consolidation but significant vehicle proliferation off of common platforms
- Shorter model lifecycles with lower average vehicle volumes
- Continuous shifts between segments
- “Regionalization” of the industry, both globally and within a region

# #2 Industry Returns to Profitability



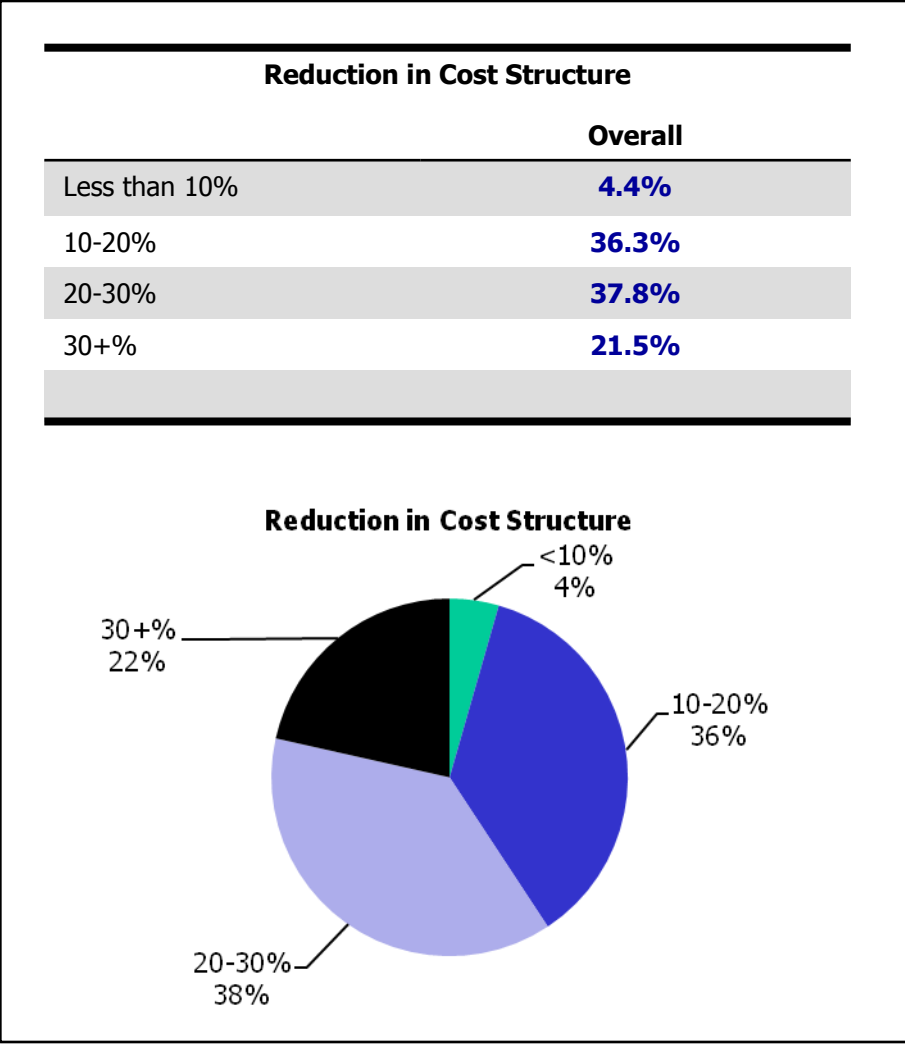
## US Corporate Profits: Motor Vehicles and Equipment Per Light Vehicle Sold



Source: CSM Worldwide

# The Upside of the Downturn

**Q5. Given the significant downturn in the industry in 2008-09, how successful were you in reducing your cost structure?**



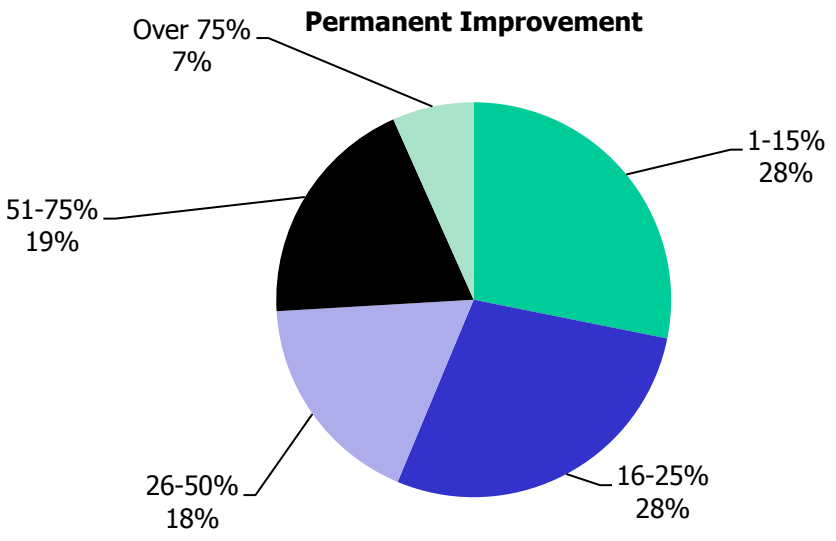
**Suppliers need a fixed cost structure that can make money at the low end of the cycles and a variable cost structure that allows them to cope with the peaks of the cycles.**

**Source:**  
 IRN 2009 Pricing Survey  
 Preliminary Results

# Permanent Cost Improvements

**Q8. When industry production begins to return to more normal levels (13 million or greater) how much of your cost improvements do you believe are permanent?**

Percentage of Improvement That is Permanent	
	Overall
1-15%	28.1%
16-25%	28.1%
26-50%	17.8%
51-75%	19.3%
Over 75%	6.7%



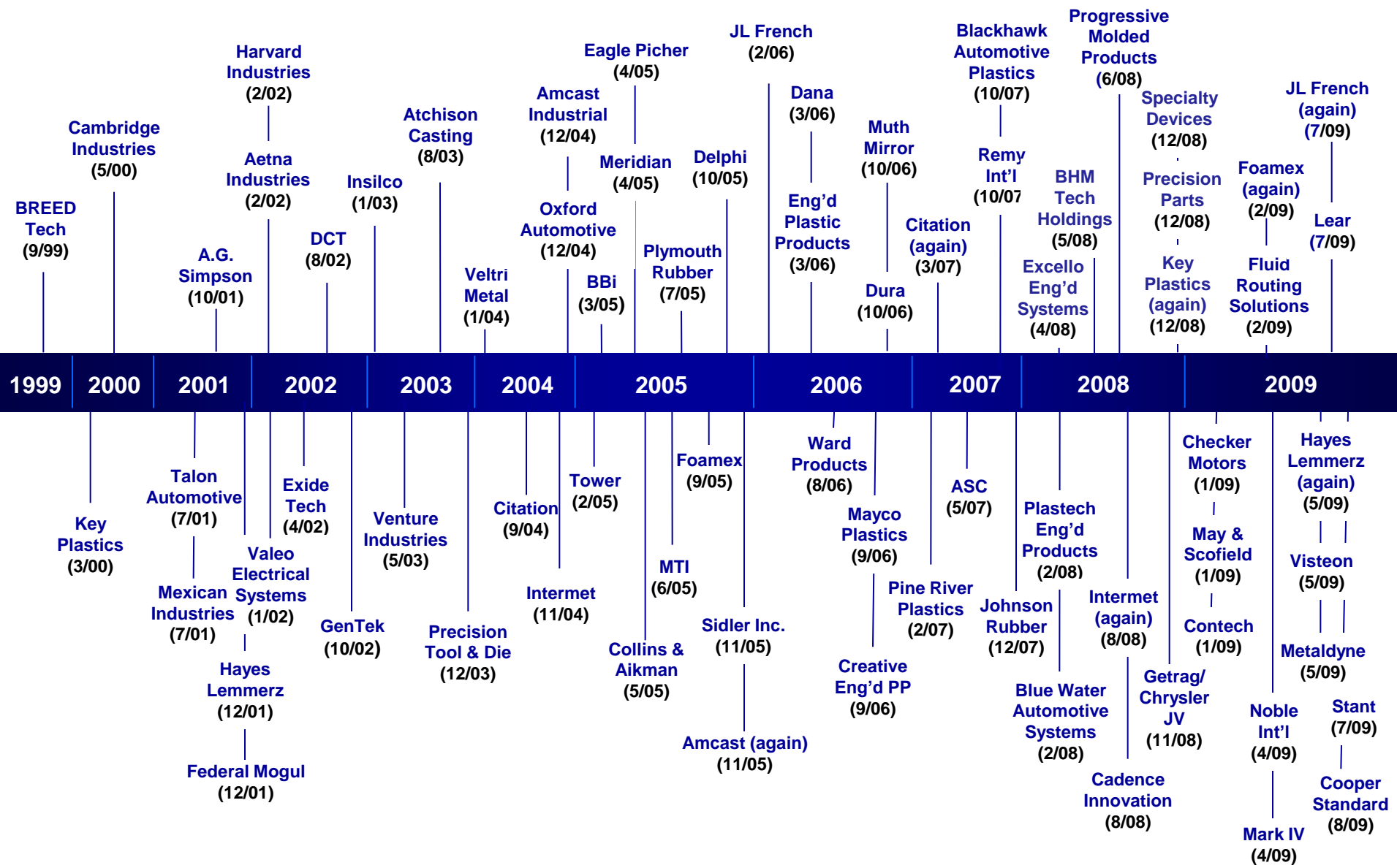
- OEMs and Major Tier Ones are *significantly* resource constrained.
- Product cadence model is accelerating.
- Flawless program launch is a key to profitability.
- Customers have no tolerance for supplier performance issues. If you cause too many problems, they will replace you.
- Most of your customers do not know how to operate in this new environment.

# Some things need no explanation...



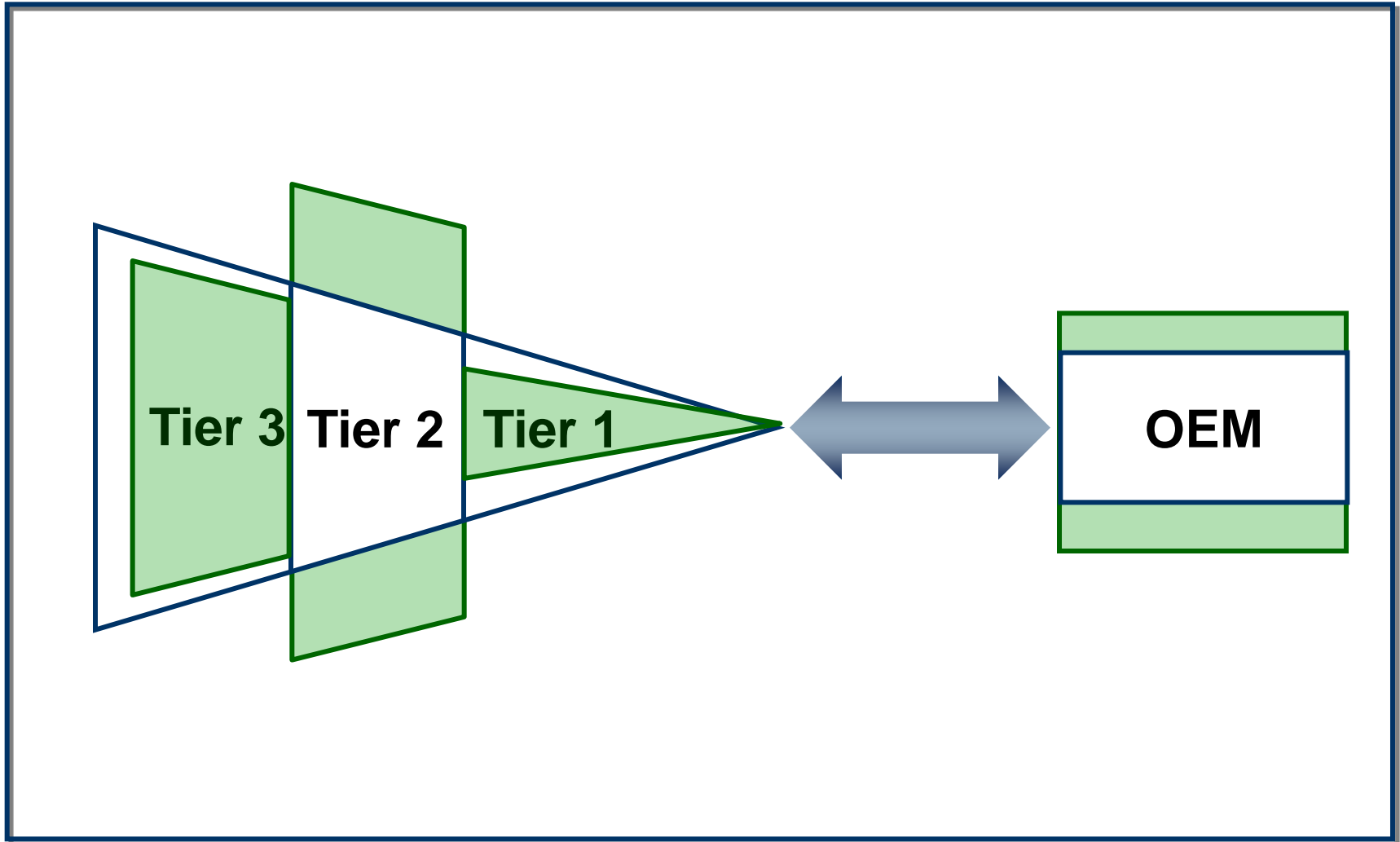
- **Supplier positioning is less about position in the food chain and more about competence and intellectual property.**
- **Most suppliers are *horrible* at articulating their competitive differentiators.**
- **The increasing mutation of home, vehicle, office makes brand identity more important.**
- **Do not wait for dysfunctional competition to go away.**

# Industry Consolidation



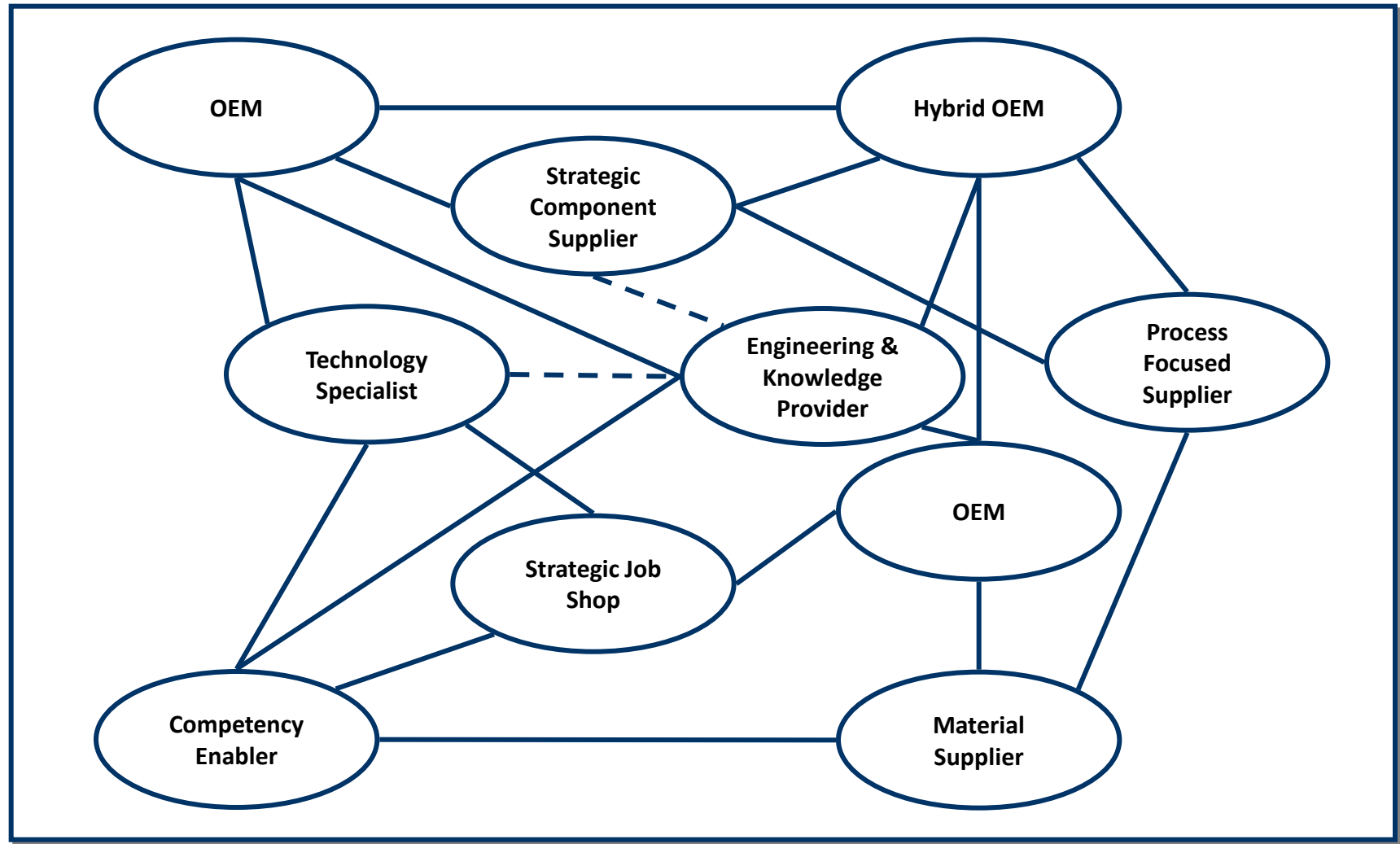
Significant industry consolidation has been predicted for over 30 years but it never seems to happen. Why?

- ❖ People underestimate the scale and breadth of automotive.
- ❖ There are significant barriers to exit (e.g. staying in to reduce exposure).
- ❖ Many businesses are run to support a lifestyle not make money in the traditional sense.
- ❖ Continuous player “churn” and ongoing new entrants



Source: IRN, Inc.

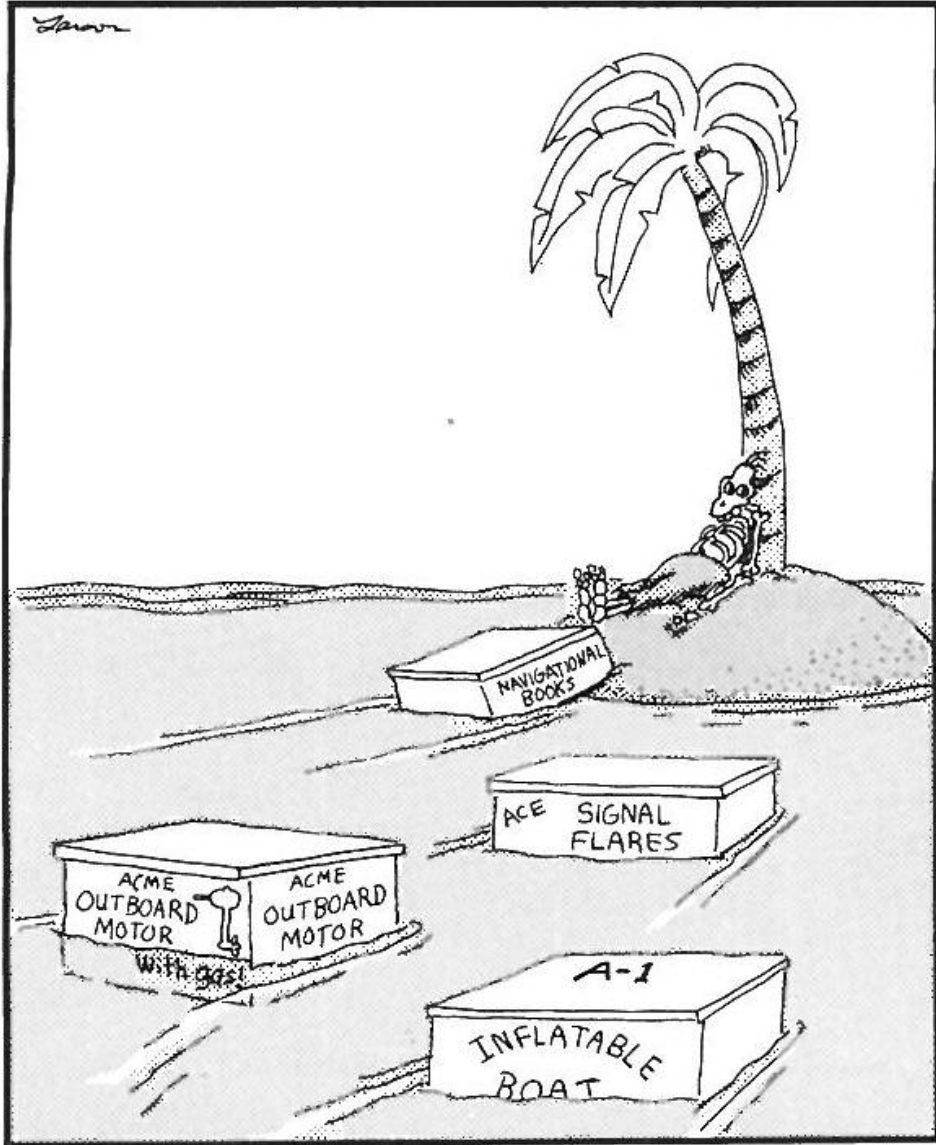
## The New Model: Organic Tiering



- ❖ Between new OEM entrants and the need to service the large OEMs on a global basis, suppliers' "go to market" capabilities will be tested.
- ❖ New technologies will be a disruptive factor.
- ❖ Below the large Tier One level, the competitive landscape is likely to change significantly.
- ❖ The key to success will be differentiation.

# Suppliers Must Shorten Their Reaction Time

- ❖ Suppliers must significantly shorten their market feedback loops. Requires a systematic and multi-disciplinary approach.
- ❖ Product design, development and execution need to become modular and iterative (e.g. lean product development).
- ❖ Flexible capital deployment and flexible manufacturing processes are key (i.e. the Honda model).



# #5 Globalization is not as logical as it sounds



Low cost within a region, not between regions

# Suppliers Need a “Personalized” Globalization Plan

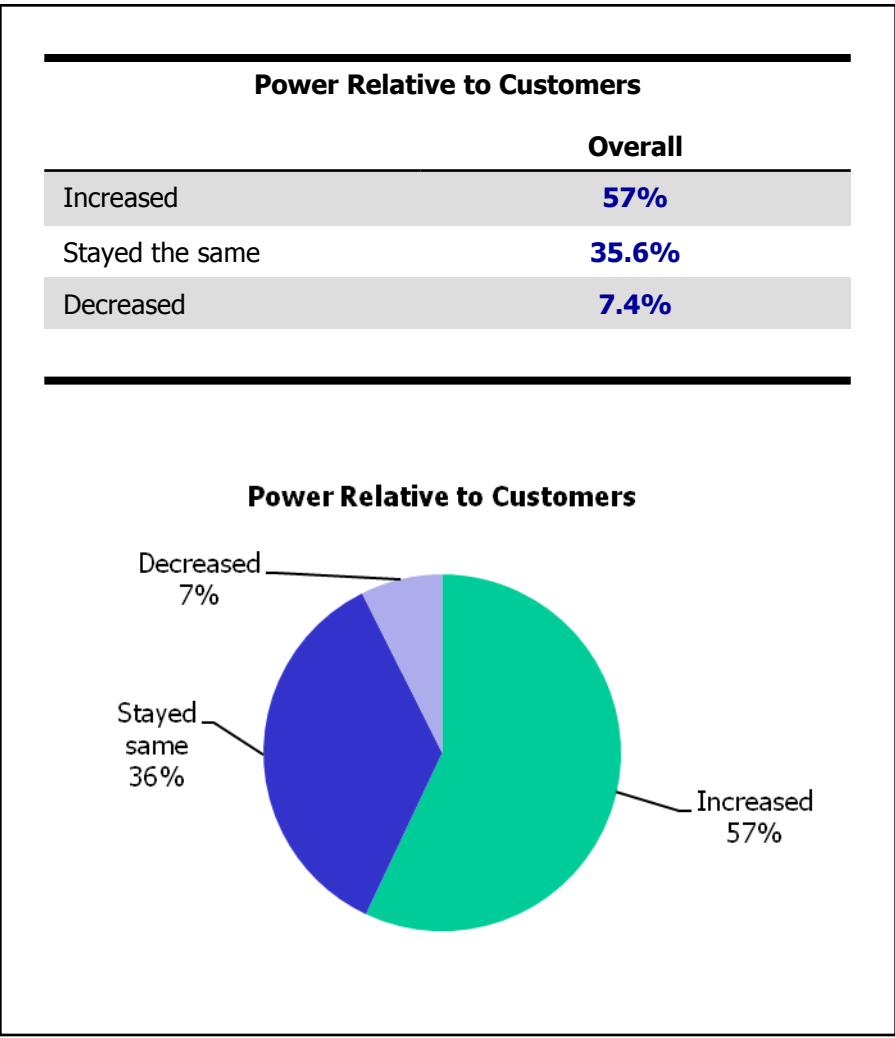
- ❖ “Going global” is not a panacea for growth or increased profitability.
- ❖ Many suppliers are ill-prepared to be successful in emerging markets. Their cost structures and product solutions do not fit the low end of the market.
- ❖ Most suppliers radically underestimate their limited managerial bandwidth to go global. The result? They allow deterioration in their home markets.
- ❖ OEMs will continue to move in the direction of global platforms and behavior but many decisions will be driven regionally (i.e. for many smaller suppliers, participation in only one region will be the norm).

- **We are experiencing a polarized environment where the weak are getting weaker and the strong cannot keep up with demand**
- **Rule of Thumb: 25% of the suppliers make 60-70% of the profits**

**1<sup>st</sup> Used this Slide in 1998!**

# Power Relative to Customers

**Q11. Compared to three years ago, do you feel the power of your company relative to that of your CUSTOMERS has: increased; stayed the same; decreased?**



**As the industry becomes more profitable, the stronger suppliers will show much greater consistency in performance while the rest of the industry will continue to compete on the historic model of price-based competition. This will be true for every level of the supplier food chain.**

**Source:**  
 IRN 2009 Pricing Survey  
 Preliminary Results

- If you have not had a lot of takeover opportunities in the last six months, you should be worried.**
- Top performing suppliers will continue to separate themselves through improved financial performance and faster top line growth.**
- Average performance = Sub par financial return**
- The industry is separating into highly profitable suppliers and everybody else.**

# Conclusion

- ❖ Suppliers need to develop cost structures and organizational designs that can cope with a much more volatile external marketplace.
- ❖ Spend less time on trying to accurately predict the future and more time on preparing your organization to make ongoing calibrations based on market requirements.
- ❖ Quit waiting for your dysfunctional competition to go away. Make them irrelevant.
- ❖ Develop a “point of view” on globalization.
- ❖ Clearly understand and articulate your competitive differentiators. In the future, brand will be more important.

- 1. Clear Strategic Position**
- 2. Strong Organizational Alignment**
- 3. Deeply Committed to Lean**
- 4. Technology / Innovation**
- 5. A Financial vs. an Accounting Mindset**

- 6. A Strategic Sales Approach**
- 7. Flawless Capability in Program Launch**
- 8. Diversified Customer Base**
- 9. Strong Balance Sheet**
- 10. Performance Based Culture**



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