

The Sixteenth Annual Automotive Outlook Symposium

# Economic and Auto Industry Outlook

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# Global Economic Update

- Global economy: no strong recovery is eminent, but recent data suggest a moderation in the pace of contraction
- China's strong domestic stimulus providing only thrust for global recovery
- US economy: green shoots starting to appear
- European economies set to recover, with a lag

	GDP		Industrial Production		Retail Sales		Exports		Confidence Index		Monetary Policy	PMI		Credit
	2008	2009*	YoY	MoM	YoY	MoM	YoY	MoM	YoY	MoM	Δ Since Jan.	YoY	MoM	
U.S.	1.1	-2.9	-12.5	-0.5	-11.4	-0.4	-21.9	-3.0 †	14.9	5.5 ††	↔	-26.5	-13.0 ††	Tight/Improving
Canada	0.5	-2.0	-2.4	-0.3 †	-4.8	0.3 †	-19.2	-1.8 †	-8.4	0.5	75 Bp ↓	-6.8	24.3	Tight/Improving
Mexico	1.4	-5.0	-11.5	-2.1 †	-3.6	1.4 †	-30.1	-0.1	-16.1	3.4	250 Bp ↓			Tight/Deteriorating
Germany	1.0	-4.7	-21.7	-0.4 †	-0.3	0.5	-21.1	0.7 †	-41.9	0.0 **	100 Bp ↓	-26.1	11.8 ††	Tight/Modest easing
Russia	5.6	-3.9	-16.7	-2.3	-5.6	-0.9	-4.4	-0.8 †			100 Bp ↓	-13.7	4.2 ††	Restricted Availability
U.K.	0.7	-3.4	-12.3	-0.7 †	2.1	1.0 †	-46.9	2.1 †	-51.4	-1.4 ††	100 Bp ↓	-6.5	5.3 ††	Tight/Modest easing
China	9.0	7.0	5.5	7.8	14.7	1.8	-22.7	-4.0	-8.4	0.1	↔	-0.4	-0.7 ††	Loosening
India	6.8	5.5	-2.4	-1.9 †	0.8	-0.7 †	-33.3	12.0	-40.6	-23.8 ‡	75 Bp ↓	-3.0	4.6 ††	Mild loosening
S. Korea	2.2	-2.5	-9.0	2.6	-2.2	0.7	-22.5	4.1	N/A	7.1 ††	50 Bp ↓	-12.9	0.1 ††	Mild loosening
Australia	2.1	-0.2	-0.7	-2.3 ‡	6.8	0.3	-6.7	3.4 †	6.1	8.3	125 Bp ↓	-25.2	24.7 ††	Mild loosening
Brazil	5.1	0.3	-12.3	1.1	5.8	0.3 †	-38.2	-13.1 ††	-16.2	-2.6	250 Bp ↓	-10.7	6.7 ††	Tight/Modest Easing
Argentina	6.8	-1.0	-11.0	0.9	20.5	4.8	-13.0	6.8	-17.7	0.2	572 Bp ↓			Tight/Moving Sideways
S. Africa	3.1	0.0	-11.5	0.1 †	3.2	-1.9 †	-37.4	-9.5			400 Bp ↓	-22.8	4.8 ††	Tight/Moving Sideways

Figures use April '09 data unless otherwise indicated \*: GMLA forecast \*\*: June '09 Data ††: May '09 Data †: March '09 Data ‡: December '08 Data

# Most of the worst fears are not materializing

Worst fear	Recent data	Market reaction	Outlook
Rising protectionism	Trade -9% for '09, less FDI, but no major reversal of trade policies	Calm	De-link = failure
Complete market meltdown	G20 \$1.1 trillion to backstop EM, IMF \$47bn to Mexico	Calm	Worst is over
Bursting of energy commodity bubble	Oil prices rebounding to \$68; CRB commodity index up 10% CYTD	MidEast housing bubble major correction, but market never panicked	Commodity prices firm up
US/UK consumer deleveraging	US private consumption largely flat, with savings rate rise to 5.7%	Mildly cheerful	Optimistic
Disintegration of euro	Yield gaps between German and Ireland/Mediterranean bonds widened, EU GDP -4% for '09	The euro corrected, then stabilized	Too costly to ditch euro
Contagion of CEE financial crisis	Ukraine GDP fell 25% in Q1; IMF committing \$50bn aid to CEE	Calm	Still alert
Communism is the new capitalism	Nationalization, regulation, tax hikes, and soak-the-rich policies	Some worries of anti-business sentiment	No lasting shift
Black swans	Somalia pirates, swine flu, terrorist attacks, N Korea	Abating worries	Don't be alarmist

# Commodity Prices Bottoming Out

Reuters/Jefferies CRB Futures Price Index: All Commodities

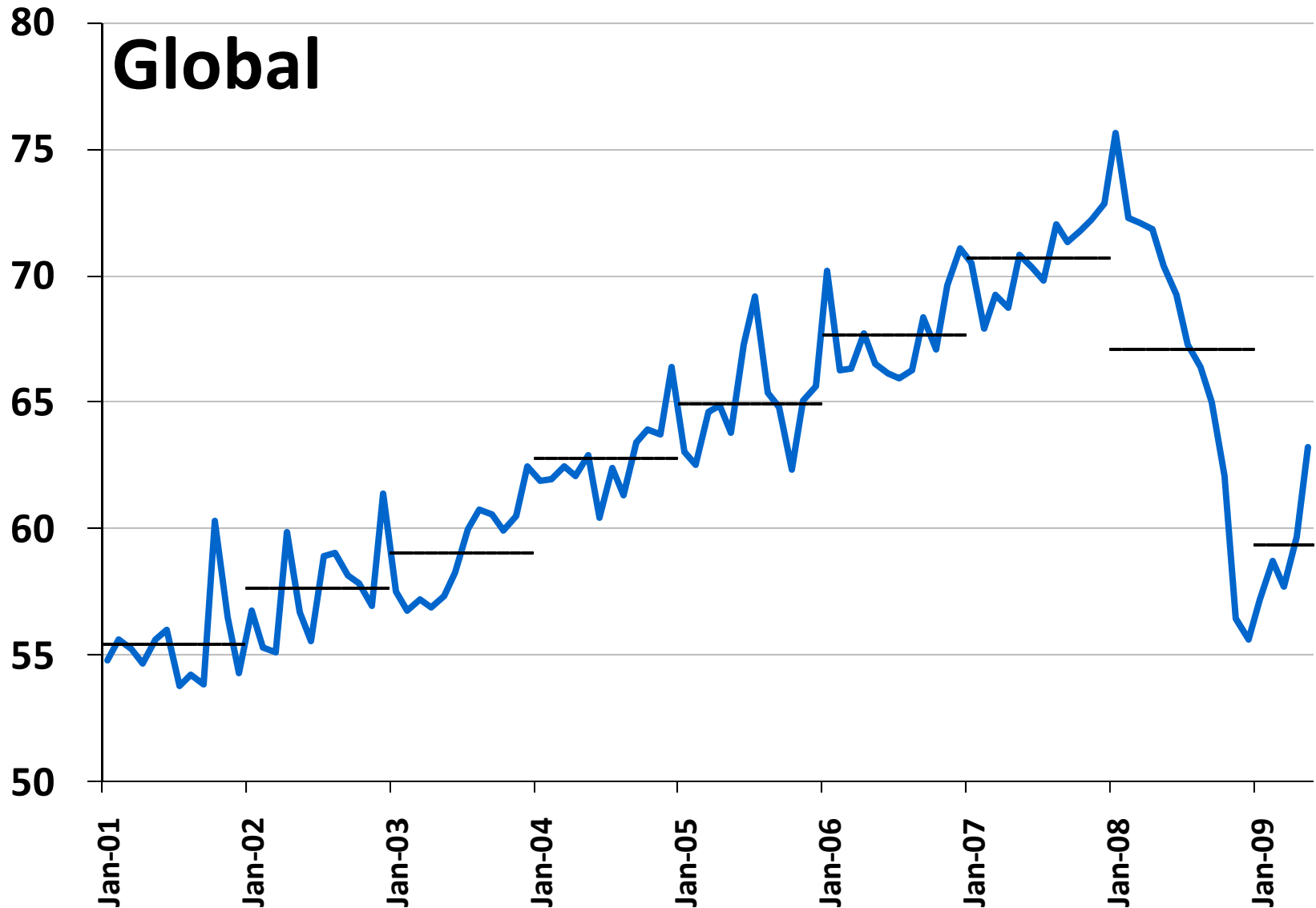
EOP, 1967=100



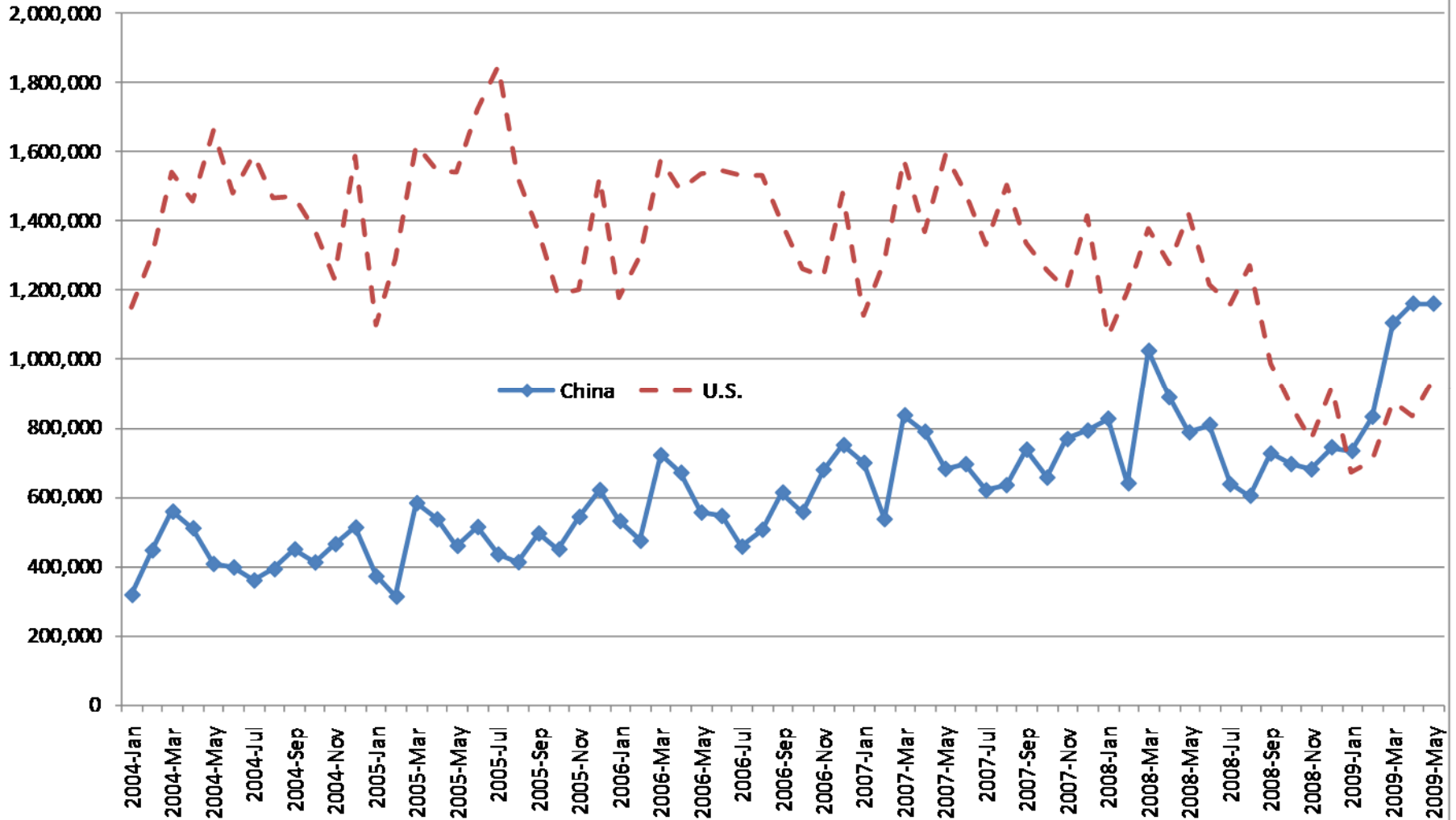
Source: Commodity Research Bureau /Haver Analytics

Vehicle sales dropped 23.5% from Jan to Dec in 2008, but are bouncing back

## Global Industry Sales (SAAR) in millions



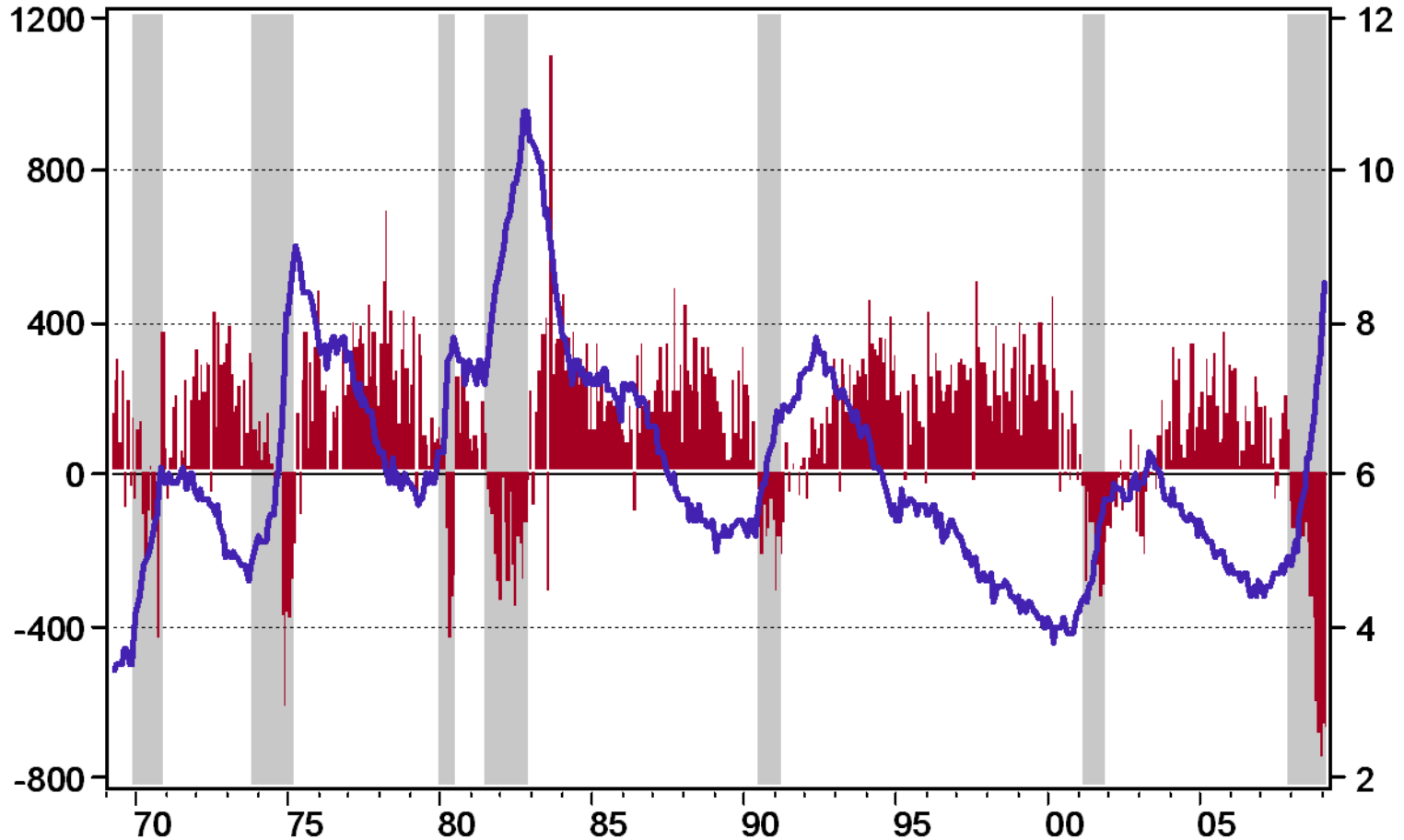
## U.S. and China Industry Volume (2004-2009 CYTD)



	<u><b>2004</b></u>	<u><b>2005</b></u>	<u><b>2006</b></u>	<u><b>2007</b></u>	<u><b>2008</b></u>	<u><b>2009 CYTD</b></u>
<b>China % of US</b>	<b>30.3%</b>	<b>32.9%</b>	<b>41.5%</b>	<b>51.3%</b>	<b>67.2%</b>	<b>124.3%</b>

# USA: Unemployment Rate Hit 8.9% in April, Highest Since 1983

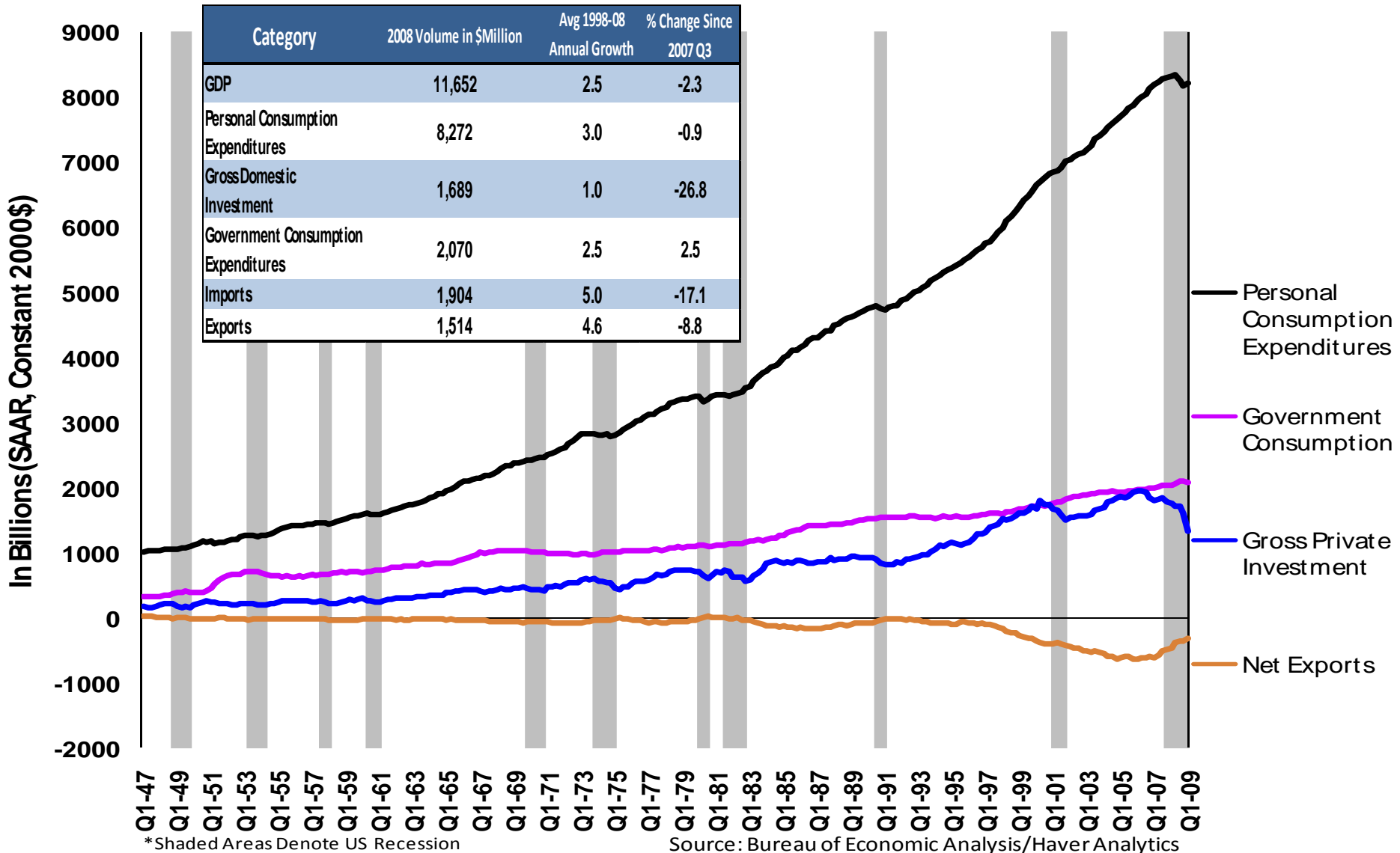
All Employees: Total Nonfarm  
Difference - Period to Period SA, Thous  
Civilian Unemployment Rate: 16 yr +  
SA, %



Sources: Bureau of Labor Statistics /Haver Analytics

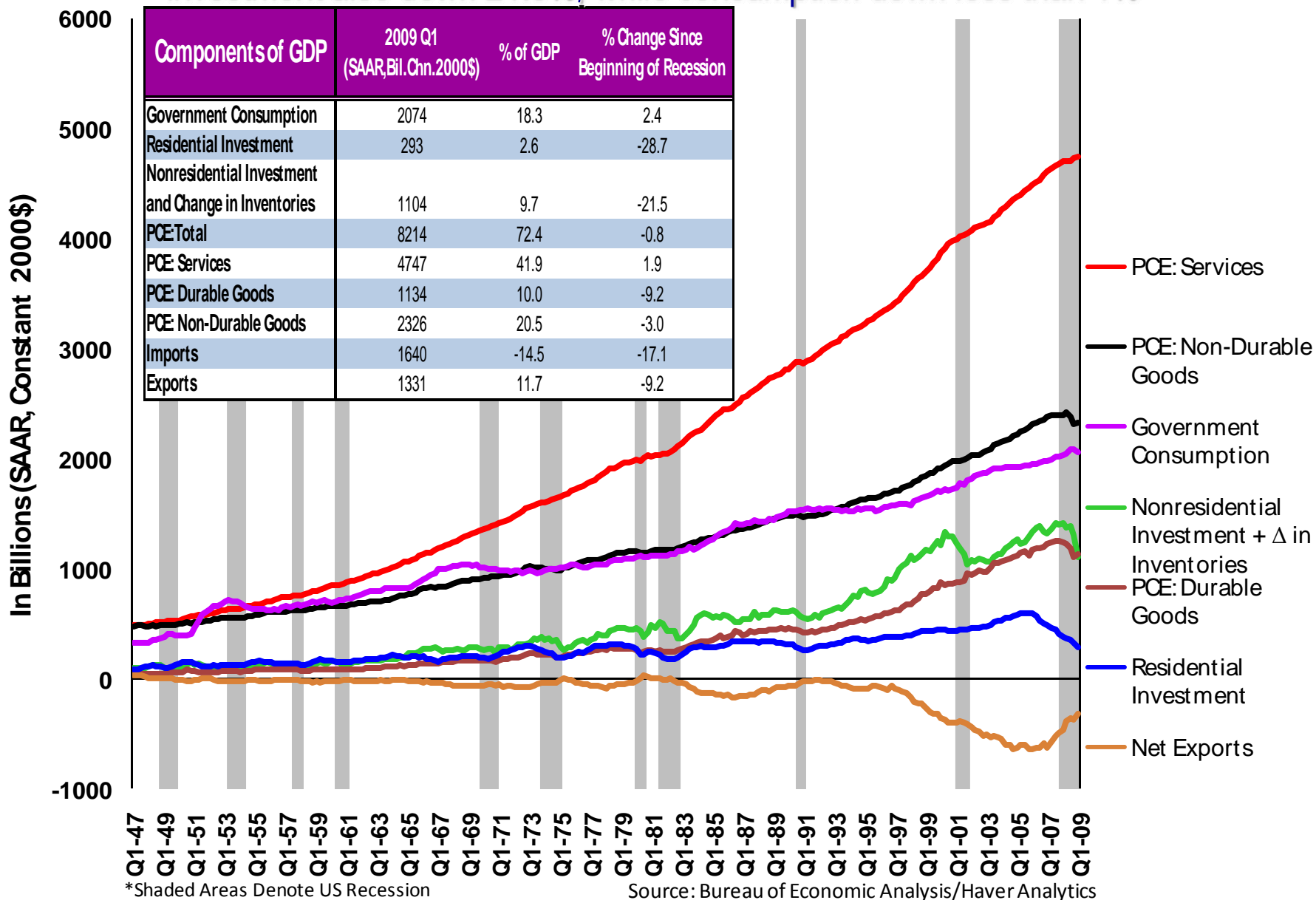
April Nonfarm payroll lost 539,000 jobs (March 699,000, total 5.7m since 1/2008).

# Worst economic crisis since Great Depression





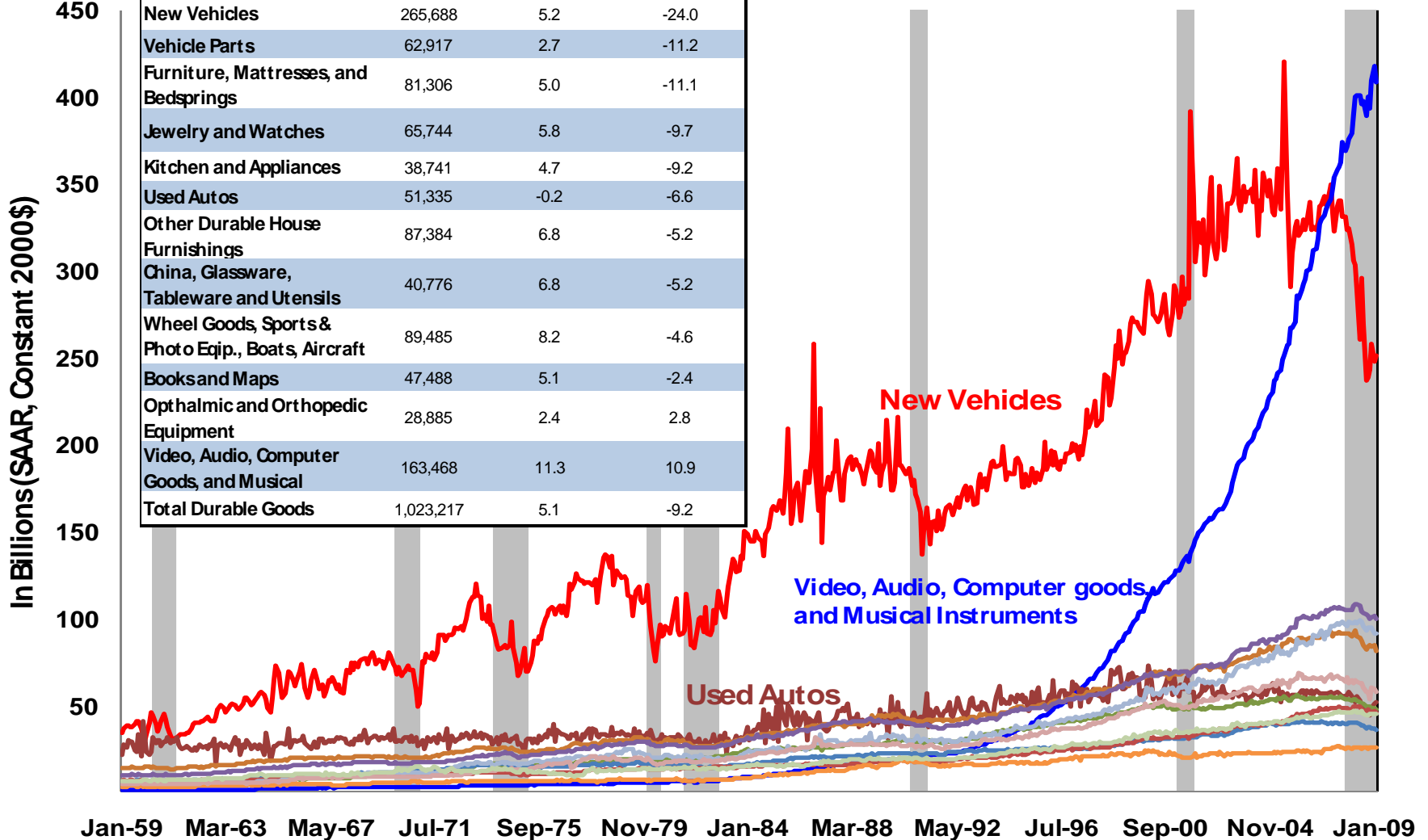
Residential investment down 28.7% (and off 50% from peak in mid-2005), but other investment also down 21.5%, while consumption down less than 1%



# New vehicle purchases have been hit particularly hard in this recession: -24% vs. -9% for All Durable Goods and -3% for All Consumer Spending

## Consumer Spending on Durable Goods by Major Category

Category	2008 Volume in \$Million	Avg 1998-08 Annual Growth	% Change Since December '07*
New Vehicles	265,688	5.2	-24.0
Vehicle Parts	62,917	2.7	-11.2
Furniture, Mattresses, and Bedsprings	81,306	5.0	-11.1
Jewelry and Watches	65,744	5.8	-9.7
Kitchen and Appliances	38,741	4.7	-9.2
Used Autos	51,335	-0.2	-6.6
Other Durable House Furnishings	87,384	6.8	-5.2
China, Glassware, Tableware and Utensils	40,776	6.8	-5.2
Wheel Goods, Sports & Photo Equip., Boats, Aircraft	89,485	8.2	-4.6
Books and Maps	47,488	5.1	-2.4
Ophthalmic and Orthopedic Equipment	28,885	2.4	2.8
Video, Audio, Computer Goods, and Musical	163,468	11.3	10.9
Total Durable Goods	1,023,217	5.1	-9.2



Shading Denotes US Recession.

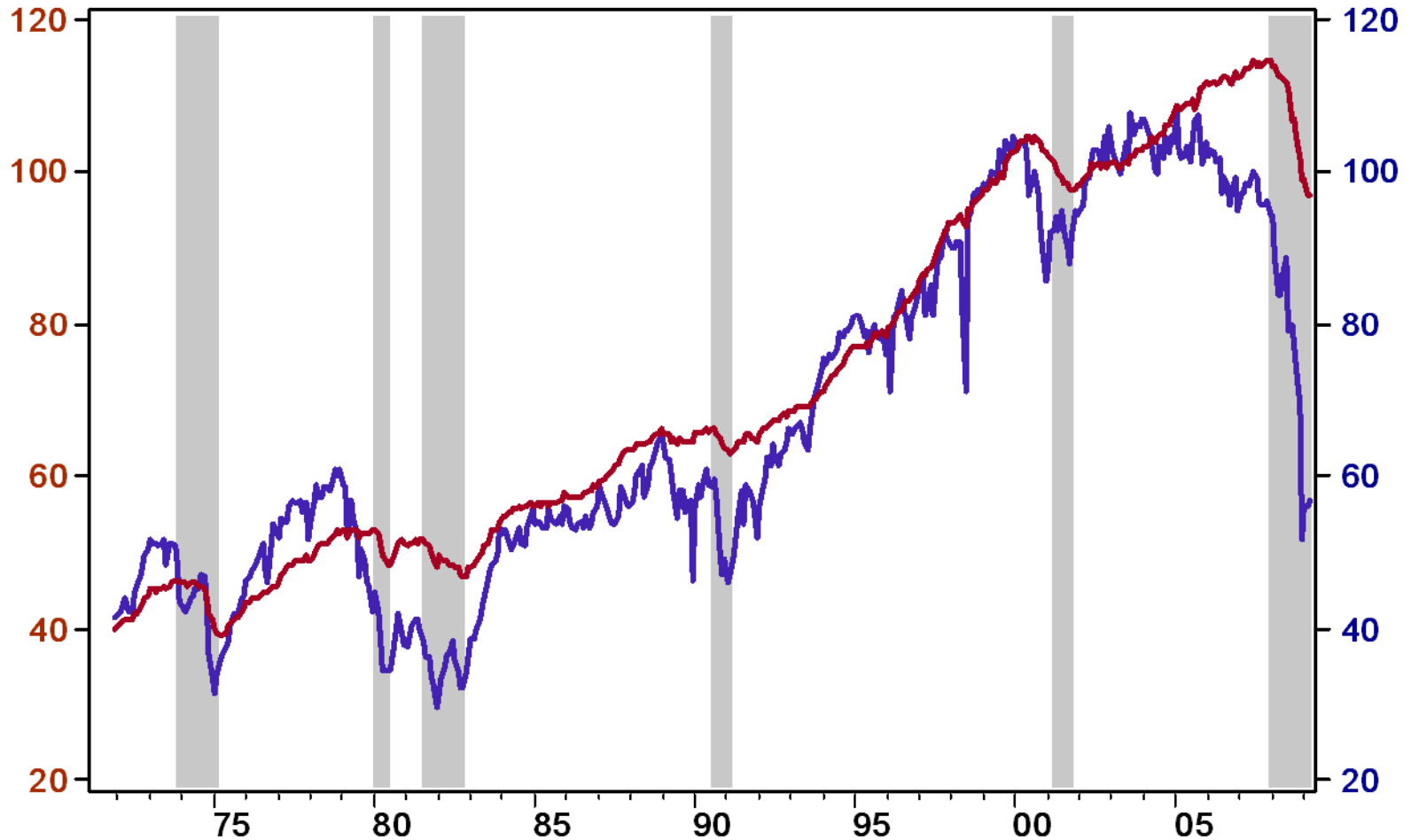
\*: March '09 is most recent data

Source: Bureau of Economic Analysis, Haver Analytics

# USA: Much steeper drop in vehicle production

Industrial Production: Manufacturing [NAICS]  
SA, 2002=100

Industrial Production: Motor Vehicles and Parts  
SA, 2002=100

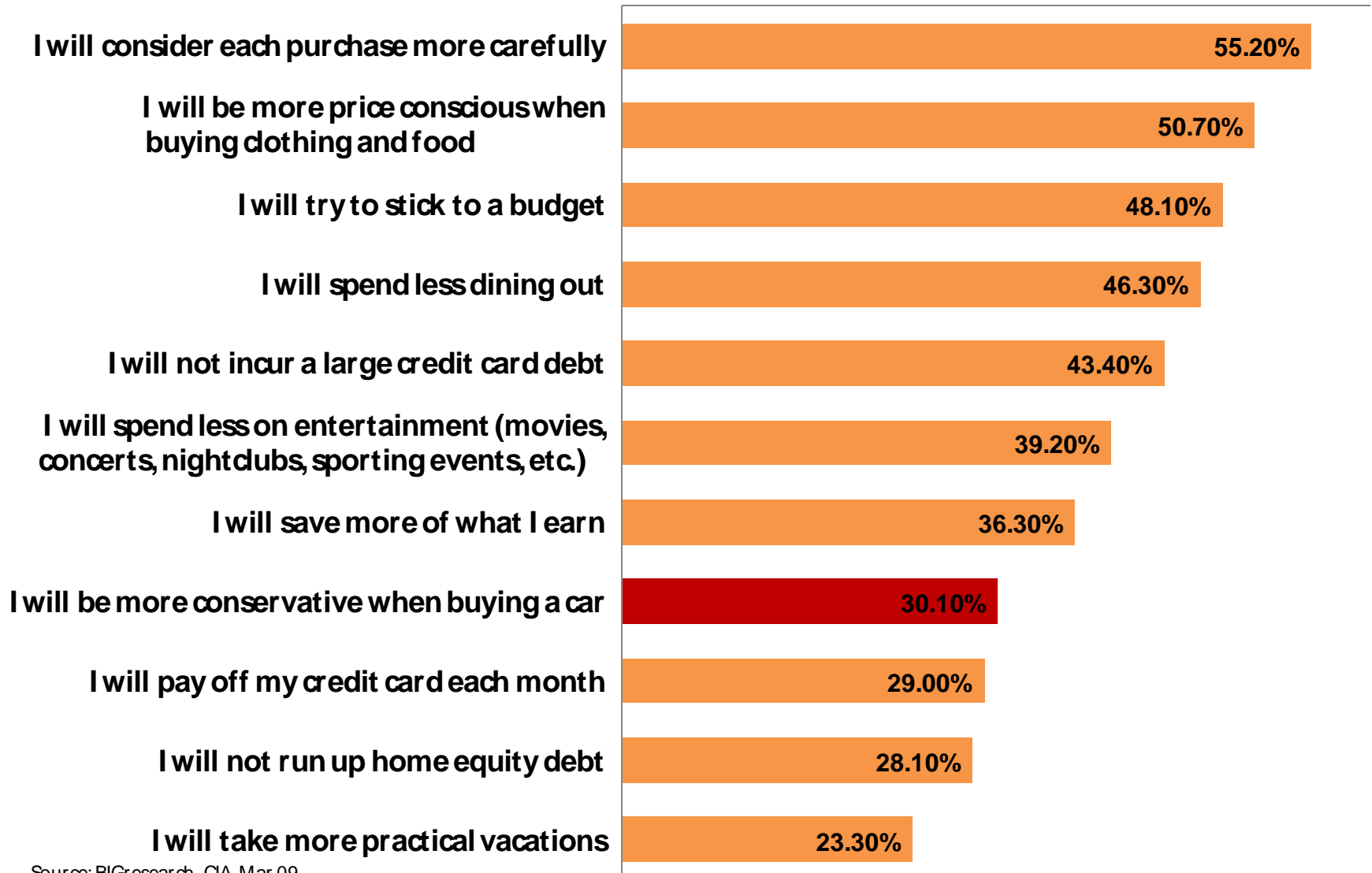


Sources: Federal Reserve Board /Haver Analytics



# Shell-shocked American Consumers

Do you think the current economic crisis will impact your lifestyle over the next 5 years in any of the following ways?



## Time Magazine: what's happening in the U.S.A. ...

...The slump is the longest, if not the deepest, since the Great Depression. Traumatized by layoffs that have cost more than 1.2 million jobs, U.S. consumers have fallen into their deepest funk in years. "Never in my adult life have I heard more deep-seated feelings of concern," says Howard Allen, retired chairman of Southern California Edison. "Many, many business leaders share this lack of confidence and recognize that we are in real economic trouble."

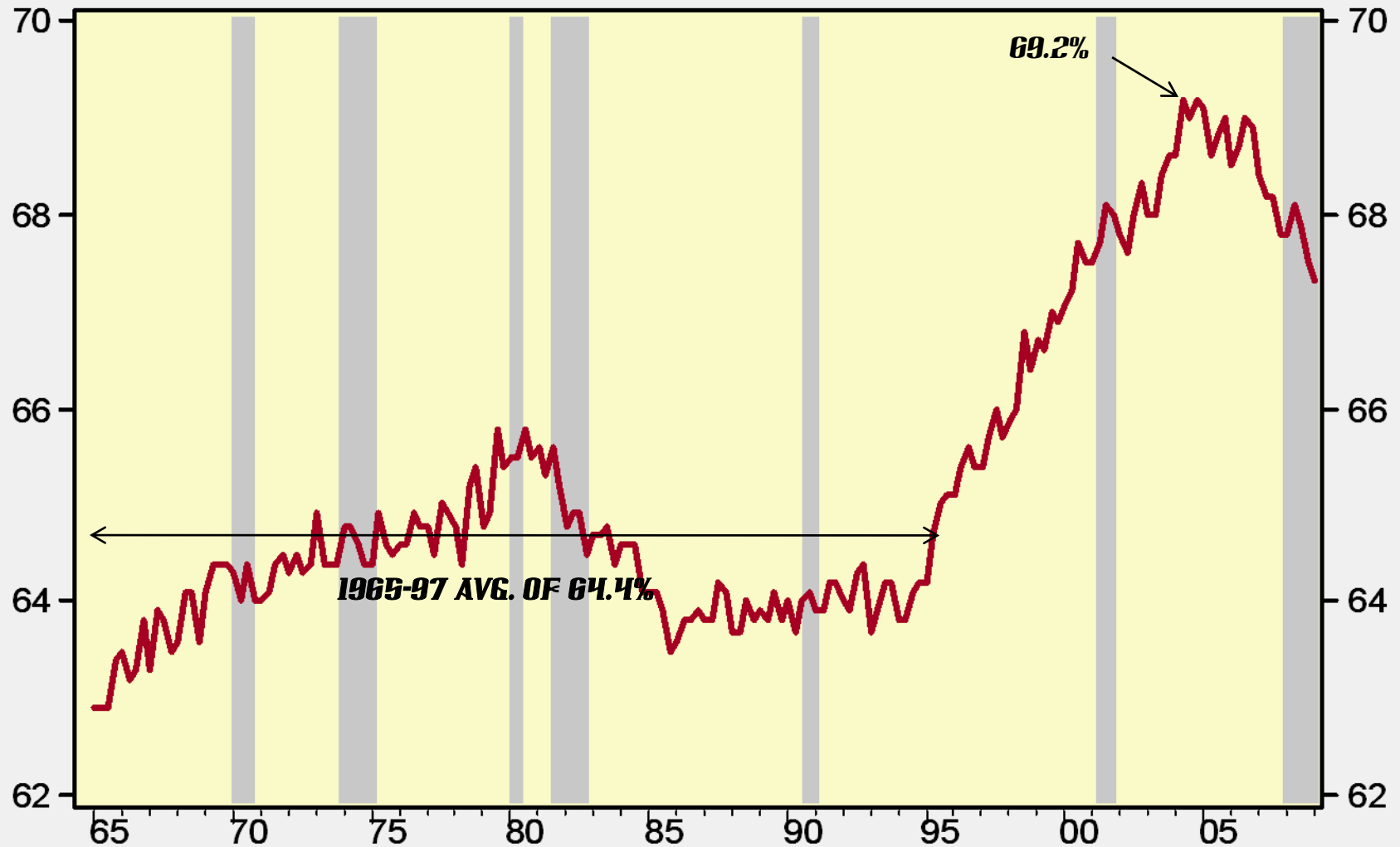
...U.S. consumers seem suddenly disillusioned with the American Dream of rising prosperity. "I'm worried if my kids can earn a decent living and buy a house," says Tony Lentini, vp, public affairs for Mitchell Energy in Houston. "I wonder if this will be the first generation that didn't do better than their parents. There's a genuine feeling that the country has gotten way off track, and neither political party has any answers. Americans don't see any solutions."

...The deeper tremors emanate from the kind of change that occurs only once every few decades. America is going through a historic transition from the heedless borrow-and-spend society of the 1980s to one that stresses savings and investment.

# The housing bubble may take many years to work off

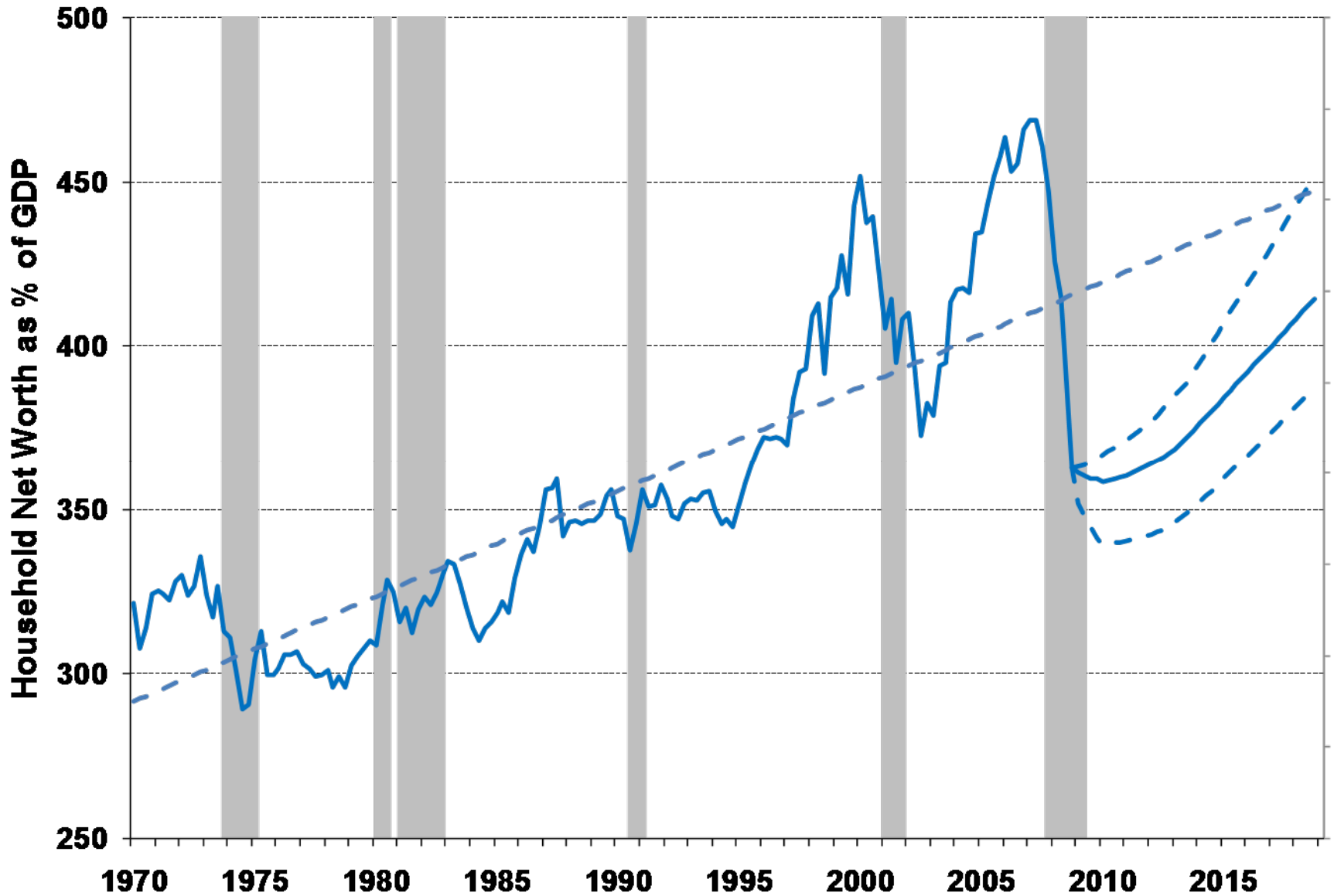
Homeownership Rate: United States

NSA, %



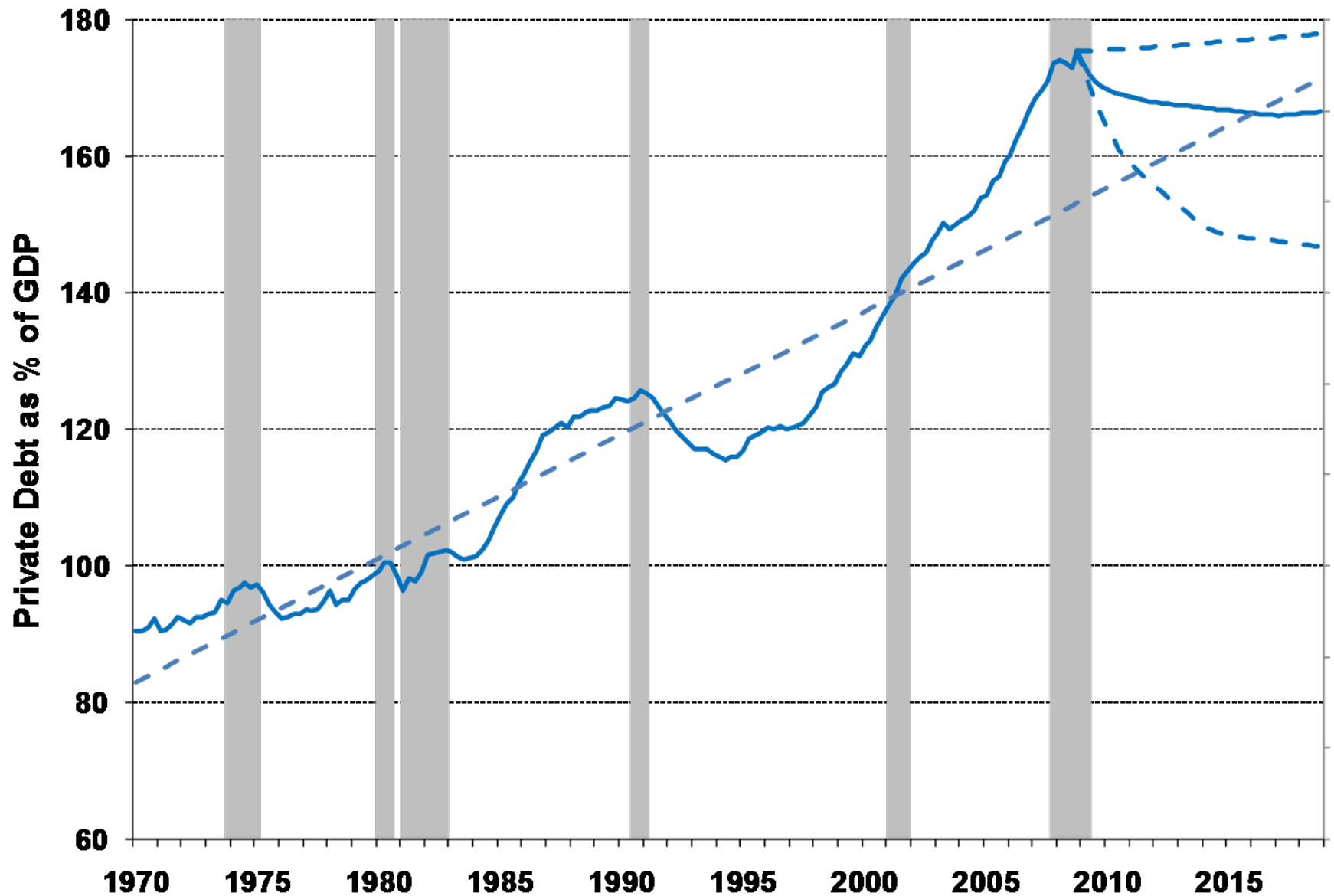
Source: Census Bureau /Haver Analytics

# The nest egg may take many years to rebuild





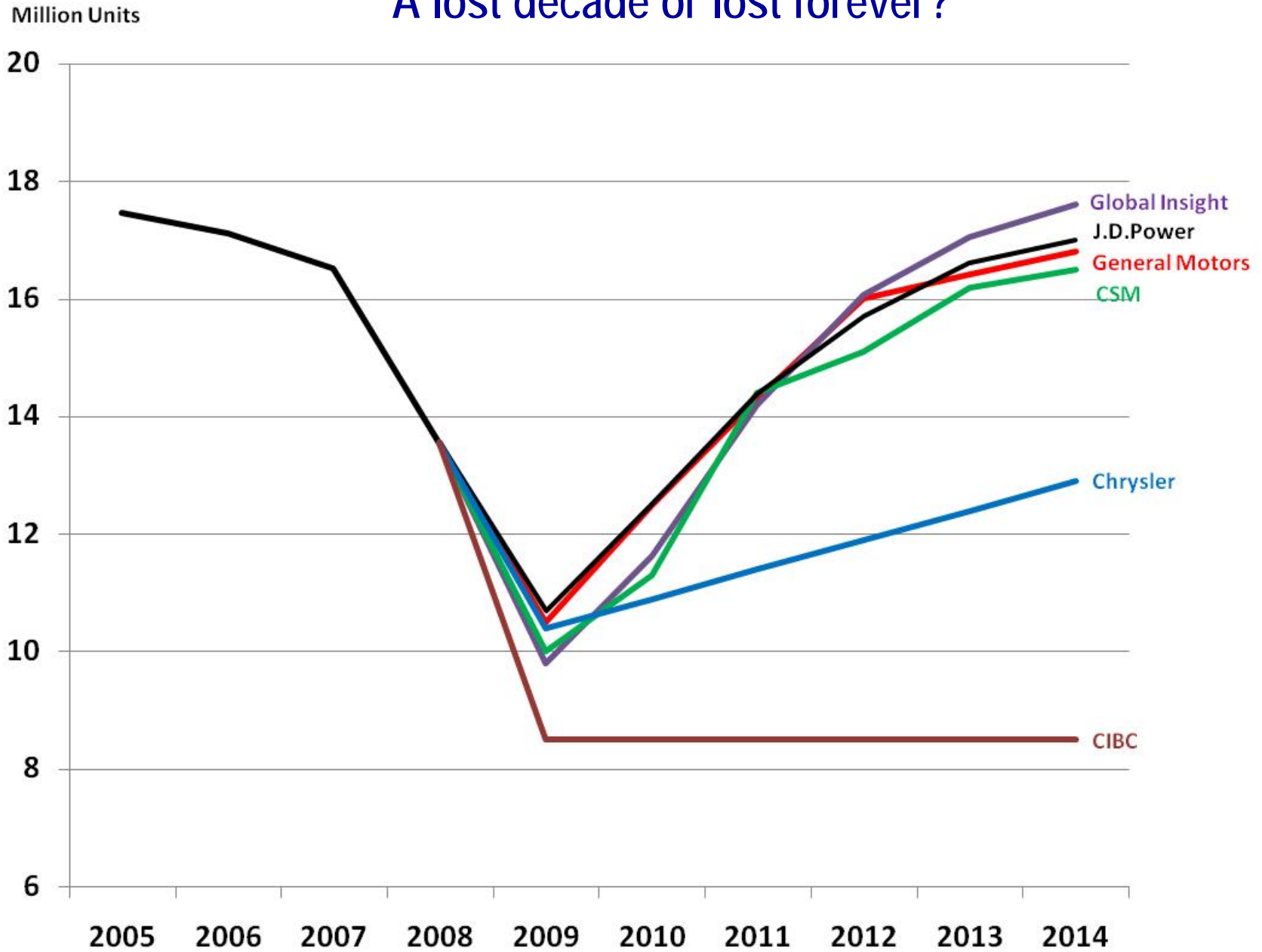
# Willingness to spend depends on speed of deleveraging



# Divergent views amidst time of uncertainty

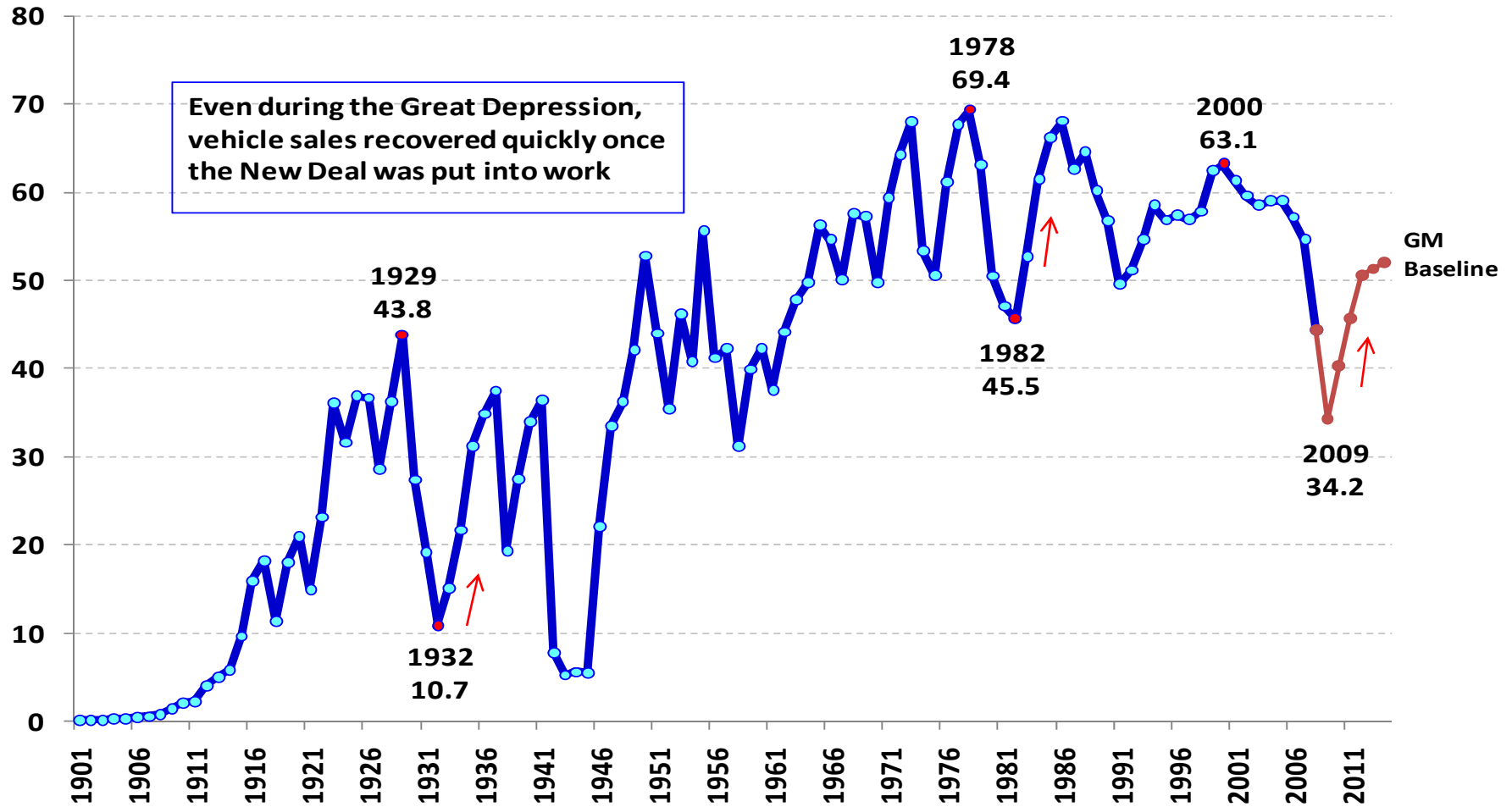
- Nothing fundamentally wrong – we are just paying the price for two recessions right now
- The day of reckoning for the overleveraged, shop-till-you-drop American consumers has finally arrived
- Our View: this is perhaps a Great Recession, between Great Depression and a “normal” recession
  - If this is true, then we won't have a sharp rebound after the collapse, but we will gradually pull out of this

# Divergent U.S. Total Vehicle Sales Forecast: A lost decade or lost forever?



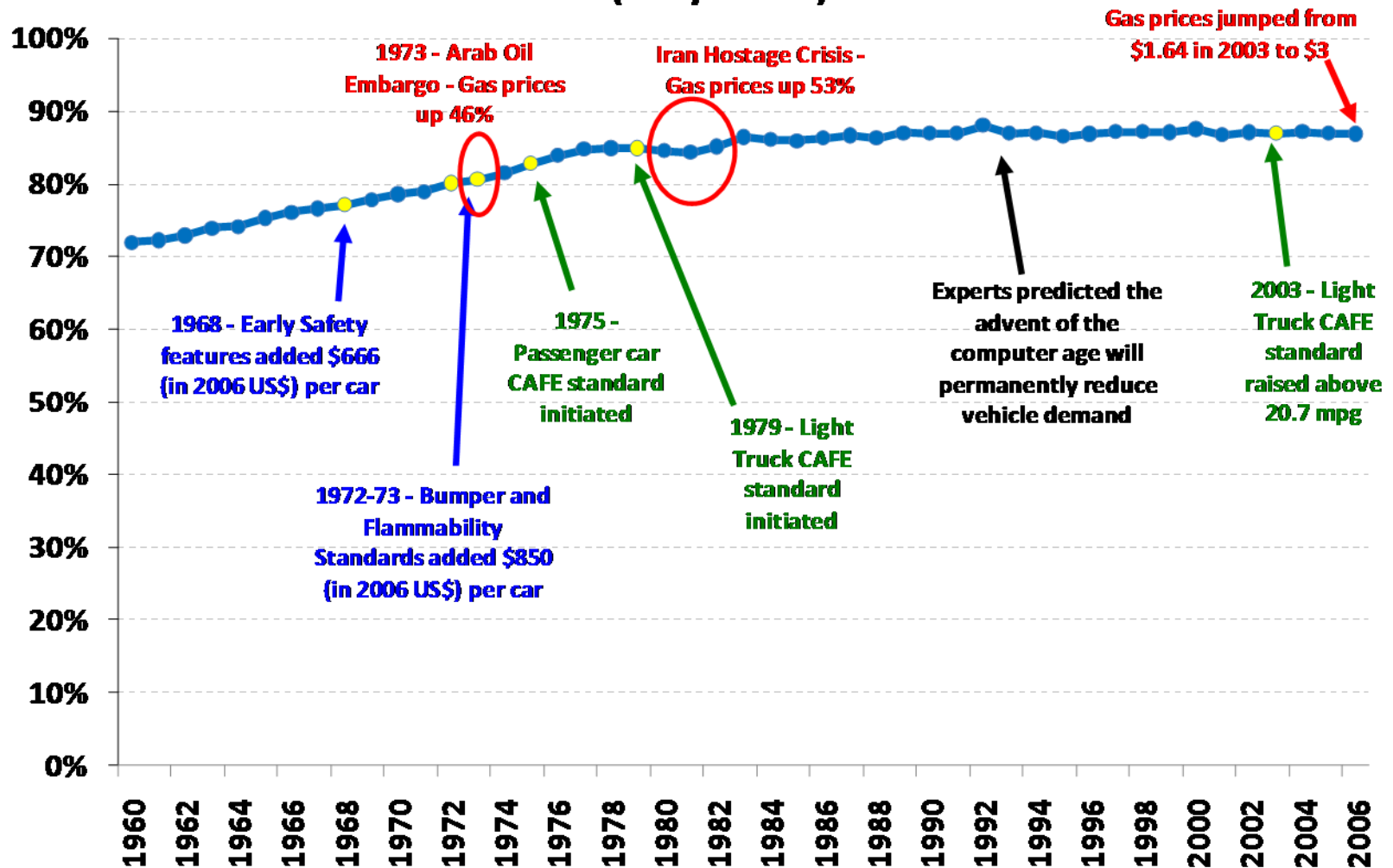
# USA: Today's challenges are similar to the early 30s and 80s

Vehicle Sales Per  
1000 People



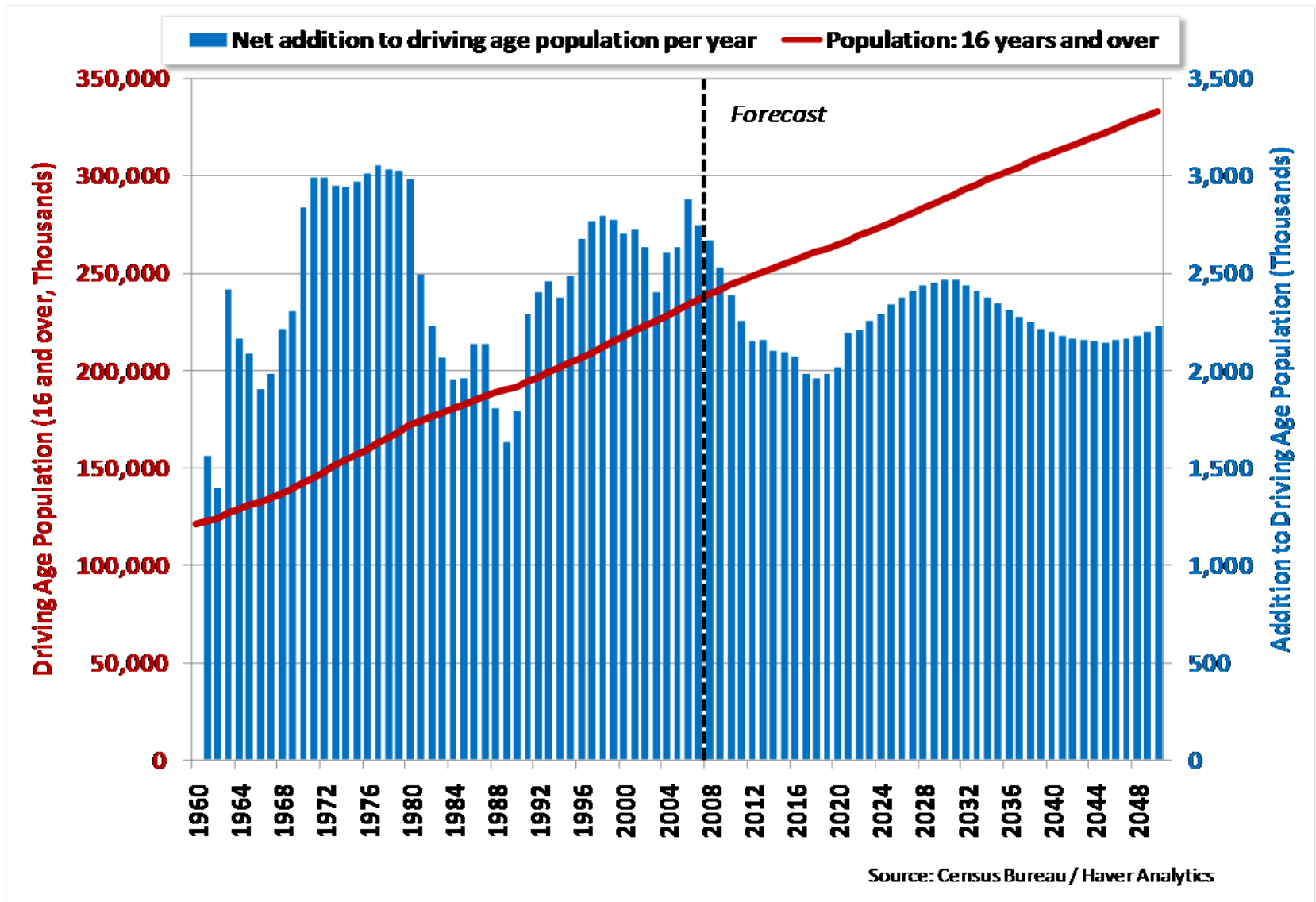
# USA: Driving age share of population (16+) has been relatively stable over the past two decades

## Percent of registered drivers among driving population (16+ year old)

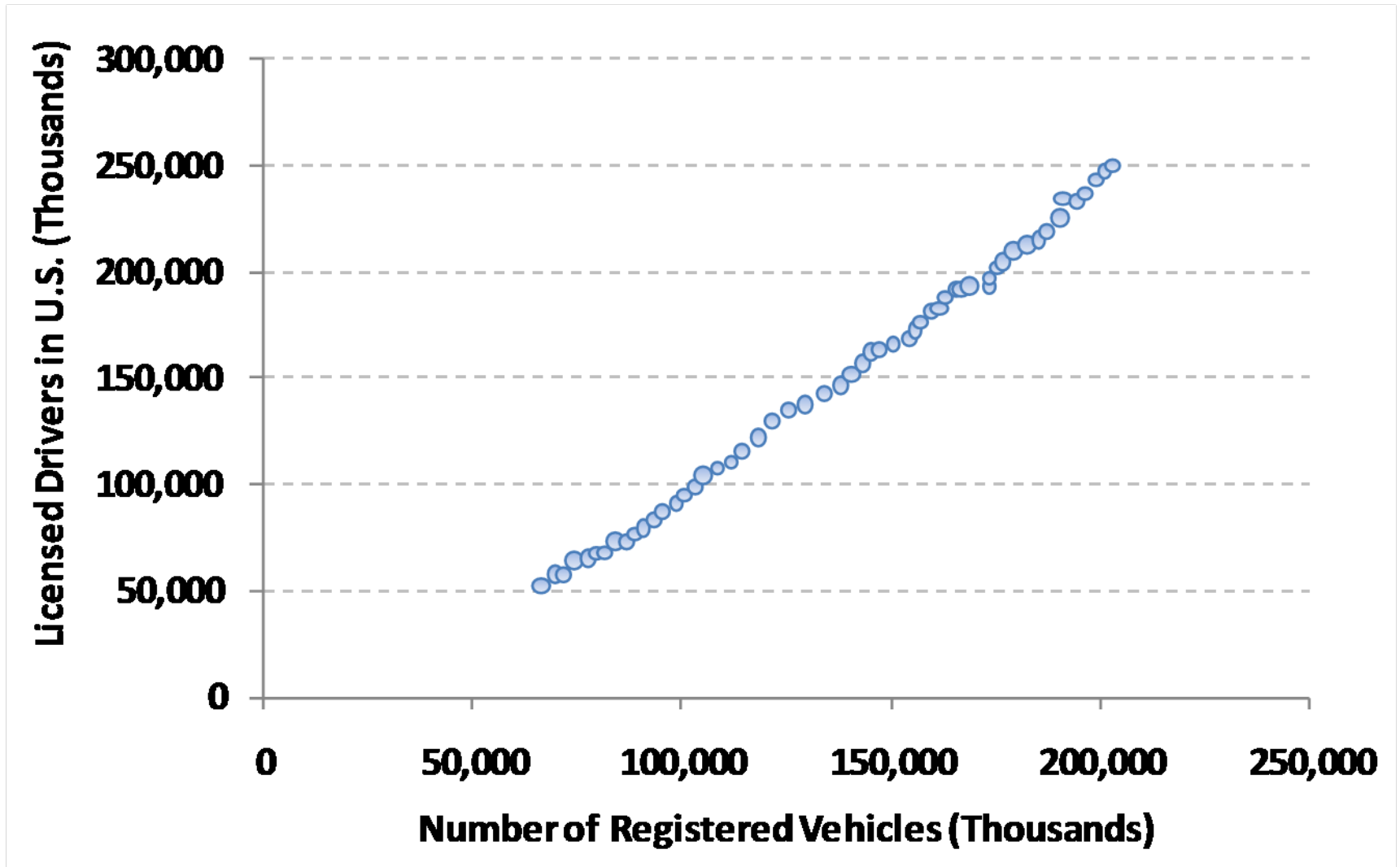


Source: Federal Highway Administration, Census Bureau/Haver Analytics

# USA: Total Driving Age Population and Net Addition Each Year

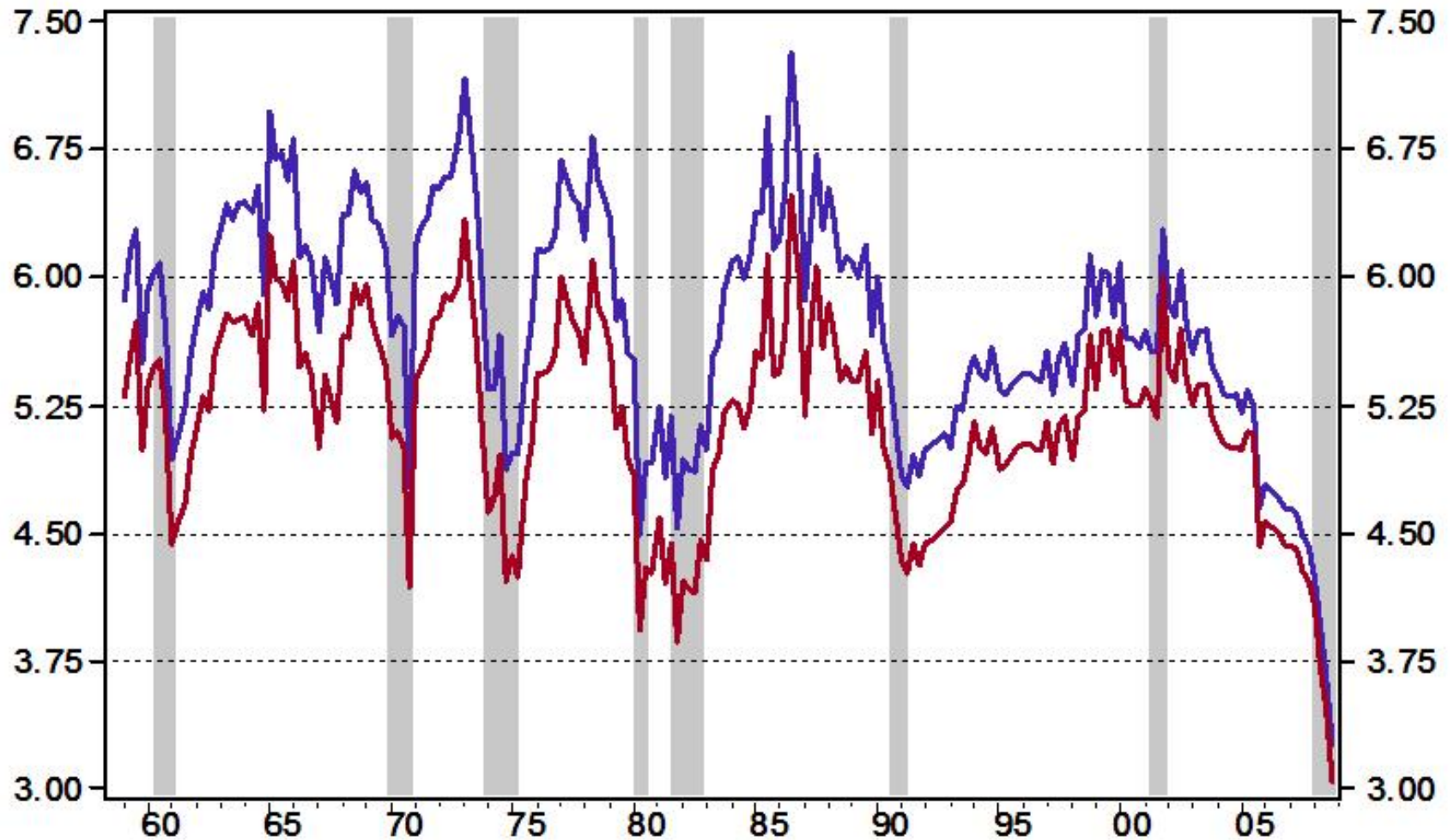


## USA: Relationship between Driving Population and Vehicle Ownership (1960 – 2007)



# Spending on Auto as Share of Disposable Personal Income

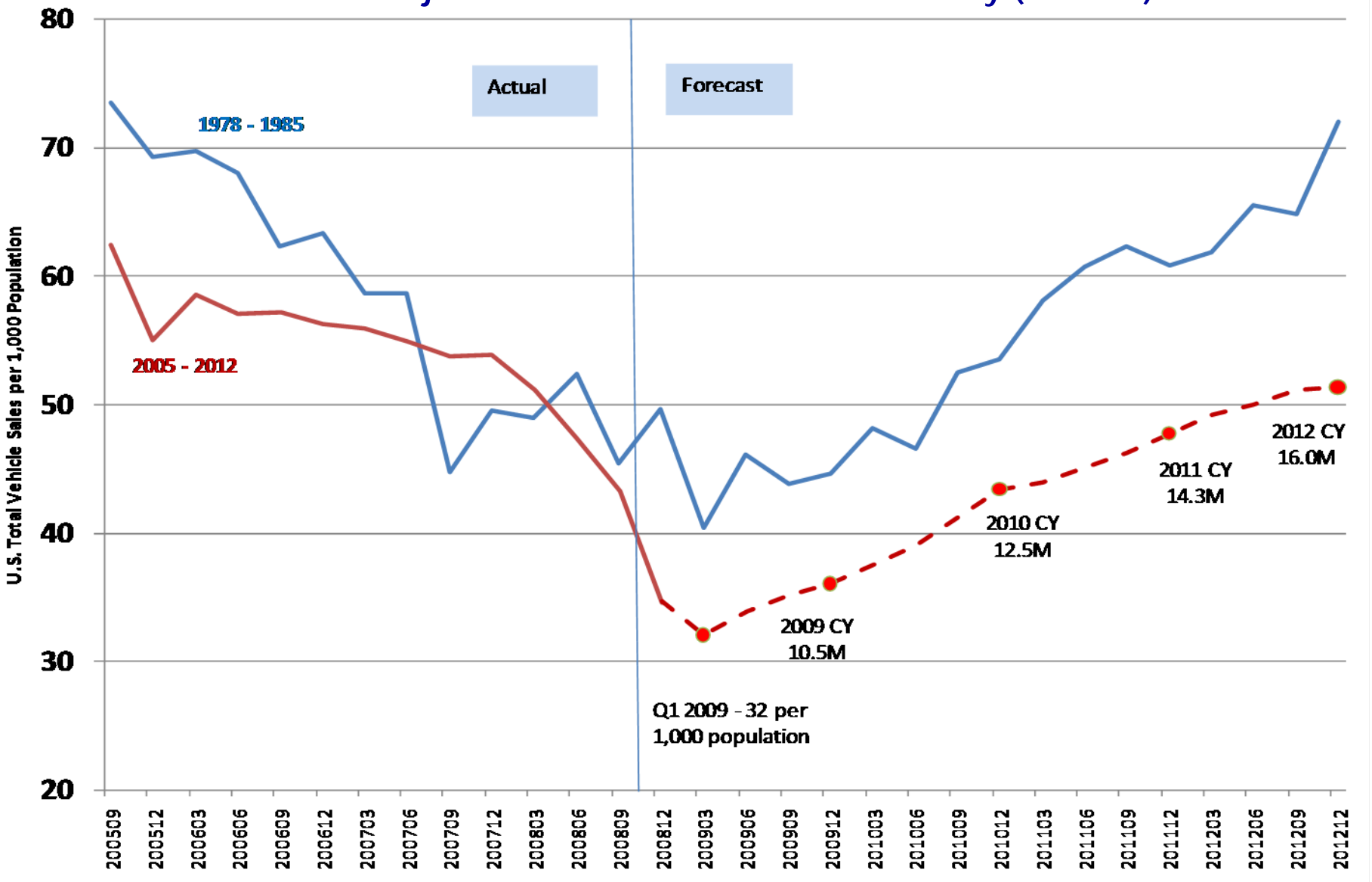
## Spending on Auto as Share of Personal Consumption



Source: Haver Analytics



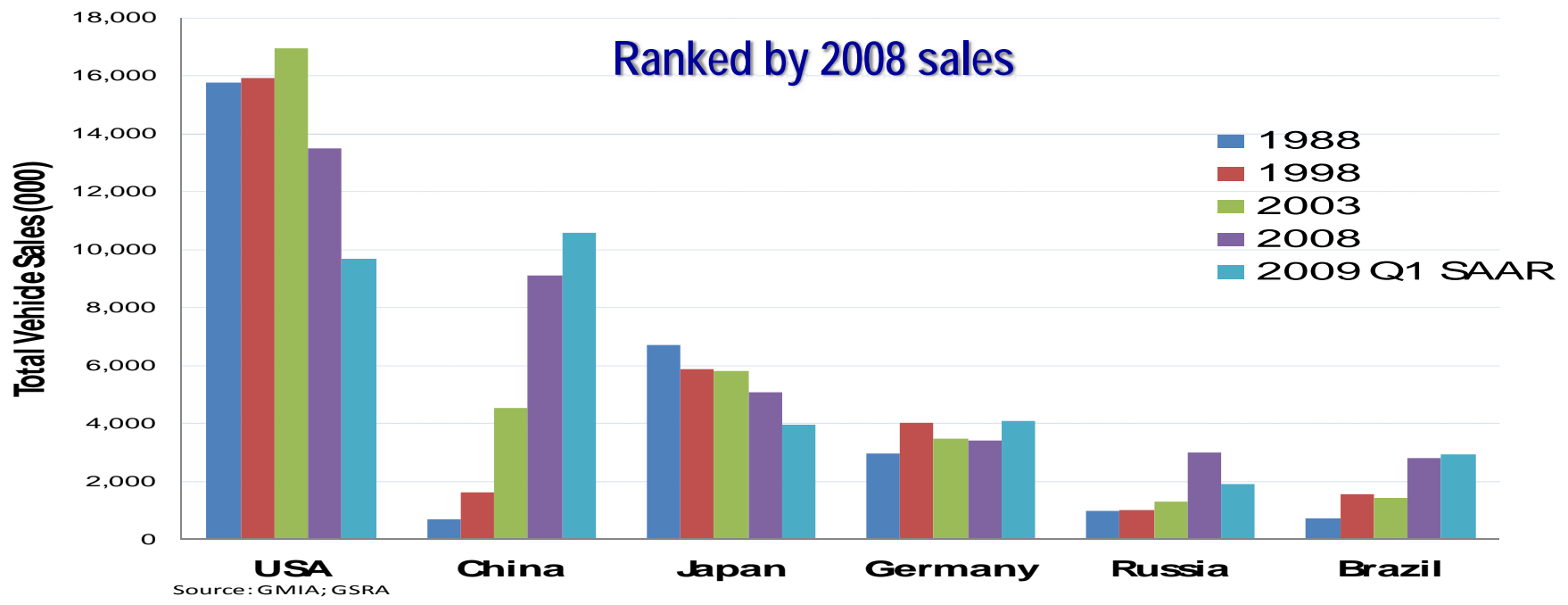
# Once adjusted for population, current industry forecast looks conservative vs the last major economic downturn and recovery (1978-85)



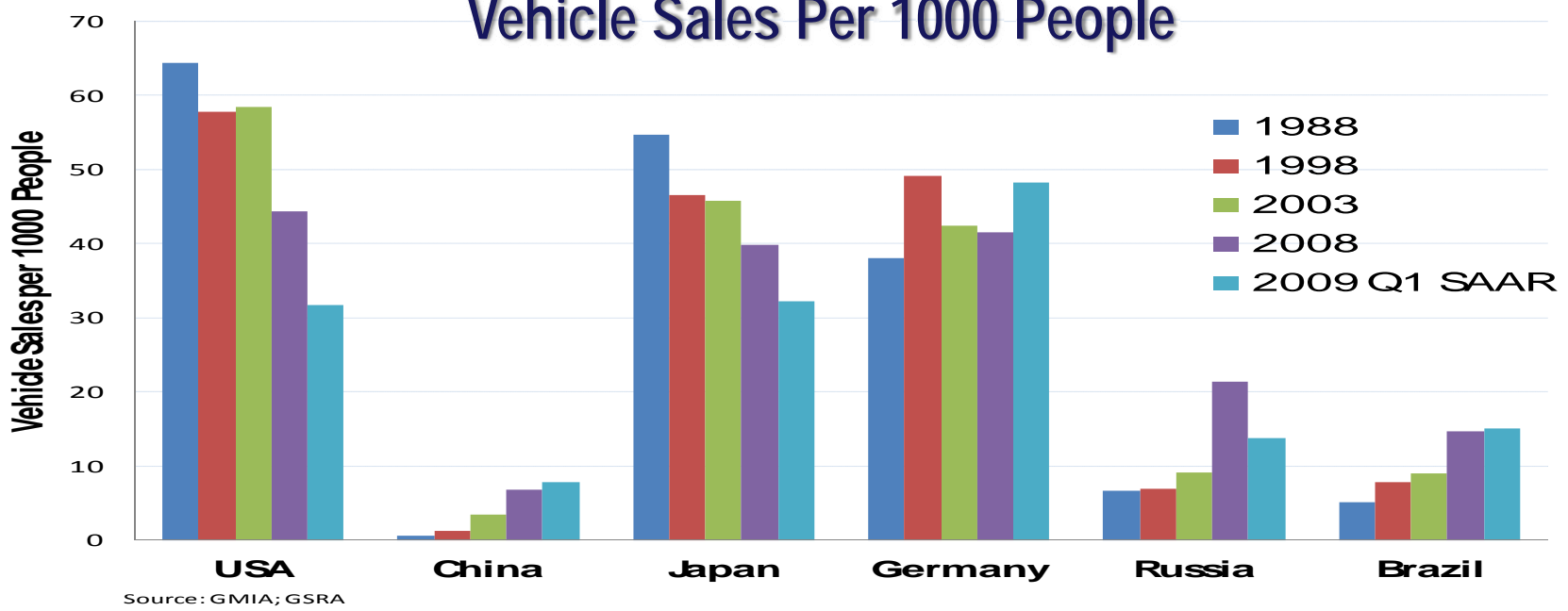
Source: GM, Census Bureau

# World's Top Six Vehicle Markets

Ranked by 2008 sales



# Vehicle Sales Per 1000 People



# Will America repeat the Japanese experience or its own stagflation experience?

- How can we ever pay our national debt?
  - Print more money, higher taxes, or any other way?

<b>Japan</b>	<b>1990</b>	<b>1991</b>	<b>1992</b>	<b>1993</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>
<b>Real GDP Growth</b>	5.3	3.3	1.0	0.2	1.1	2.0	3.6	1.7	-1.1	0.0	2.9
<b>Personal Savings Rate</b>	11.9	12.8	12.2	11.9	10.5	10.2	8.5	8.2	9.7	8.2	6.9
<b>Population Growth</b>	0.11	0.27	0.25	0.27	0.24	0.24	0.26	0.21	0.24	0.17	0.15
<b>% of Population 65+</b>	12.0	12.5	13.0	13.5	14.0	14.5	15.1	15.6	16.2	16.7	17.2
<b>Deficit (in \$Bil.)</b>	21	18	115	173	212	222	229	159	531	346	282
<b>Deficit as% of GDP</b>	0.5	0.4	2.4	3.5	4.3	4.4	4.5	3.1	10.4	6.9	5.5
<b>Net Exports as% of GDP</b>	31.5	27.7	24.2	17.2	23.6	24.3	27.7	20.3	18.5	24.4	7.9
<b>US</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>
<b>Real GDP Growth</b>	1.1	-2.4	2.5	4.6	4.6	3.9	3.7	2.8	2.2	2.0	2.0
<b>Personal Savings Rate</b>	1.8	5.1	5.2	5.1	4.8	4.6	4.1	3.6	3.5	3.5	3.7
<b>Population Growth</b>	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.95
<b>% of Population 65+</b>	12.7	12.9	13.0	13.2	13.5	13.8	14.1	14.4	14.7	15.0	15.4
<b>Deficit (in \$Bil.)</b>	833	1176	1115	1057	921	863	848	860	882	920	978
<b>Deficit as% of GDP</b>	6.0	8.2	7.9	7.3	6.1	5.5	5.1	4.9	4.8	4.8	4.9
<b>Net Exports as% of GDP</b>	-3.4	-3.0	-3.2	-3.2	-2.8	-2.5	-2.5	-2.1	-1.5	-1.1	-0.7

Sources for US: GMIA, US Census Bureau, US Treasury, Macroeconomic Advisors, Haver Analytics

Sources for Japan: Japan Cabinet Office, Japan Bureau of Internal Affairs and Communication, Bank of Japan/Ministry of Finance, Haver Analytics

# Conclusion

- The immediate danger of collapse and disintegration seems to have dissipated
  - The challenge will be healing and renew
- Fundamentals suggest no sunset for the economy and auto industry
  - The bounce in auto demand will be stronger than economy
- Yet new sources of growth needed to avert the fate of Japan
  - Will America stand on the next frontier