



# RISI World Printing and Writing Paper Market Outlook: Markets React to Worldwide Recession

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Vice President

November 2008



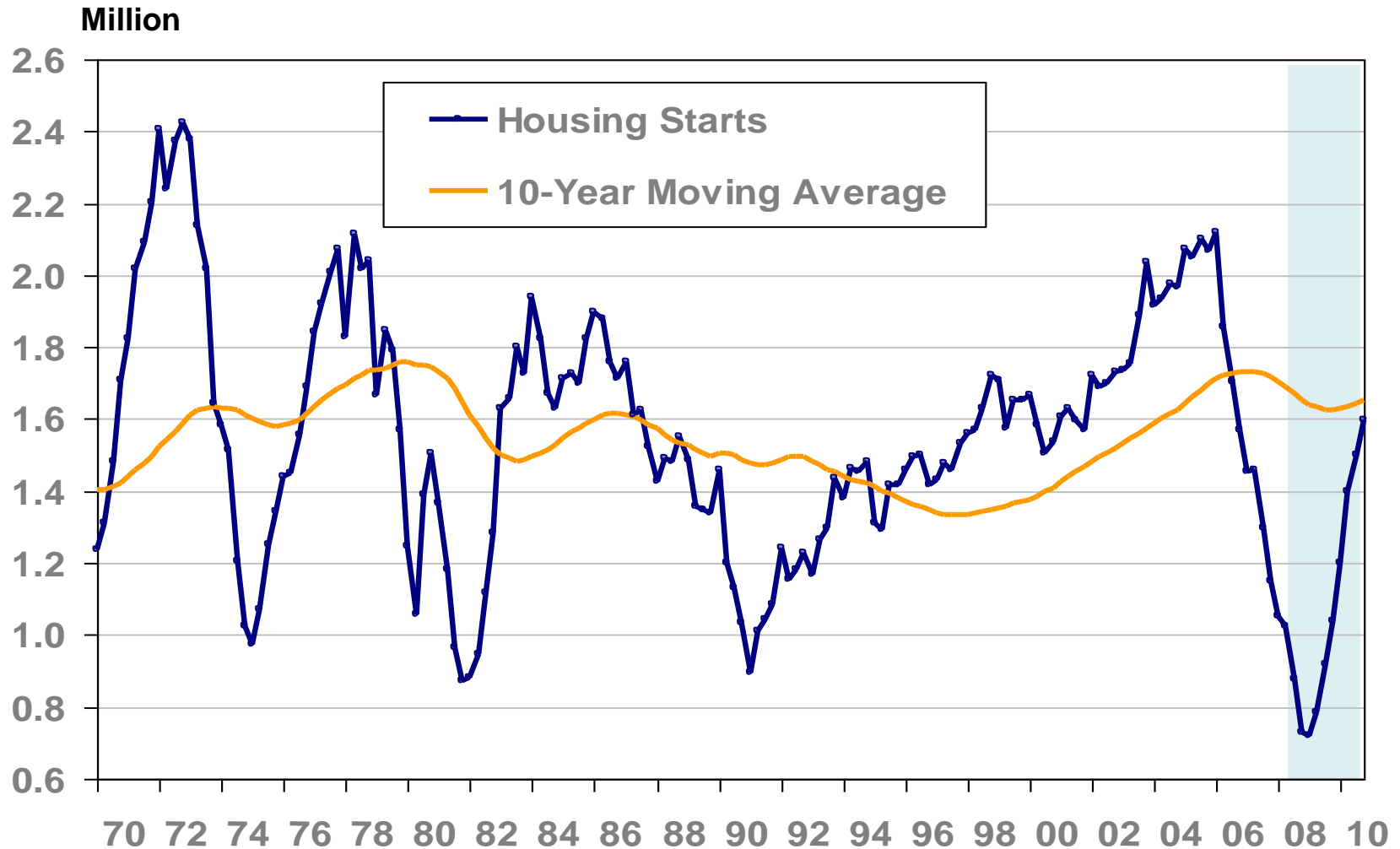
# RISI Growth Projections for 2008 Presented to GPC Last Year (11/07)

	Last Yr's Fcst. For 2008	Current Est. For 2008	Current Fcst For 2009
<b>GDP (U.S.)</b>	<b>2.3%</b>	<b>1.3%</b>	<b>-0.4</b>
<b>Paper Demand (N. America)</b>	<b>0%</b>	<b>-7%</b>	<b>-3%</b>
<b>CFS</b>	<b>1%</b>	<b>-11%</b>	<b>-4%</b>
<b>CGW</b>	<b>0%</b>	<b>-12%</b>	<b>-4%</b>
<b>UFS</b>	<b>-1%</b>	<b>-6%</b>	<b>-4%</b>
<b>UGW</b>	<b>0%</b>	<b>-1%</b>	<b>-2%</b>
<b>U.S. Catalog Circulation</b>	<b>-2%</b>	<b>-5%</b>	<b>-5%</b>

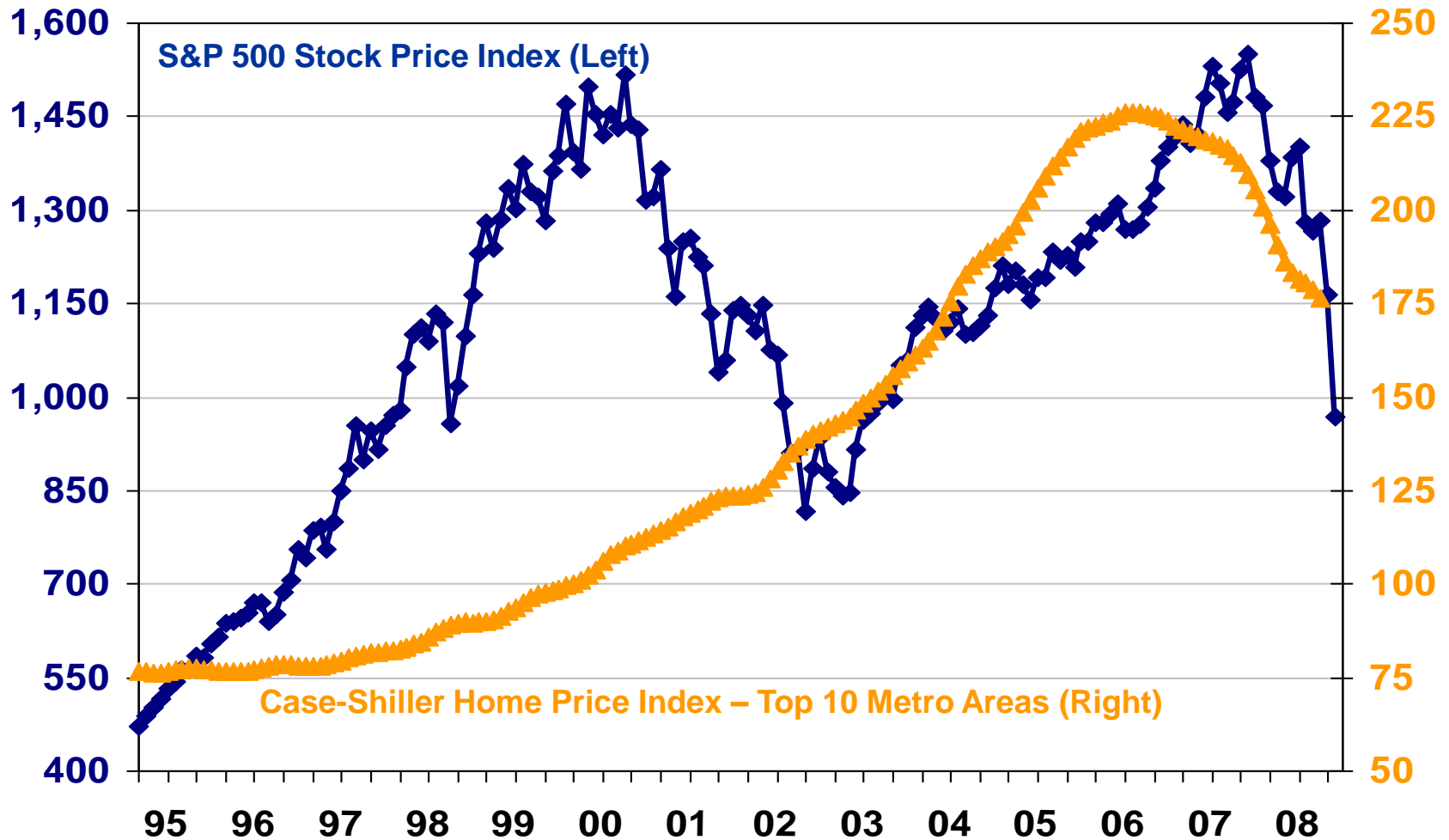
# US Recession

- ▶ Housing Market Still in Decline
  - Sales and prices falling
  - Home construction nearing a bottom
  - Foreclosures climb
  
- ▶ Consumers Retrench
  - Falling asset prices equals less spending
  - Bleak near-term outlook

# US Housing Construction Is Near Bottom

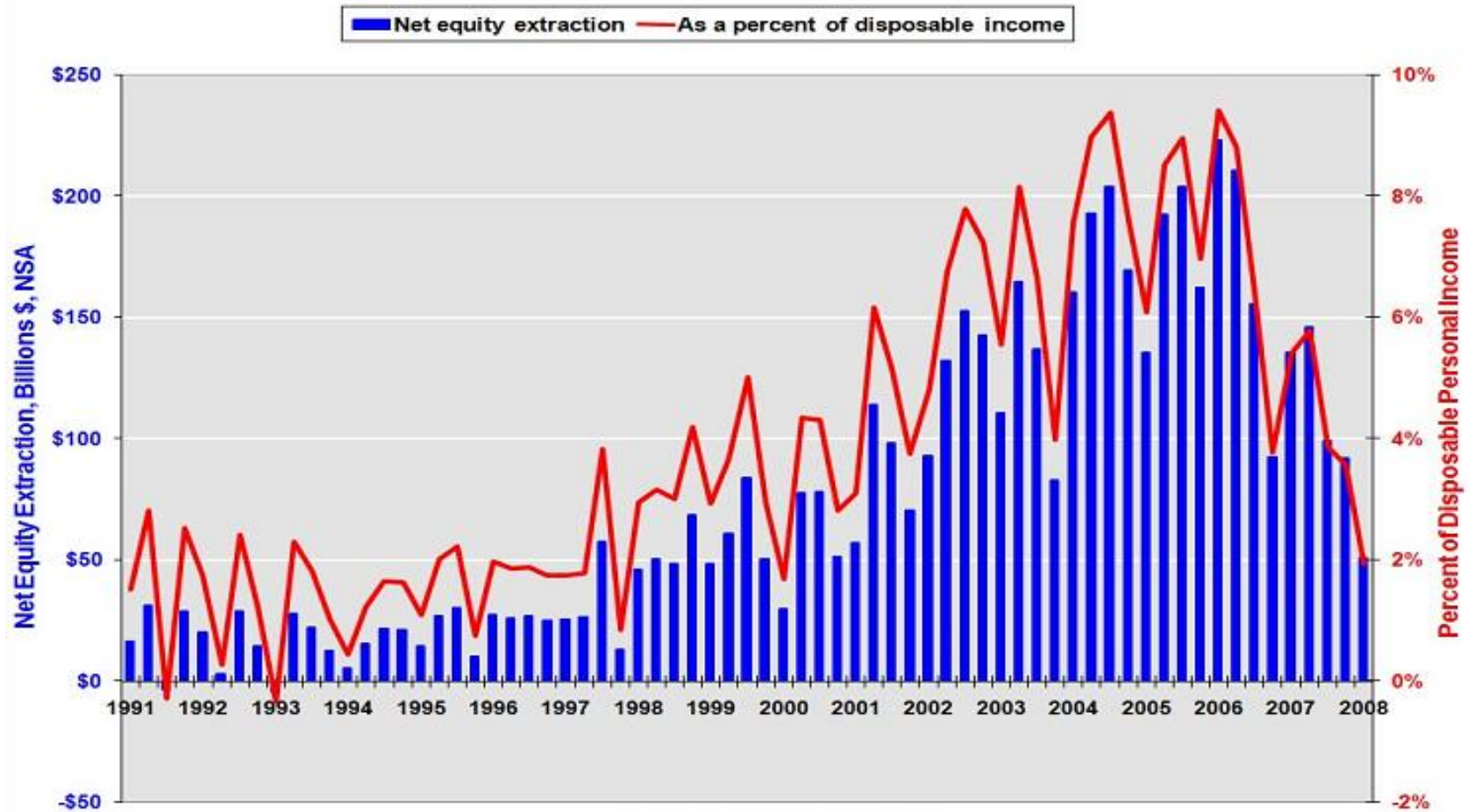


# The Era of Asset-Fueled Consumption Is Over



# Mortgage Equity Extraction Has Fallen Sharply

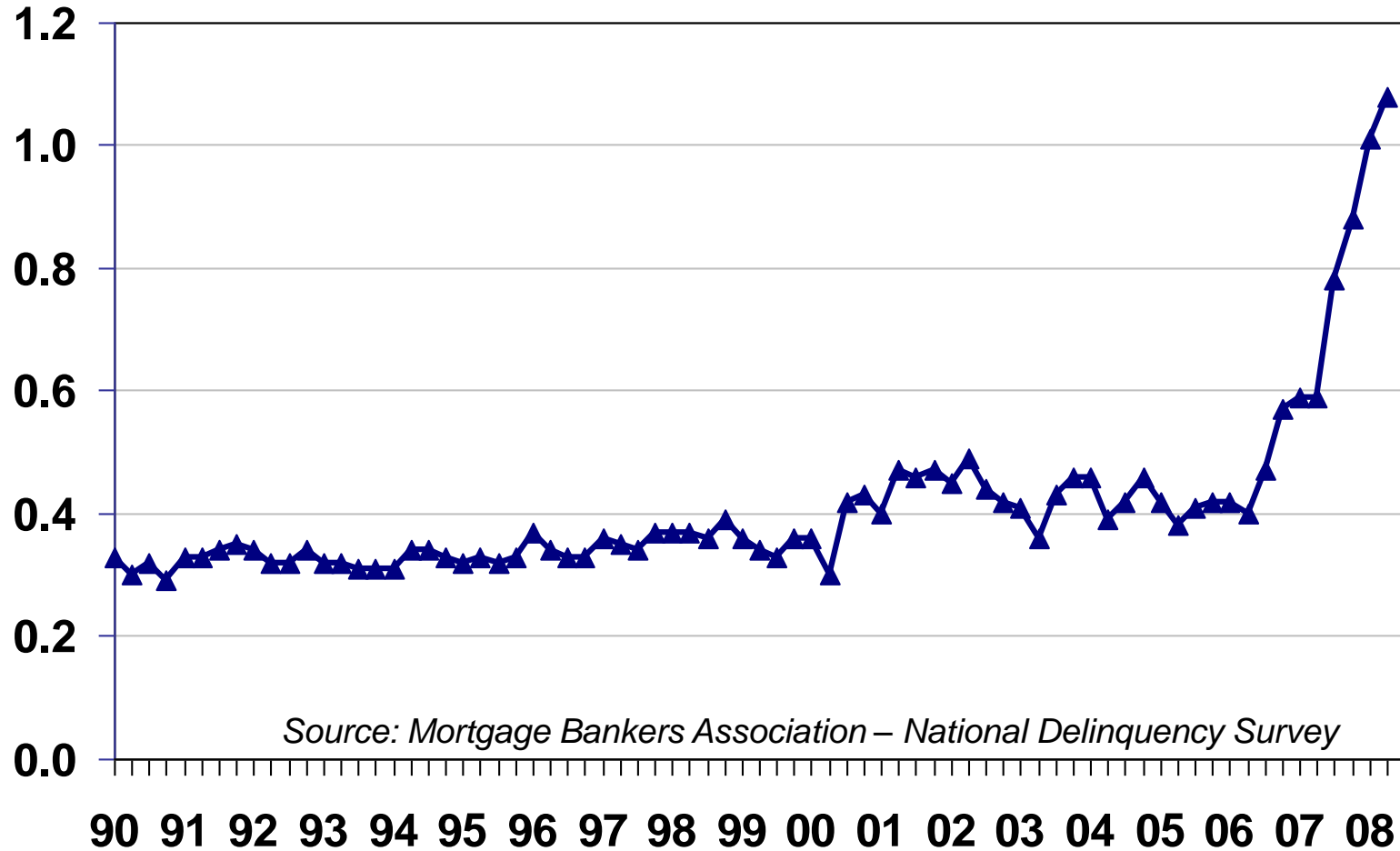
MEW, Billions of Dollars, Quarterly, Kennedy-Greenspan



<http://calculatedrisk.blogspot.com/>

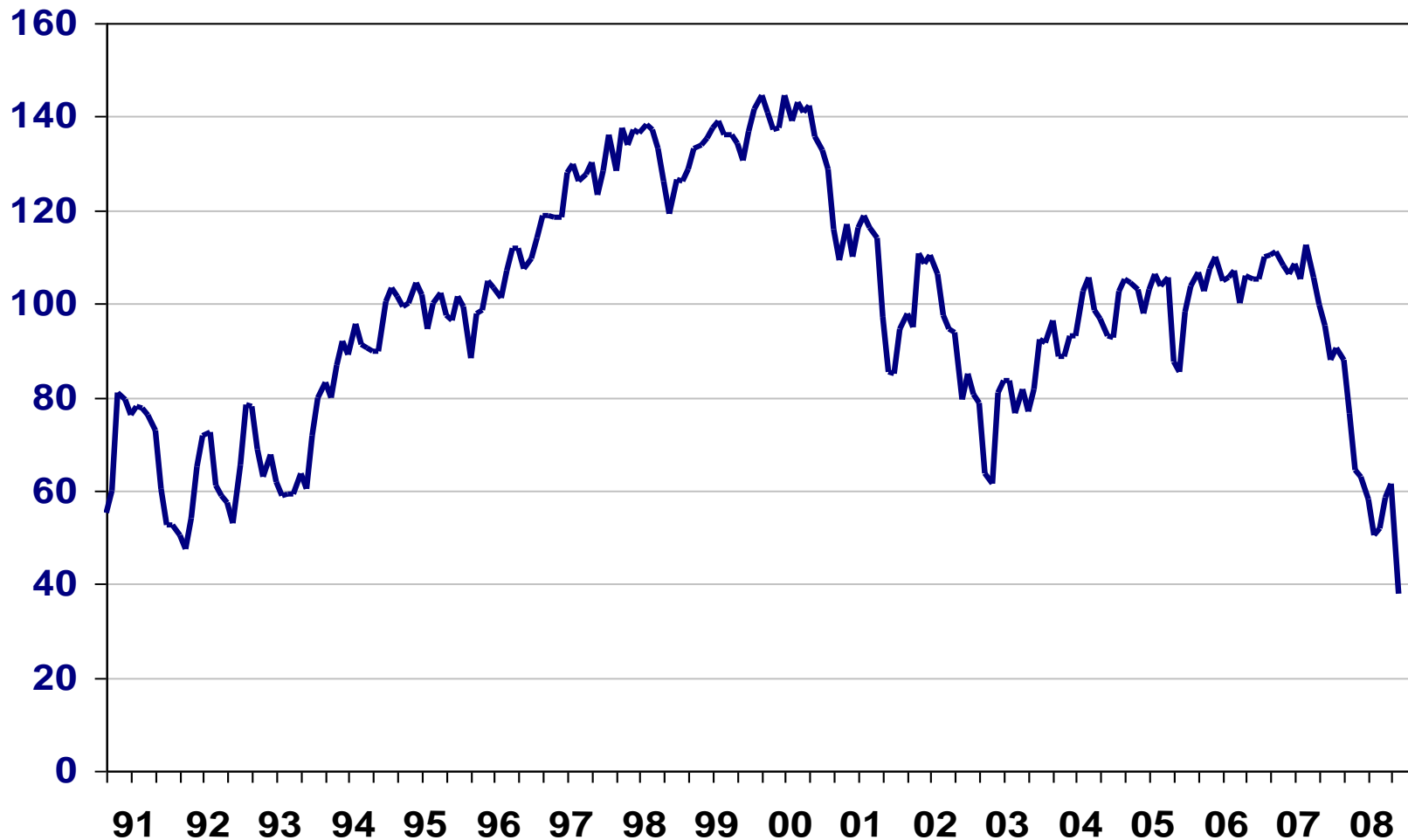
# Foreclosures Continue to Climb

(Foreclosures Started in Quarter, Percent of All Loans)



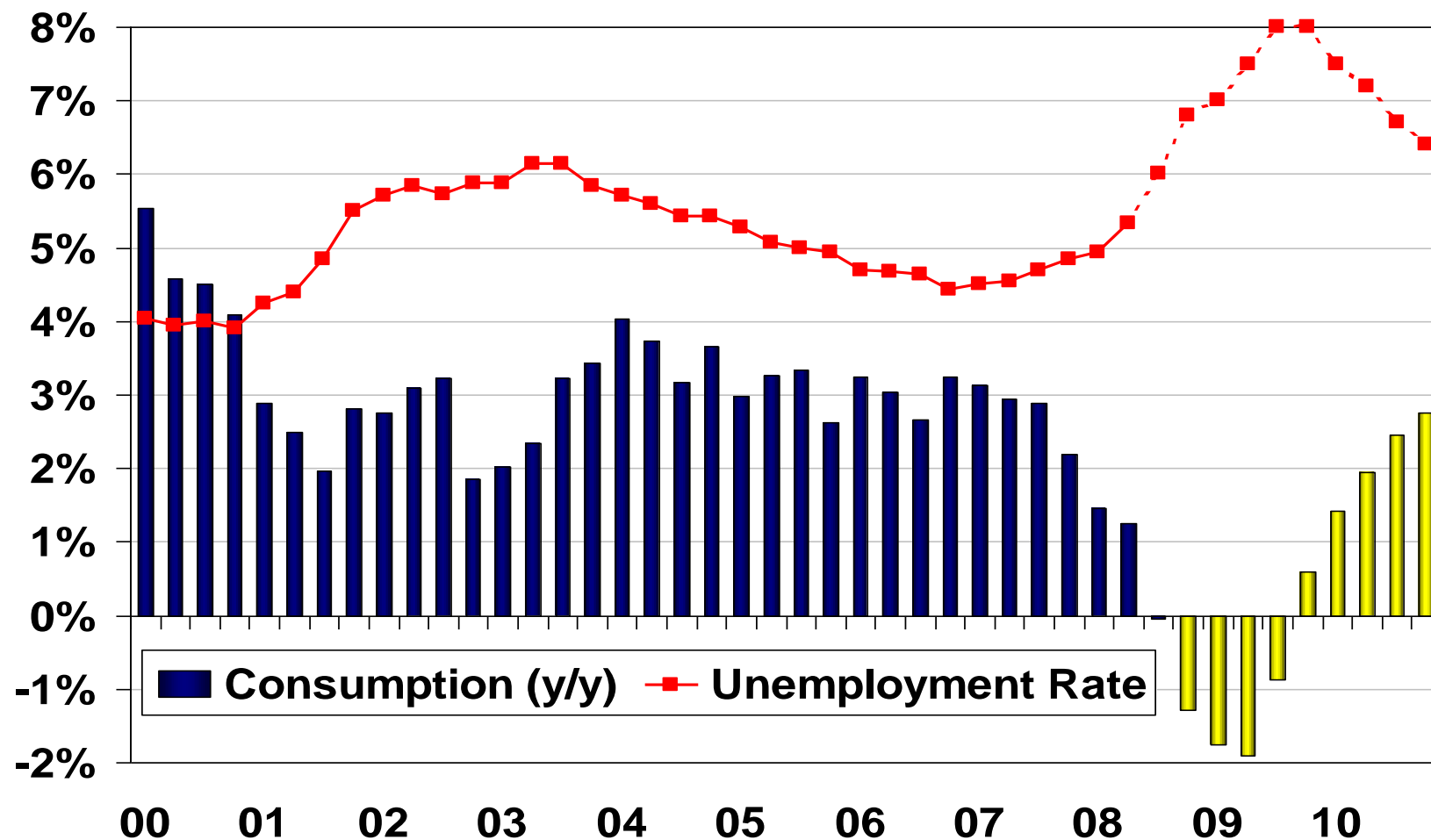
# US Consumer Confidence Plummets

(Conference Board Consumer Confidence Index, 1985=100)



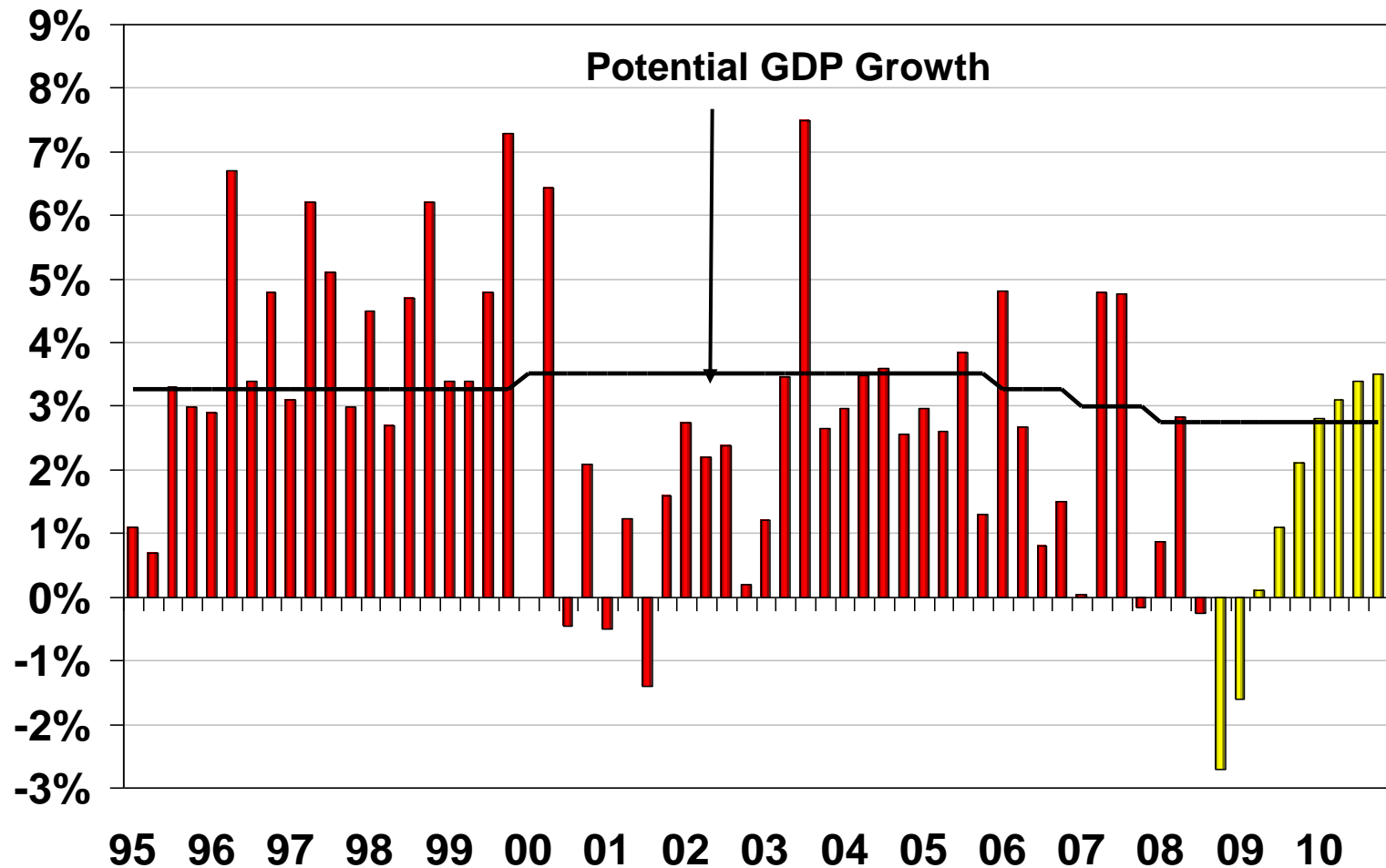


# Weakening Labor Market Further Undermines Consumption



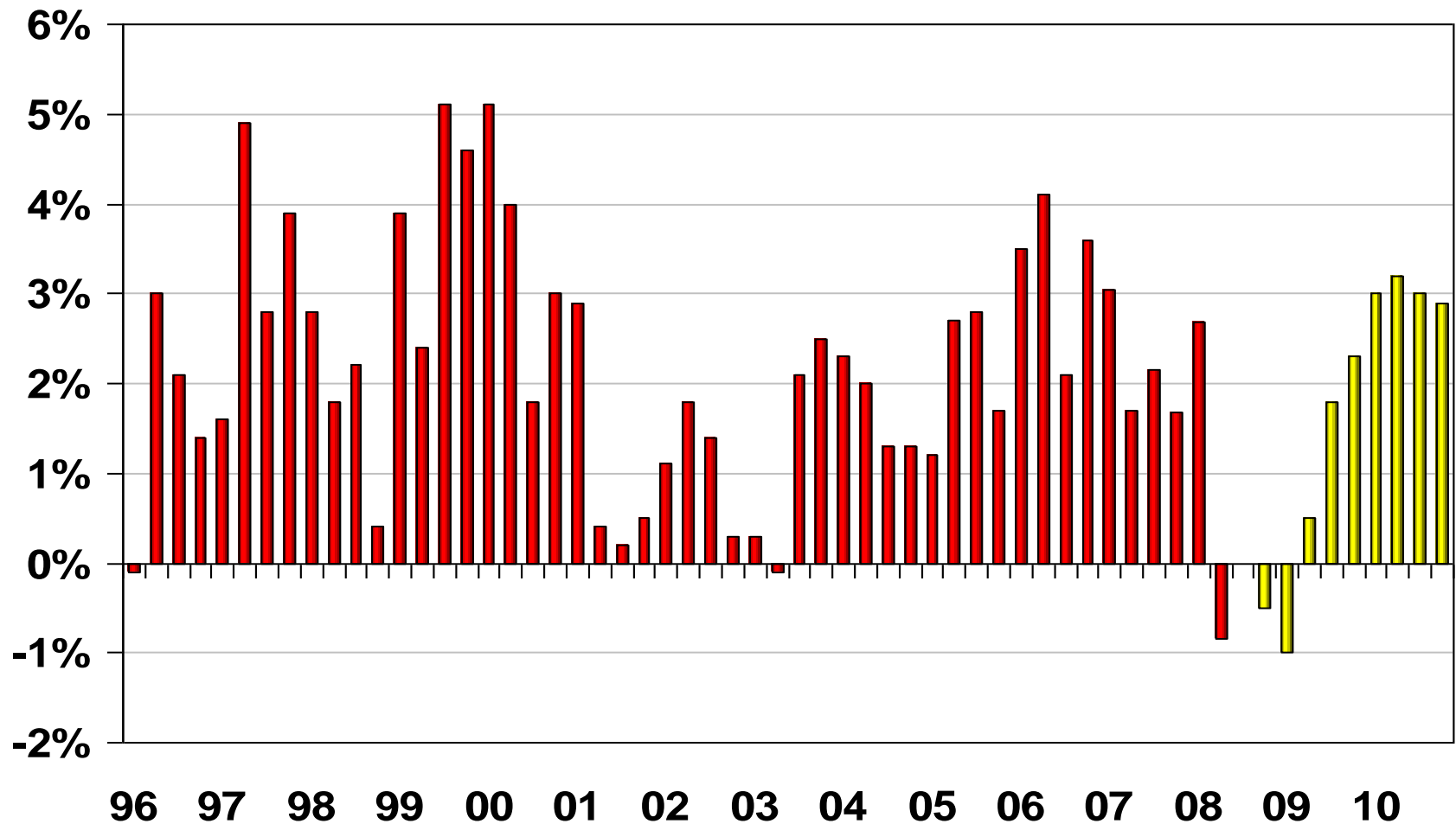
# The US Economy In Recession

(Real GDP Growth, Annualized Percent Change)



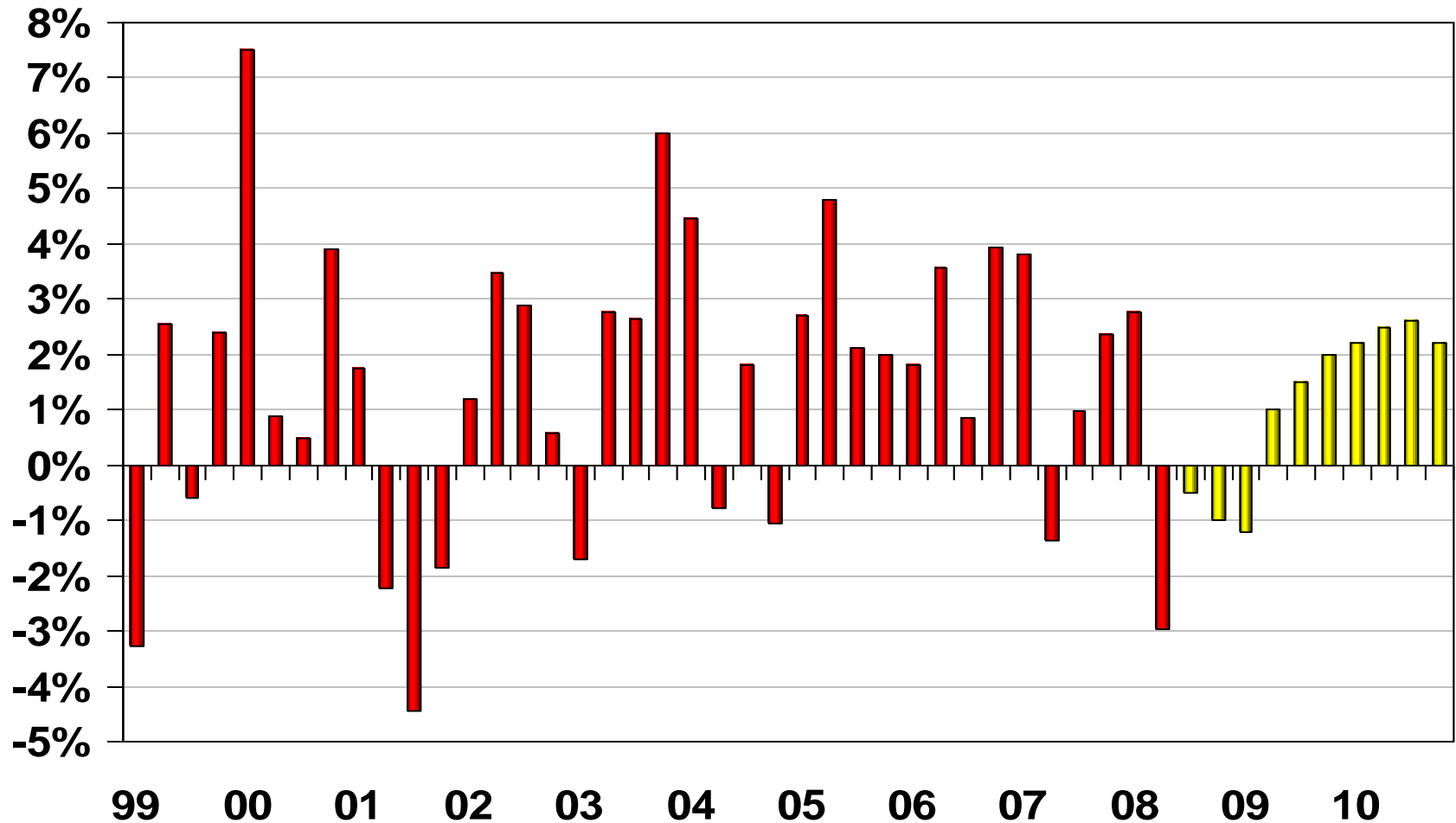
# Euro Area In Recession

(Real GDP Growth, Annualized Percent Change)

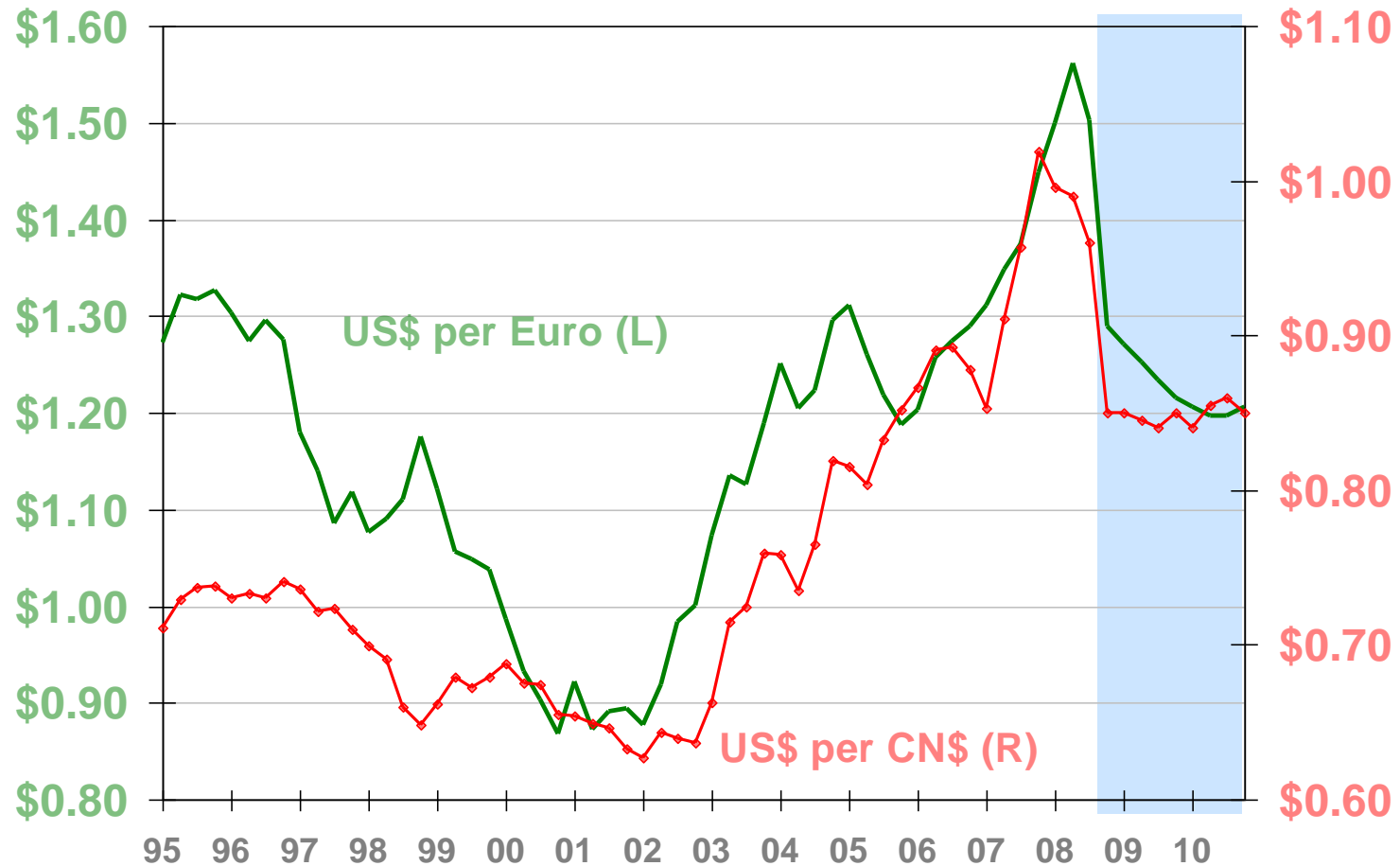


# Japan In Recession

(Real GDP Growth, Annualized Percent Change)



# Euro Will Weaken Gradually After Sharp Correction, Canadian Dollar Will Steady

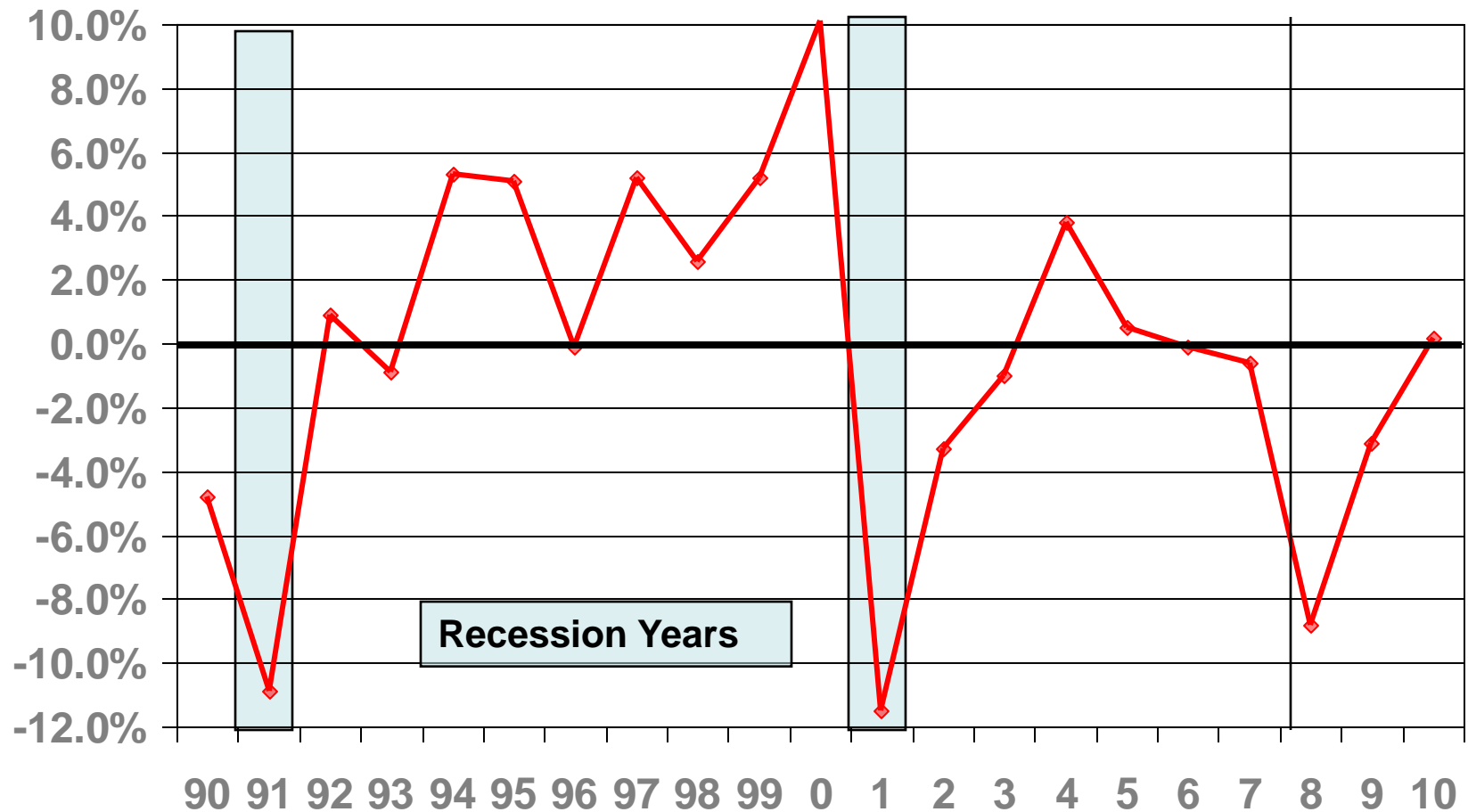


# The US Recession is Hitting Key Paper End-Uses Hard

- ▶ The Consumer Side of the Economy Is a Key Driver of Paper Markets, and It Is Faltering Badly
  - Falling house values, drop in stock-market, rising unemployment and job insecurity all lead to less spending
- ▶ Magazines, Catalog and Retail Will Be Impacted
  - Reduced advertising pages
  - Drop in circulation
  - In addition to ongoing shift to the Internet
  - Will use less and cheaper paper

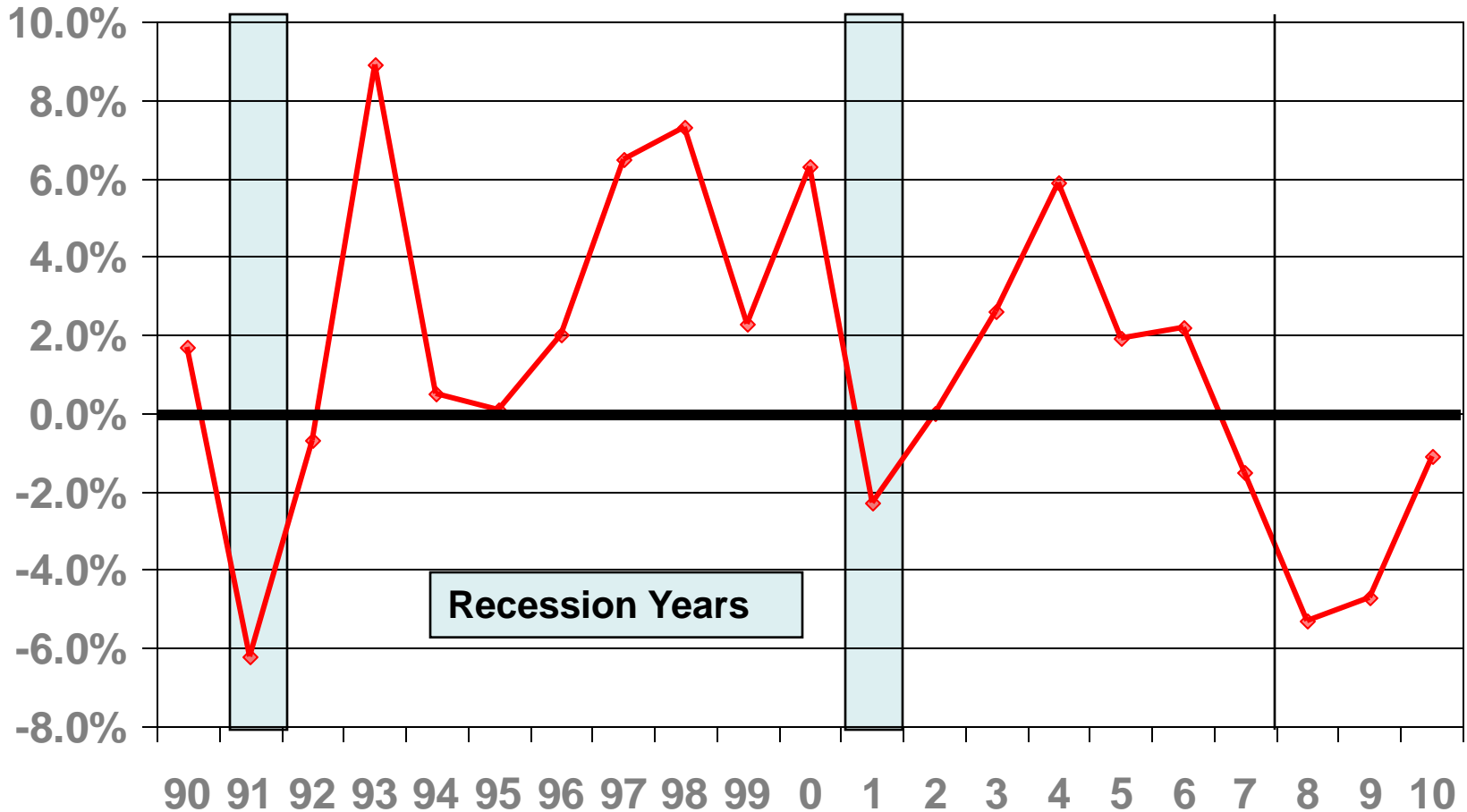
# US Magazine Ad Pages to Decline 9% in 2008 with a Risk of an Extended Drop

(PIB Magazine Ad Pages, Year-Over-Year Percent Change)



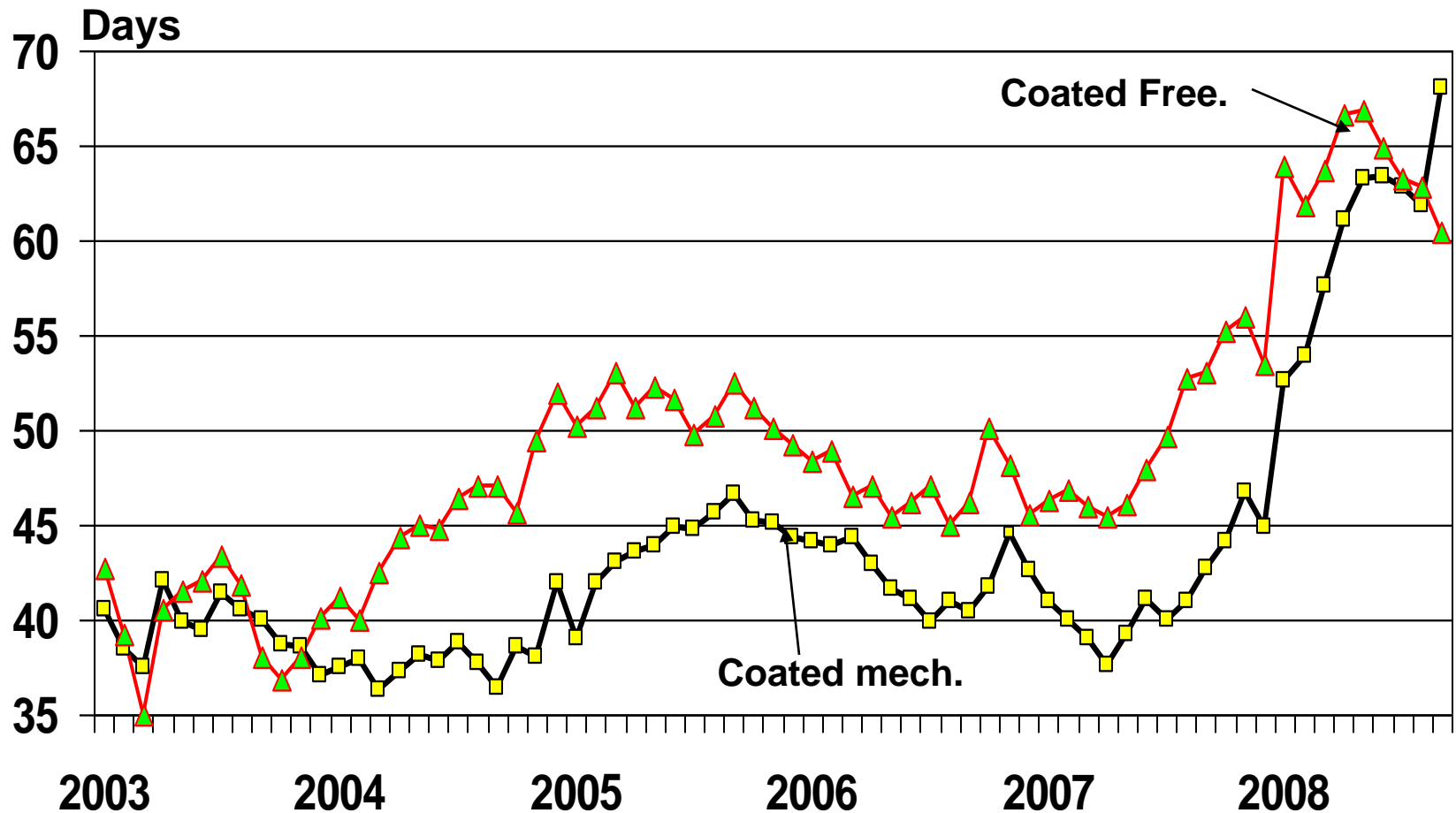
# US Catalog Circulation Will Fall Again in 2008 in Addition to Exhibiting Less Pagination

(RISI Catalog Circulation Index, Year-Over-Year Percent Change)





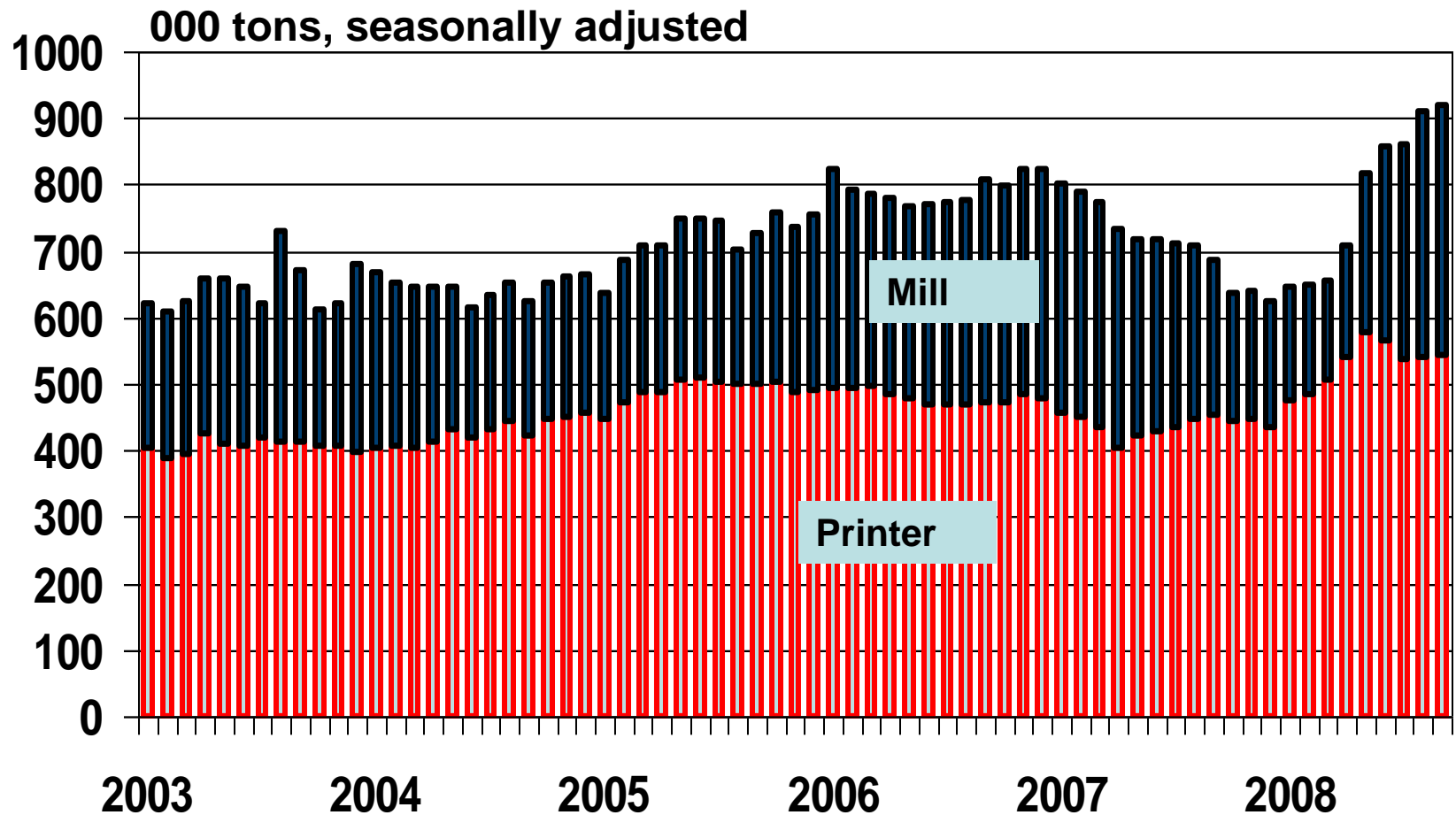
# Printer Inventories of Paper (Days of Supply, seasonally adjusted)



Data source: Calculated by RISI from IDEAlliance data

Last Data Point:  
Sept 08

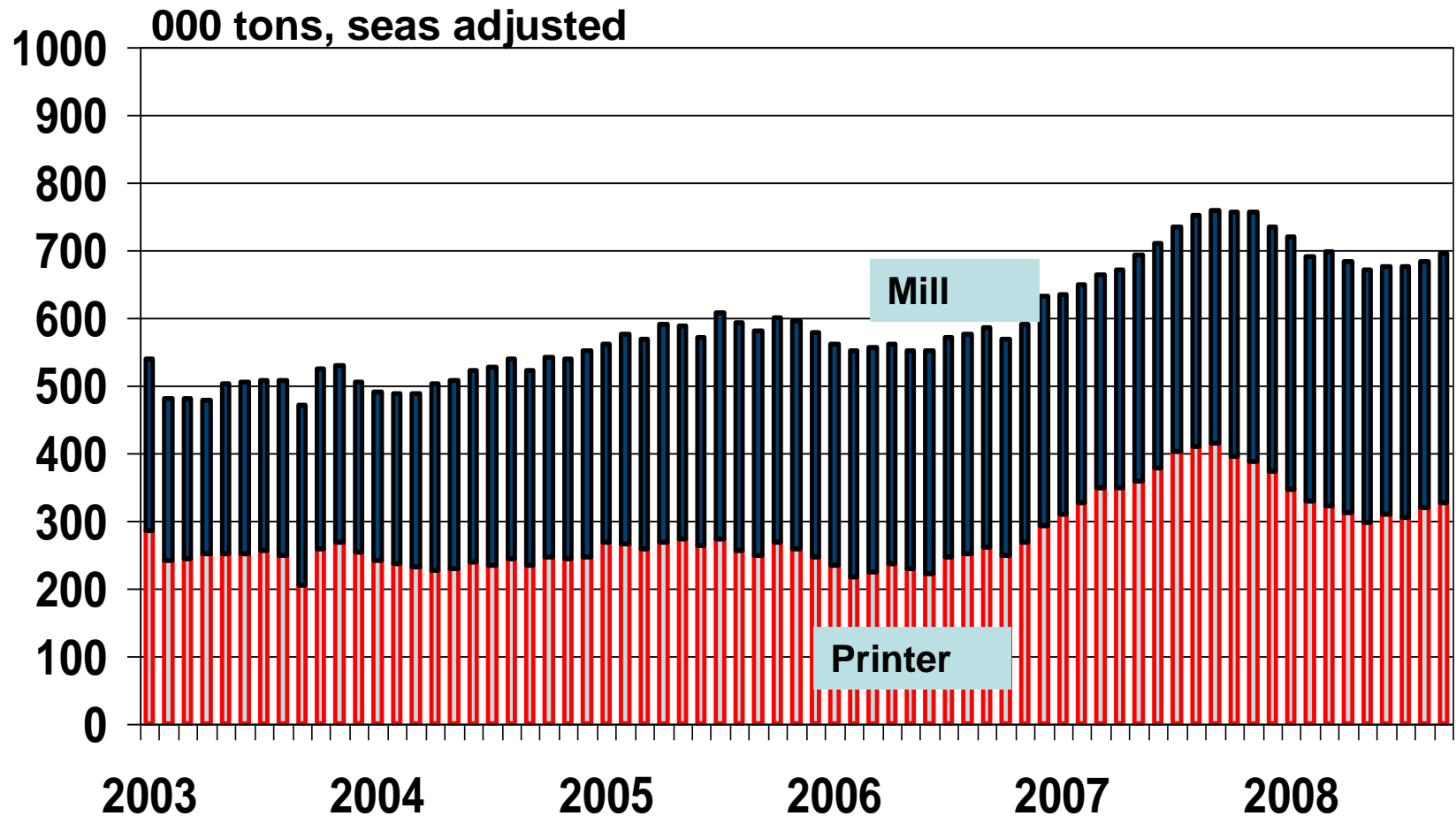
# Inventories of Coated Mechanical Paper at Mills & Printers Combined are Still far too High



Data sources: PPPC, IDEAlliance data

Last Data Point:  
Sept 08

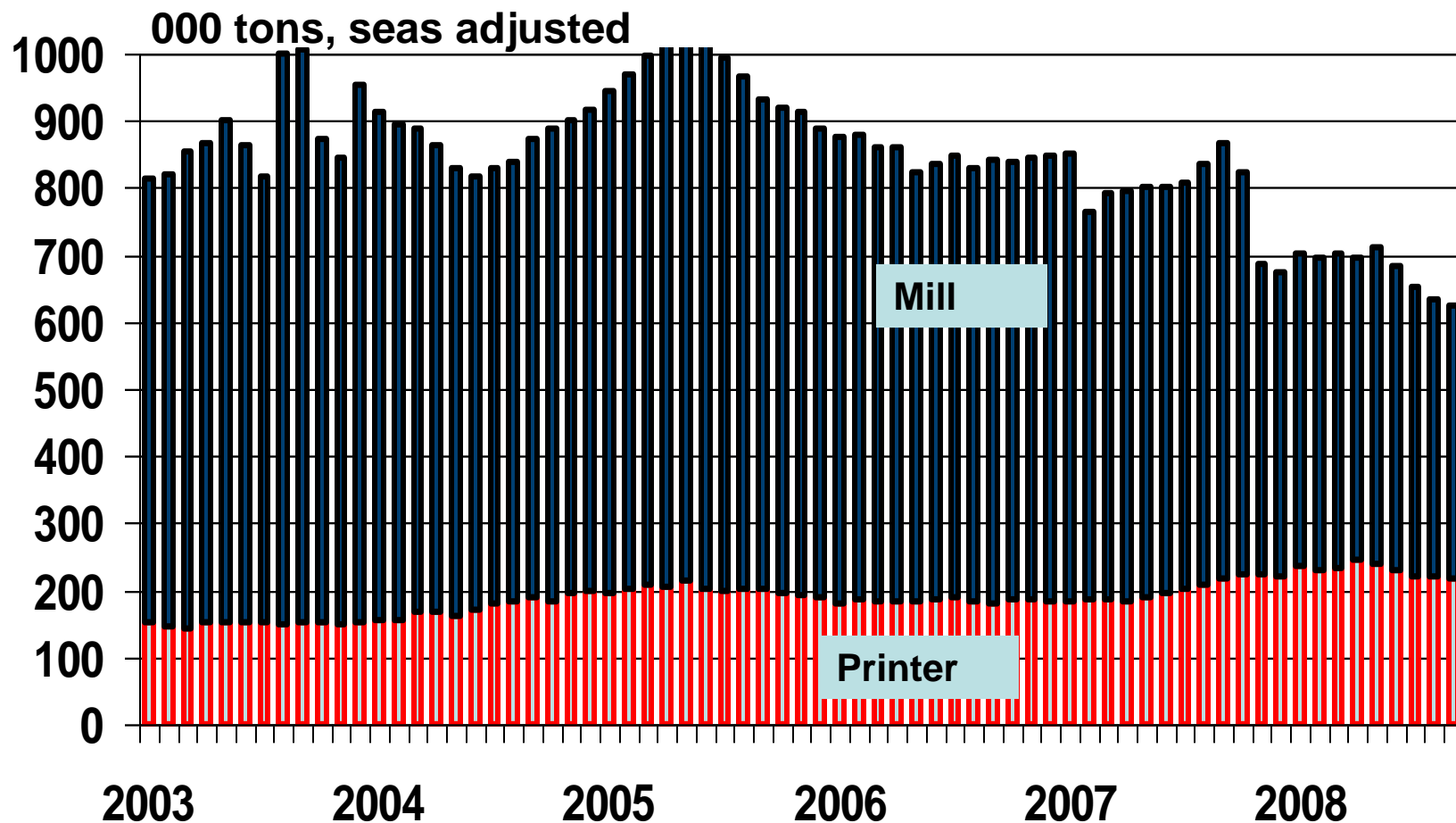
# Inventories of Uncoated Mechanical Paper at Mills & Printers Combined Much More In-Line with Demand



Data sources: PPPC, IDEAlliance data

Last Data Point:  
Sept 08

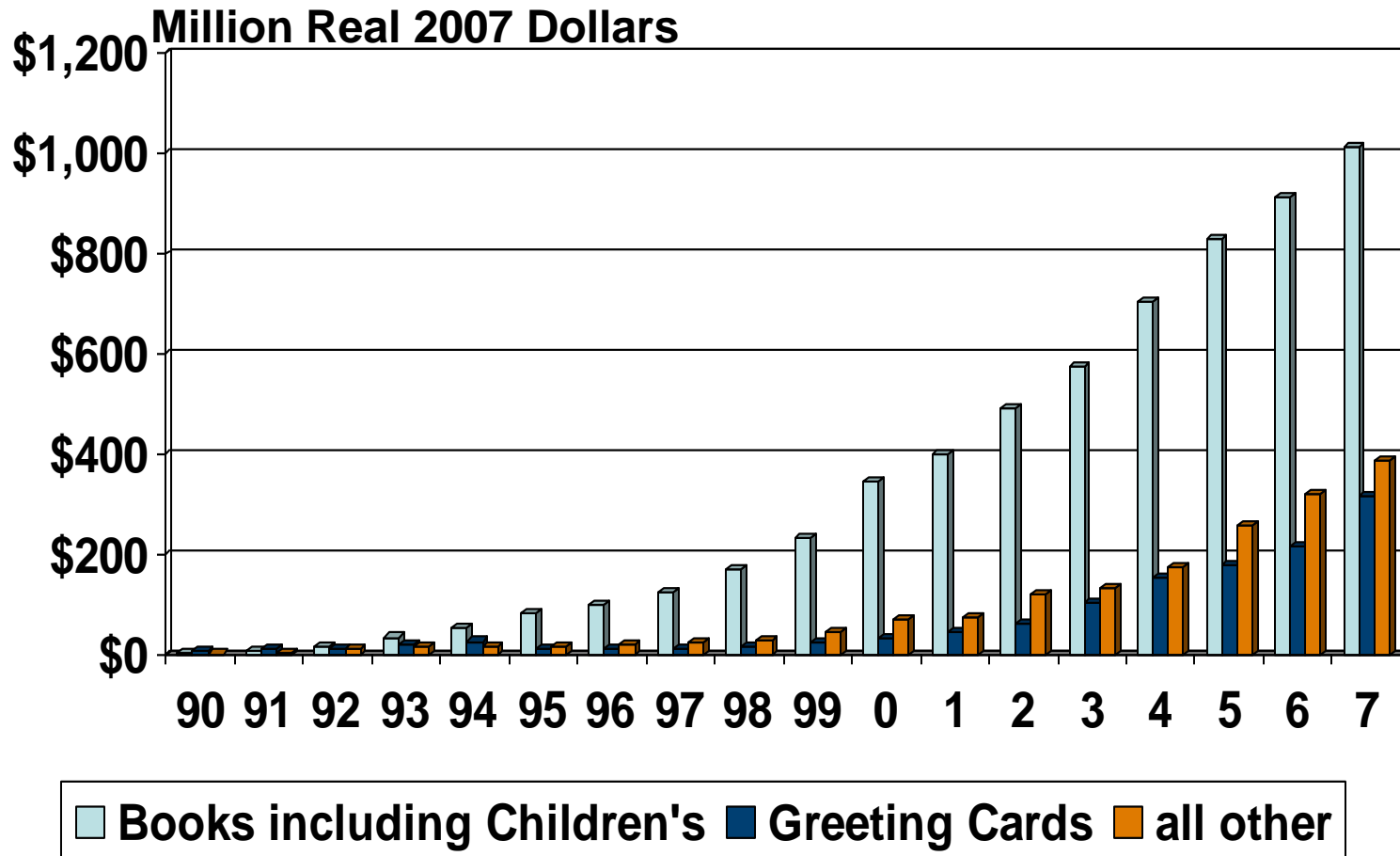
# Inventories of Coated Freesheet Paper at Mills & Printers Combined are Much Lower Than Mechanical



Data sources: PPPC, IDEAlliance data

Last Data Point:  
Sept 08

# US Imports of Printed Products from China also Helping to Reduce Domestic Demand for Paper



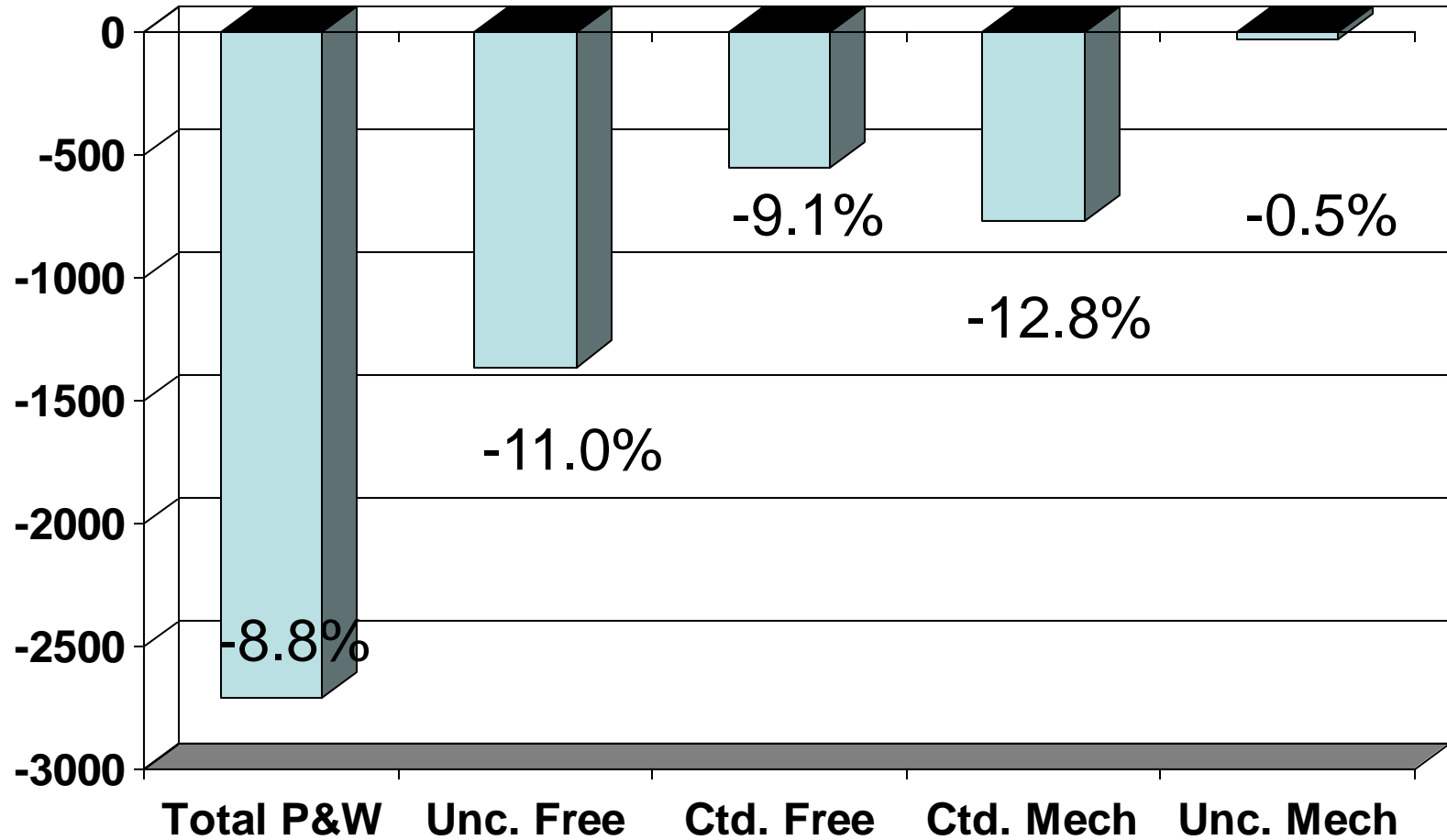
# North American P&W Demand by Grade

## Million Tonnes, % Change

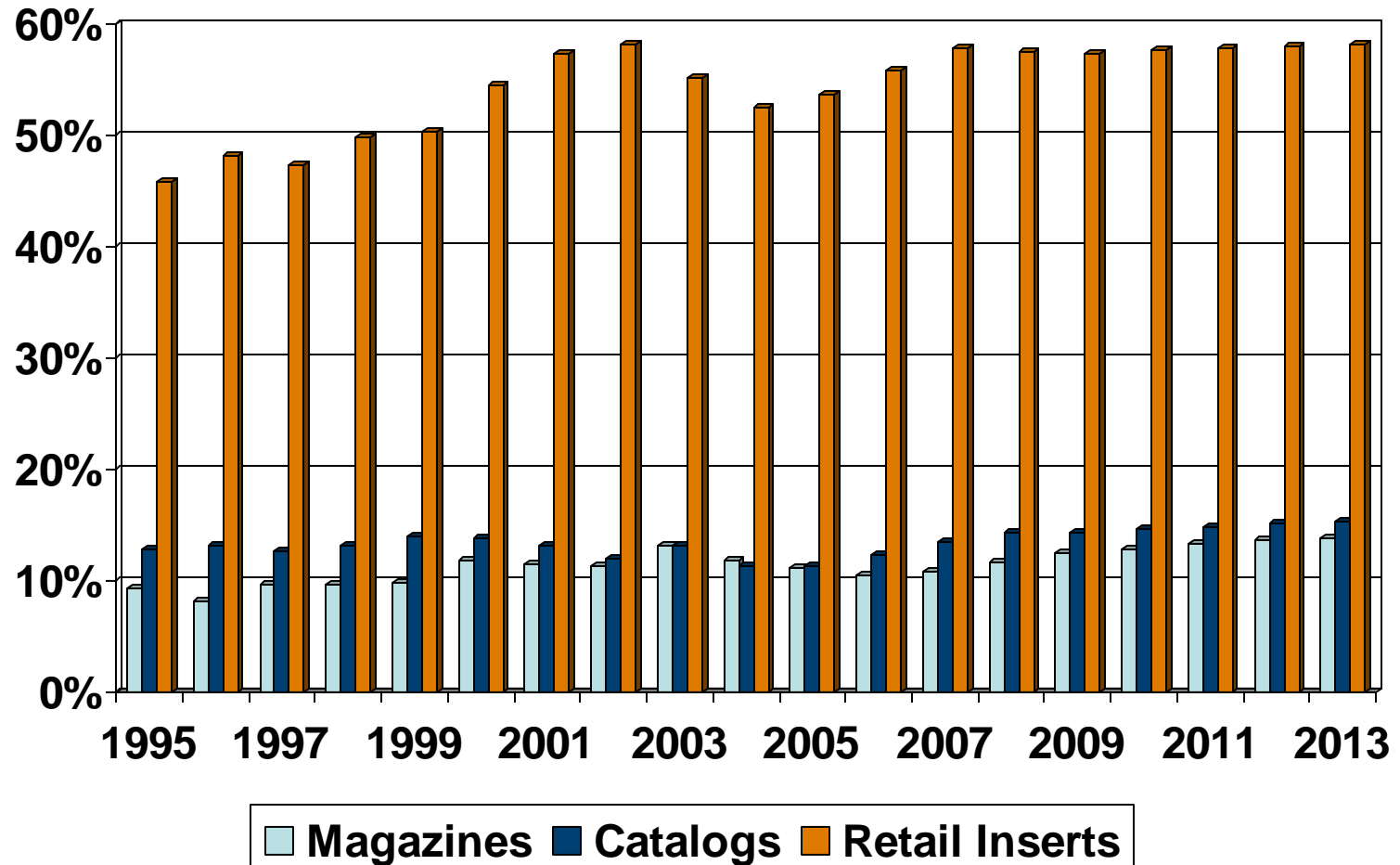
	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>
Ctd. Freesheet *	6.1	5.4	5.2	5.4
%ch	-8%	-11%	-4%	3%
Ctd. Mechanical	6.0	5.3	5.1	5.2
%ch	3%	-12%	-4%	2%
Unc. Freesheet *	12.4	11.6	11.2	11.2
%ch	-5%	-6%	-4%	0%
Unc. Mechanical	6.2	6.2	6.0	6.1
%ch	2%	-1%	-2%	2%
Total	30.7	28.5	27.6	28.0
%ch	-3%	-7%	-3%	1%
US GDP %ch	2.0%	1.3%	-0.4%	2.5%

\*Includes bristols and cotton

# North American Six-Year Growth Trends for 2008 to 2013 by Grade (000 tonnes)

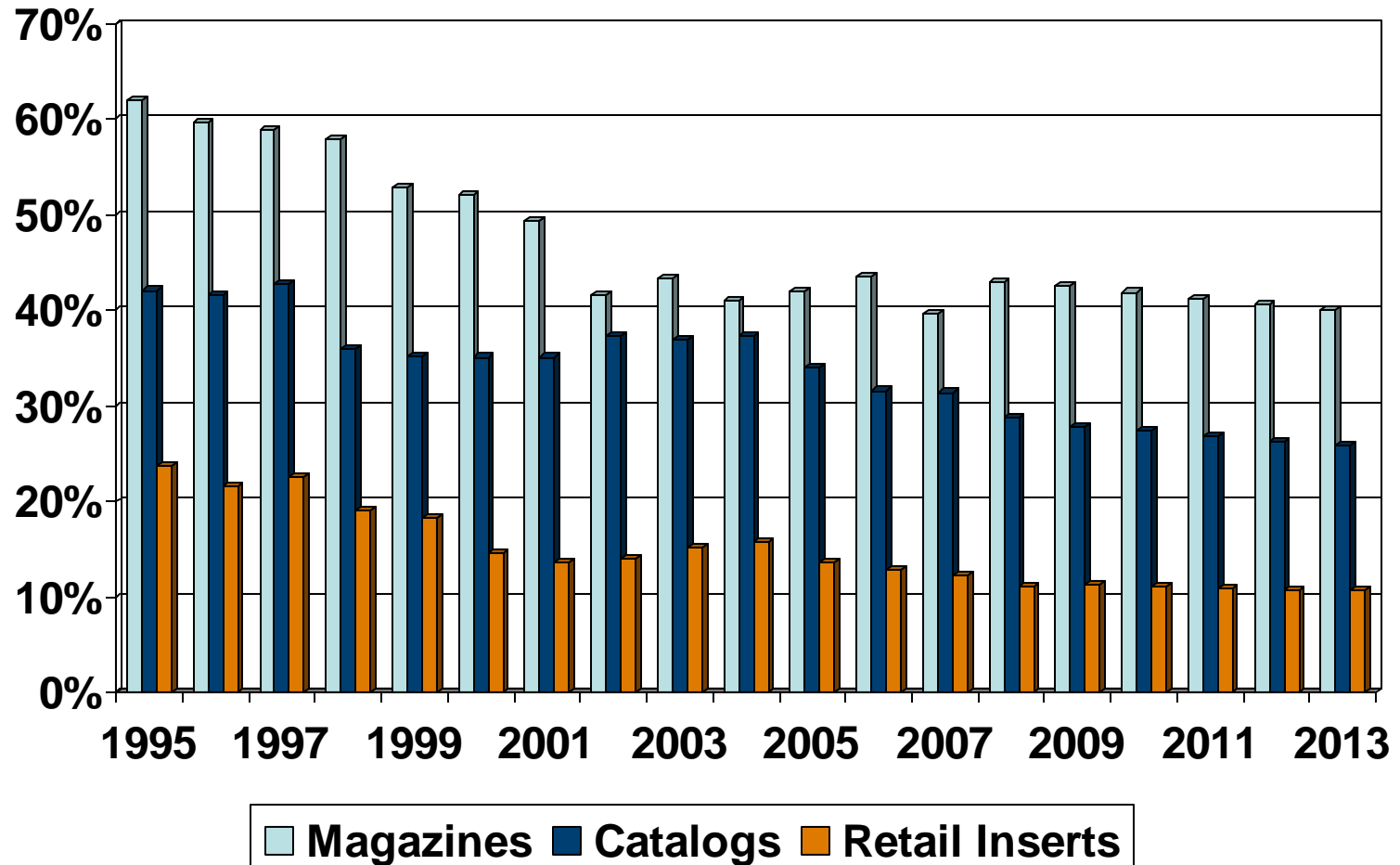


# SC has been Gaining as a Percentage of All Paper used in U.S. Magazines, Catalogs and Retail Inserts



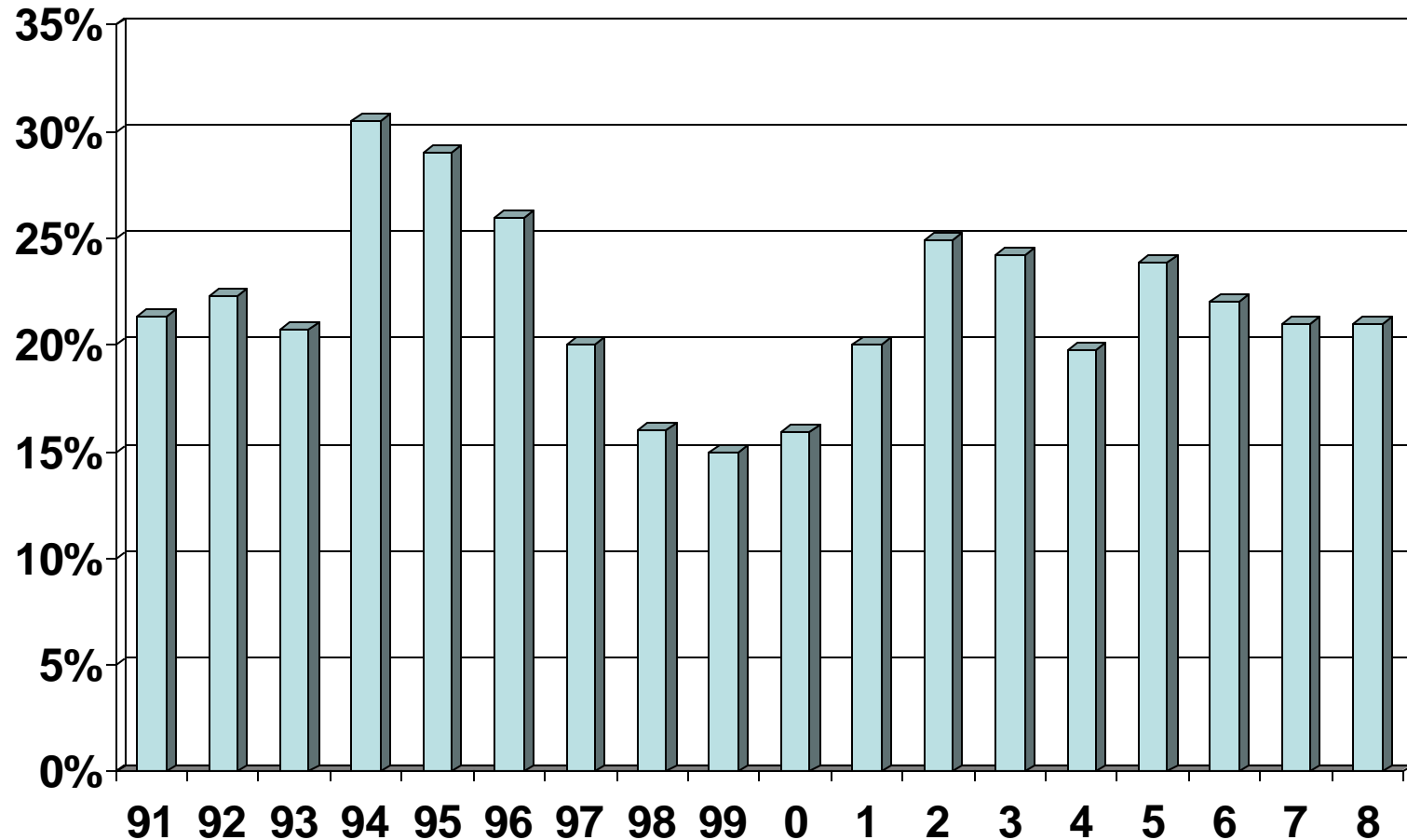


# While LWC No. 5 has been Falling as a Percentage of All Paper used in U.S. Magazines, Catalogs and Retail Inserts (excludes LWC No. 4)



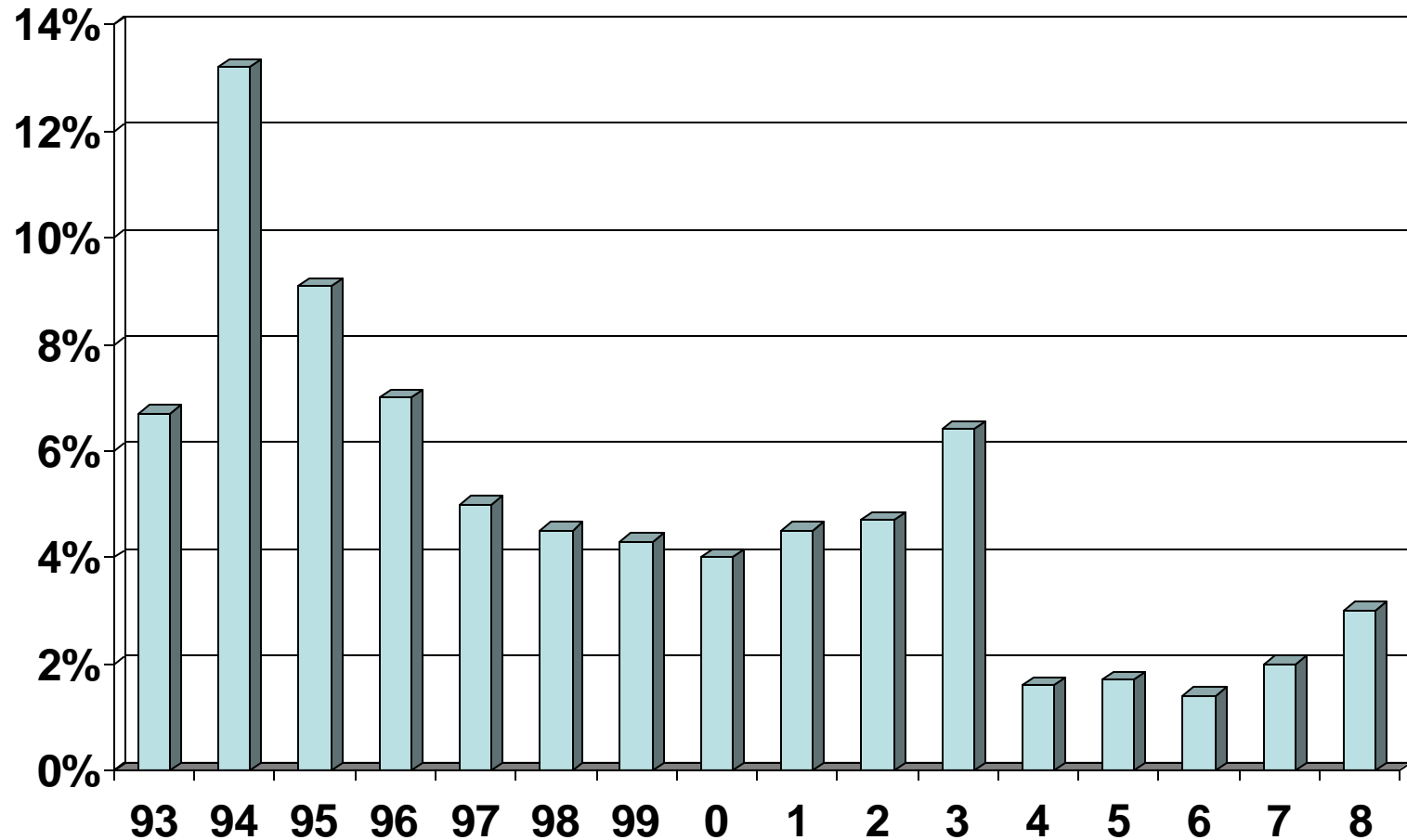
# Share of Magazine Paper Use That is Gravure

(Source: Annual MPA Paper Surveys)



# Share of Magazine Paper Use That is Recycled (at least 10% recycled content)

(Source: Annual MPA Paper Surveys)



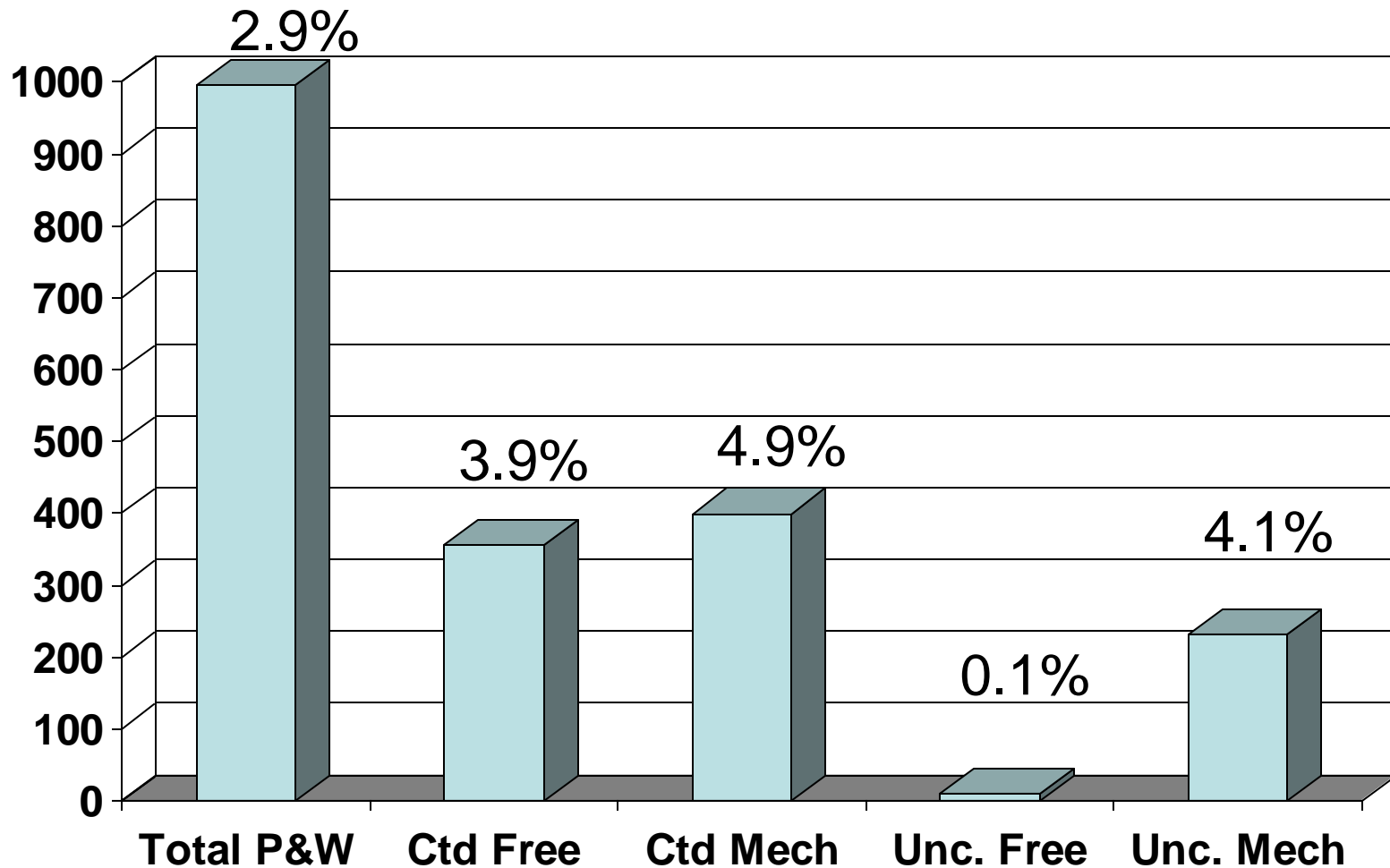
# European P&W Demand by Grade

## Million Tonnes, % Change

	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>
Ctd. Freesheet	8.9	8.8	8.7	8.9
%ch	0%	-1%	-1%	1%
Ctd. Mechanical	8.2	8.2	8.0	8.1
%ch	6%	0%	-2%	1%
Unc. Freesheet	11.8	11.3	11.1	11.2
%ch	2%	-4%	-2%	1%
Unc. Mechanical	5.7	5.8	5.7	5.8
%ch	2%	1%	-1%	1%
Total	34.5	34.1	33.6	34.0
%ch	2%	-1%	-2%	1%
GDP %ch	3.9%	2.5%	1.7%	3.7%

**Includes both Western and Eastern Europe**

# European Five-Year Growth Trends for 2008 to 2012 by Grade (000 tonnes)

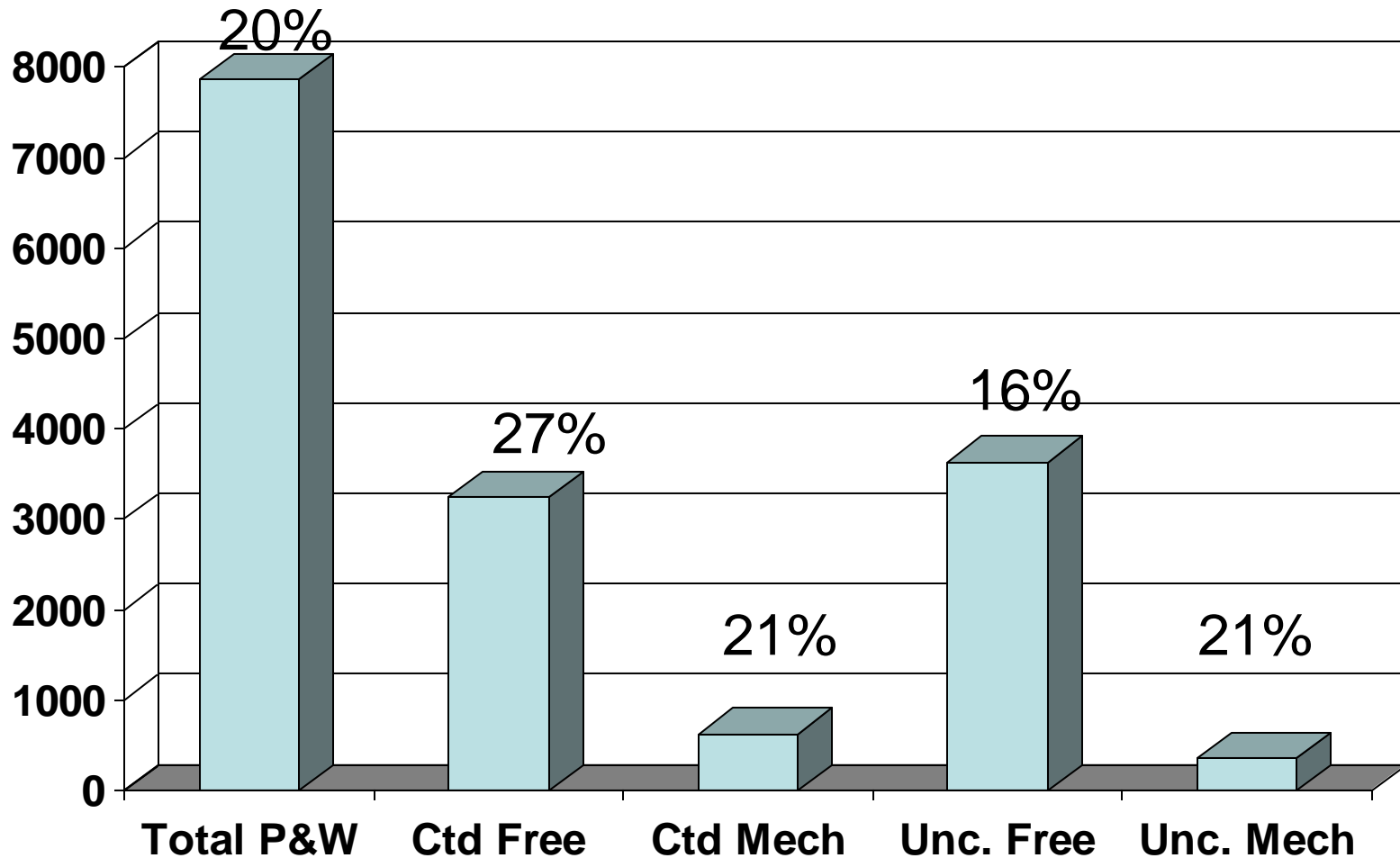


# Asian P&W Demand by Grade

## Million Tonnes, % Change

	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>
Ctd. Freesheet	12.0	12.6	13.2	14.0
%ch	6%	6%	5%	6%
Ctd. Mechanical	3.0	3.0	3.2	3.4
%ch	6%	0%	4%	7%
Unc. Freesheet	22.5	23.3	23.9	24.8
%ch	4%	4%	2%	4%
Unc. Mechanical	1.7	1.8	1.9	1.9
%ch	2%	5%	3%	5%
Total	39.2	40.8	42.1	44.1
%ch	5%	4%	3%	5%
GDP %ch	7.4%	6.6%	6.0%	6.8%

# Asian Five-Year Growth Trends for 2008 to 2012 by Grade (000 tonnes)



# Latin American P&W Demand by Grade

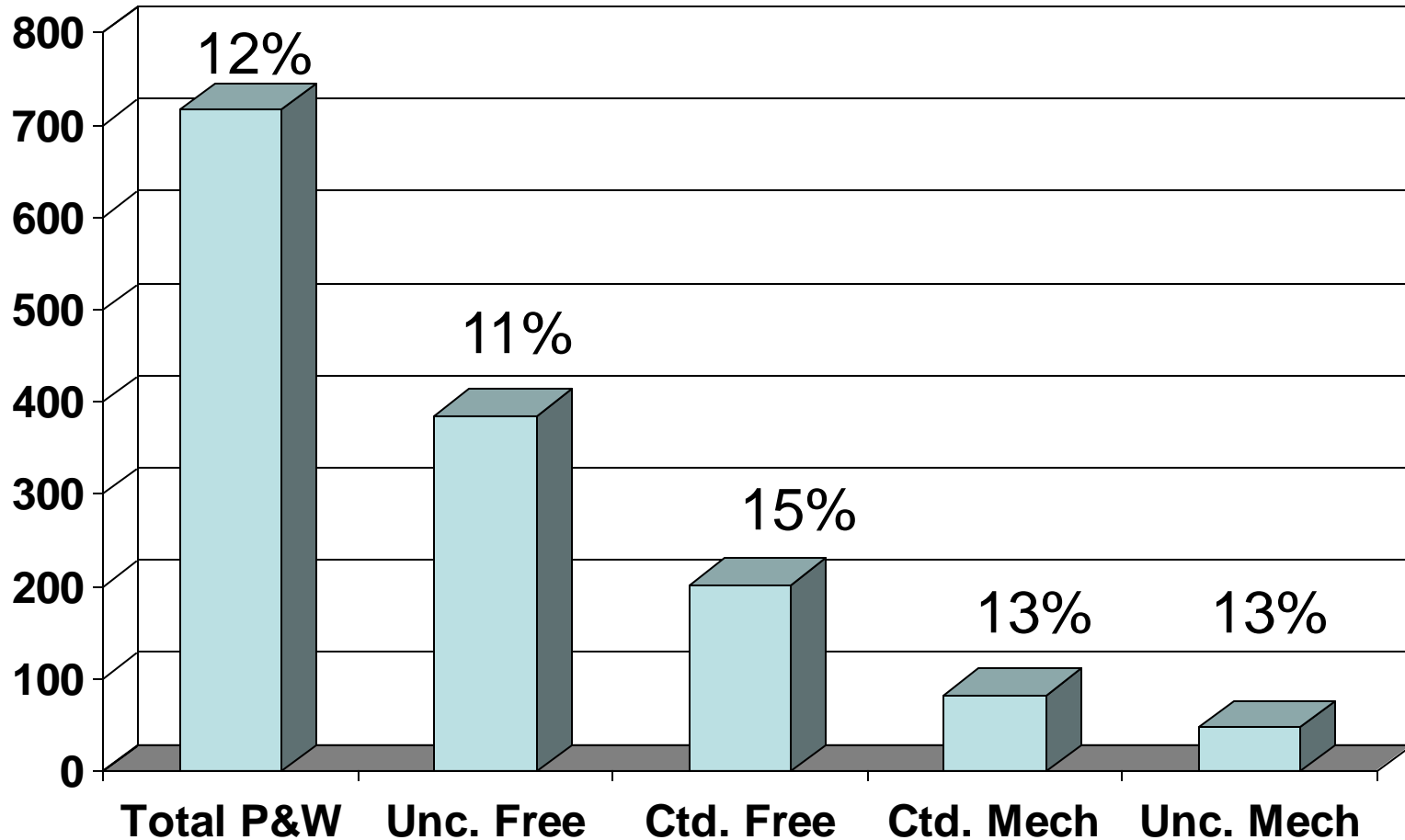
## Million Tonnes, % Change

	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>
Ctd. Freesheet	1.29	1.34	1.38	1.44
%ch	2%	4%	3%	4%
Ctd. Mechanical	0.59	0.61	0.63	0.66
%ch	5%	4%	3%	3%
Unc. Freesheet	3.51	3.62	3.71	3.84
%ch	6%	3%	3%	3%
Unc. Mechanical	0.33	0.34	0.35	0.37
%ch	-3%	4%	3%	4%
Total	5.72	5.99	6.16	6.38
%ch	4%	3%	3%	4%
GDP %ch	5.6%	4.6%	4.1%	4.5%

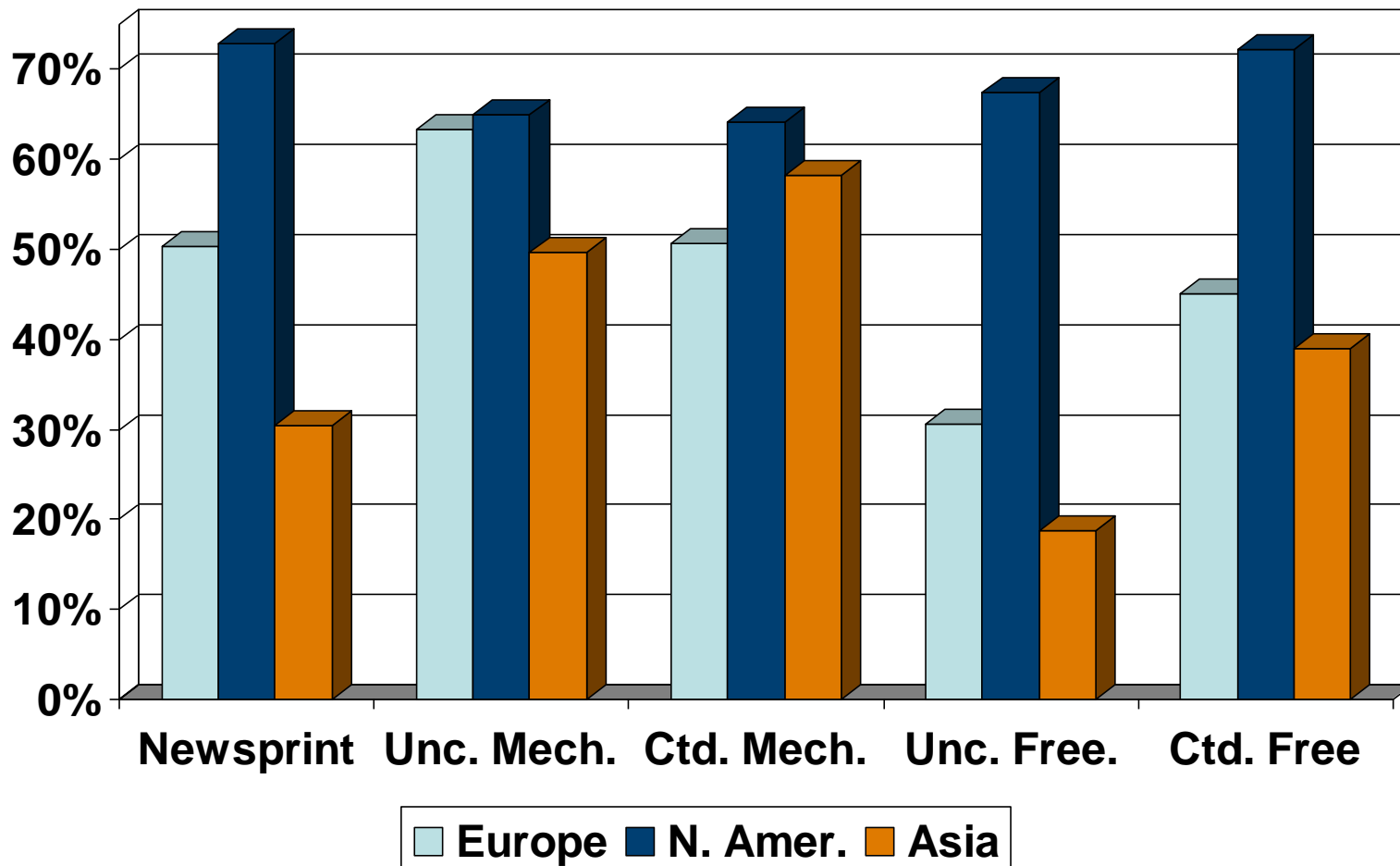
Lat. Amer. Includes Mexico, Caribbean, central and South America



# Latin American Five-Year Growth Trends for 2008 to 2012 by Grade (000 tonnes)



# European vs. North American Combined Market Share of Top Three Producers in 2007 Indicates Further Consolidation to Come in Europe



## N.A. Paper Mill/Machine Closures (000 Tonnes)

			Umec	CFS	Cmec	UFS
	IP	Pensacola				318
	NewPage	Luke		90		
	GP	Wauna				100
	Boise	Wallula				220
	UPM	Miramachi			450	
	Tembec	St. Francisville		280		
	Domtar	Gatineau		90		23
	Dirigo	Gilman, Vt				64
	Fraser	Madawaska			82	64
	Domtar	Port Edwards				31
	Domtar	Baileyville				113
	AbitibiBow	Fort William	150			
	AbitibiBow	Dolbeau	88			
	Kruger	Three Rivers	135			
2007	Totals 2007		388	460	532	933

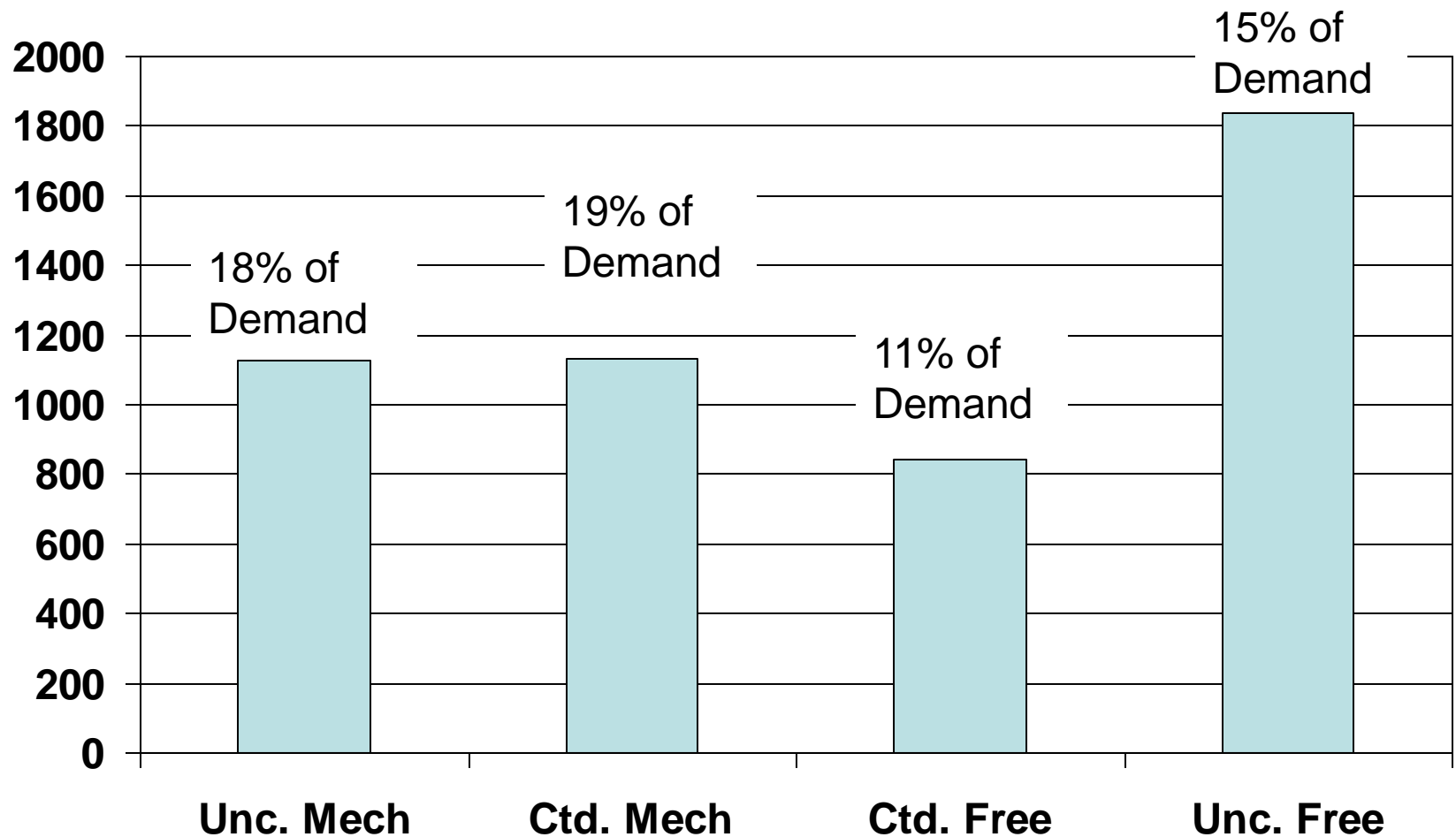
## N.A. Paper Mill/Machine Closures (000 Tonnes)

			Umec	CFS	Cmec	UFS
	Wausau	Groveton, NH				95
	Neenah	Urbana, OH				35
	Domtar	Port Edwards				117
	IP	Bastrop, LA				225
	Domtar	Dryden, ON				161
	New Page	Rumford, Me		54	45	
	New Page	Niagara, WI			209	
	New Page	Kimberly, WI		181	272	
	Kruger	Three Rivers	68			
	AbitibiBow	Donnacona	160			
	AbitibiBow	Dalhousie	40			
	AbitibiBow	Belgo	260			
	Verso	Bucksport PM1			76	
	Thunder Bay	Thunder Bay, On		150		
	Katahdin	Millinocket, Me	165			
	AbitibiBow	Gatineau	45			
2008	Totals 2008		738	385	602	633

# N.A. Paper Mill/Machine Closures (000 Tonnes)

		Umec	CFS	Cmec	UFS
	<b>Domtar</b>	<b>Dryden, On</b>			<b>135</b>
	<b>IP</b>	<b>Franklin, VA</b>			<b>135</b>
	<b>Boise</b>	<b>St Helens</b>			<b>180</b>
<b>2009</b>	<b>Totals 2009</b>				<b>450</b>

# North American Capacity Closures Announced for 2007 - 2009 (000 tonnes)

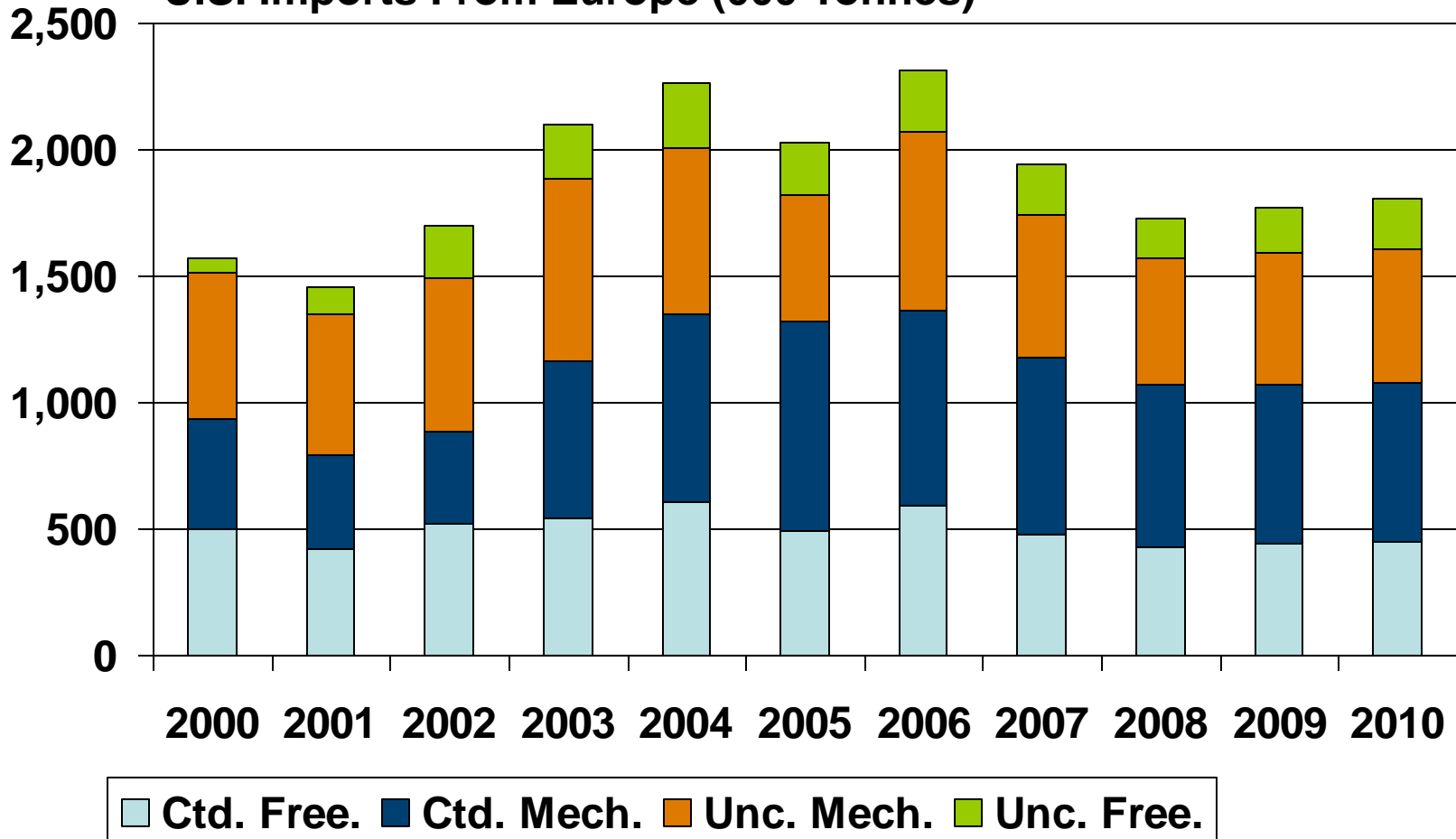


# European Paper Mill/Machine Closures (000 Tonnes)

			CFS	UFS	CMec	SC/Umec
2007	UPM	Jamsankoski			110	
	M-Real	Sittingbourne	210			
		Gohrsmuhle	100			
	Mylykoski	Dachau			230	
	Andapak	Belgium	80			
	Stora Enso	Reizholz				215
	M-Real	Wifsta, Sw		175		
	Stora Enso	Berghuizer, Ne		235		
	Various	Be, Fr, Sp, Ne, Ru		155		
	Pap. Des Alpes	Domene, Fr				75
2008	Stora Enso	Summa				215
	M-Real	Kangas			100	
	Stora Enso	Anjala			155	120
	Mondi	Szolnok, Hu		140		
	Holmen	Hallstavik				110
		Wargon, Sw			145	
	Burgo	Chieti, It	210			
SAPPI	Blackburn/Maastricht	190				
2009	M-Real	New Thames, UK		230		
	UPM Kajaani	Kajaani, FN				230
	M-Real	Gohrsmuhle, BE, Hallein, DE	600			
	Lecta/Torraspapel	Spain	160			
	Stora	Kabel			140	
<b>Total ISI</b>			<b>1,560</b>	<b>935</b>	<b>880</b>	<b>965</b>

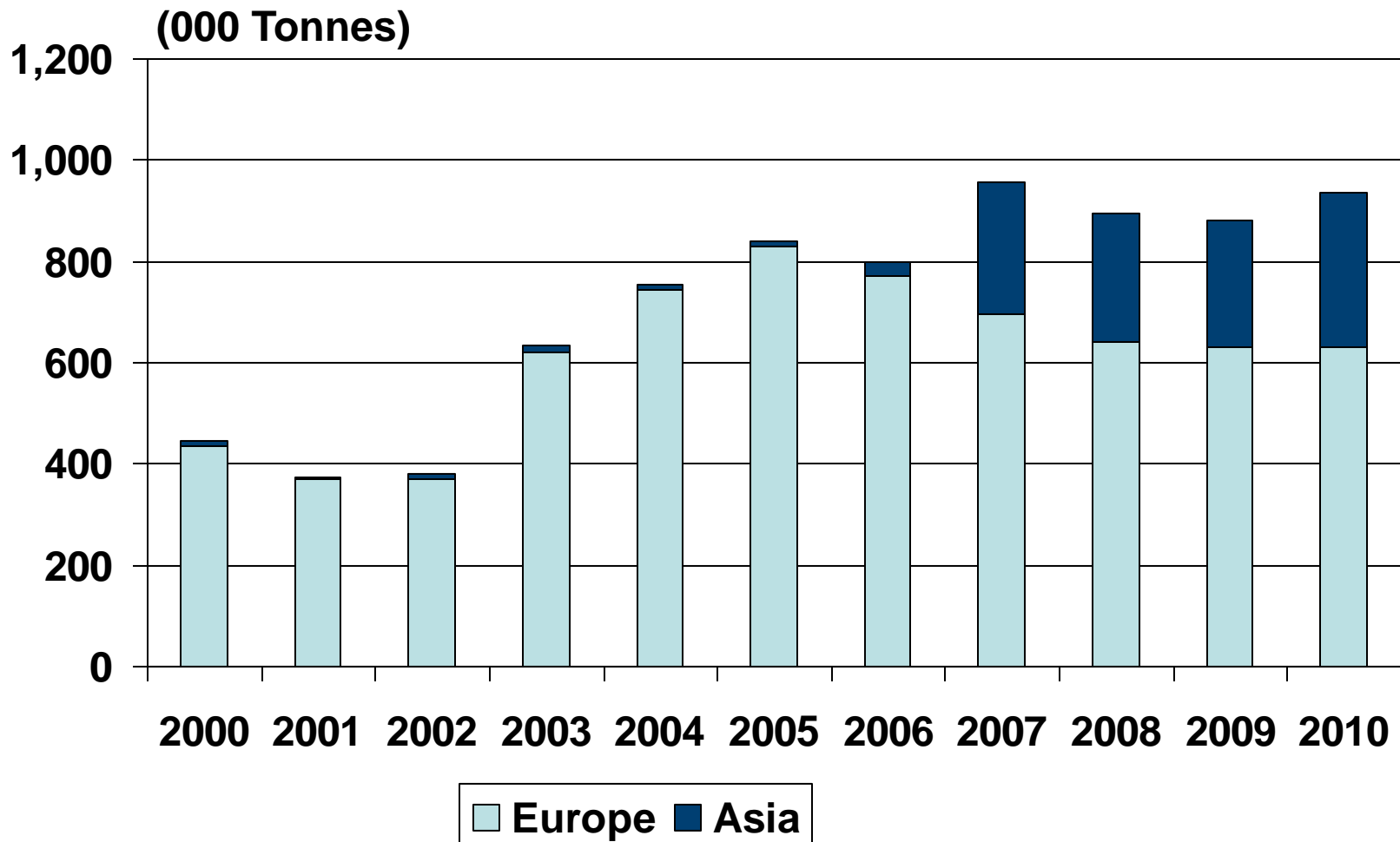
# European Supply of Printing and Writing Papers to US Market Has Been Declining due to the Strong Euro, but May Now Reverse

U.S. Imports From Europe (000 Tonnes)





# US Coated Mechanical Offshore Imports by Source

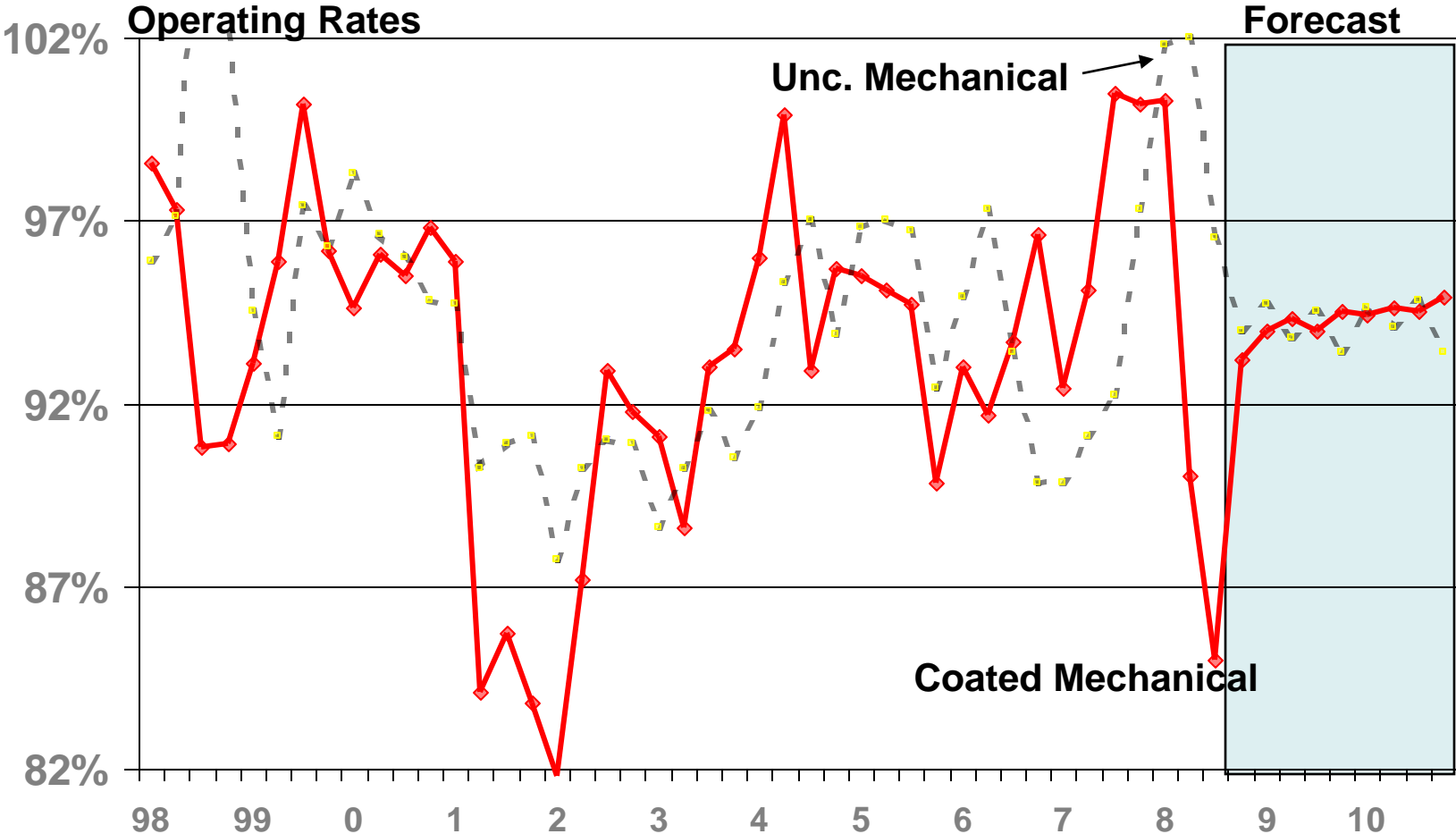


## Comparison and Demand and Supply Growth for 2008 and 2009 – Coated Mechanical (metric tonnes)

	2008	2009
Demand		
% Change	-12%	-4%
Tonnes	-710	-205
Supply		
% Change	-8%	-6%
Tonnes	-519	-322
NA Capacity	-408	-304
Offshore Imports	-111	-18

**2009 is based on currently announced closures; capacity data are prorated for the years based on the timing of the closure**

# North American Markets for Coated Mechanical Respond to Capacity Closures



## Comparison and Demand and Supply Growth for 2008 and 2009 – Uncoated Mech (metric tonnes)

	2008	2009
Demand		
% Change	-2%	-2%
Tonnes	-95	-124
Supply		
% Change	-6%	0%
Tonnes	-459	0
NA Capacity	-424	-25
Offshore Imports	-26	+25

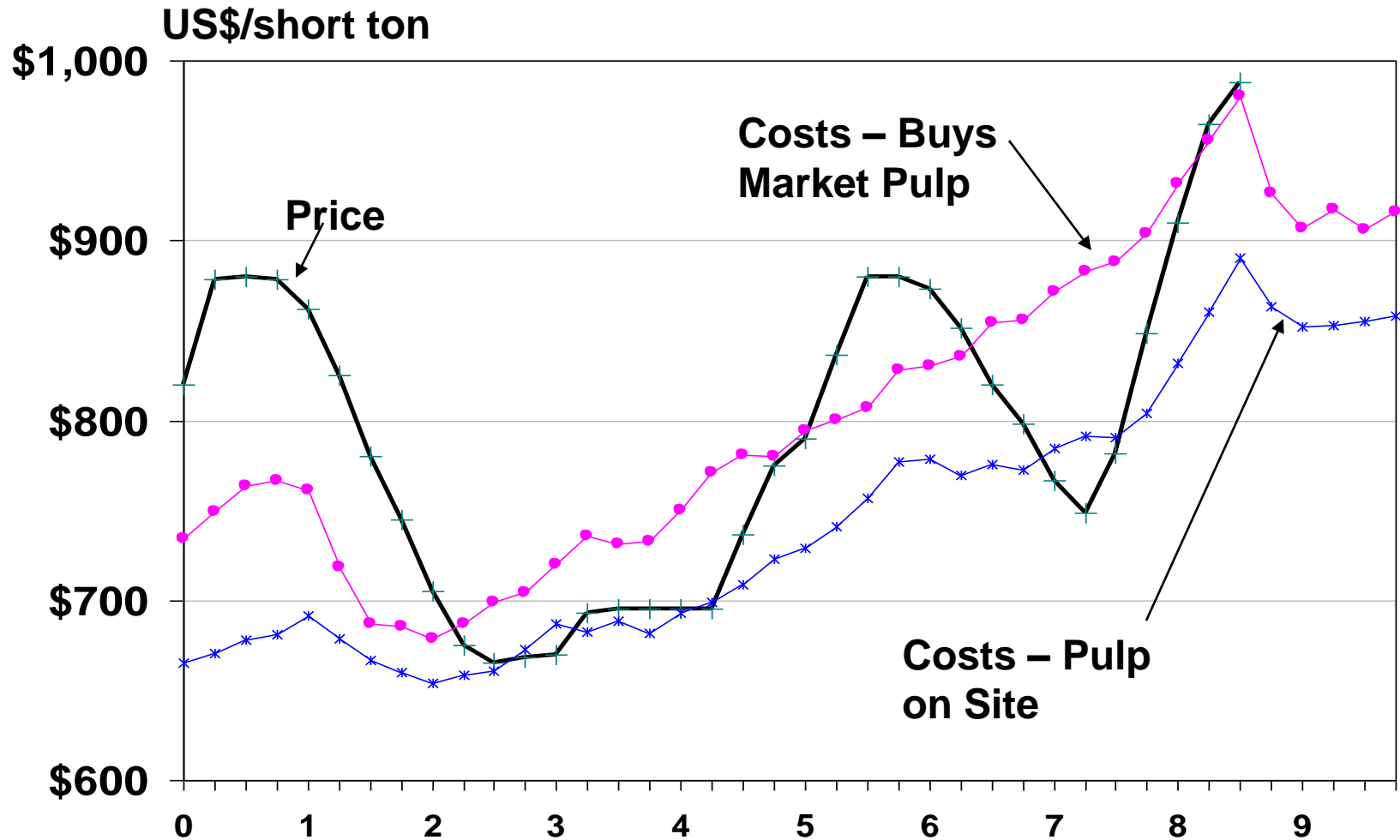
**Includes all uncoated mechanical, not just SC. 2009 is based on currently announced closures; capacity data are prorated for the years based on the timing of the closure**

## Comparison and Demand and Supply Growth for 2008 and 2009 – Coated Freesheet (metric tonnes)

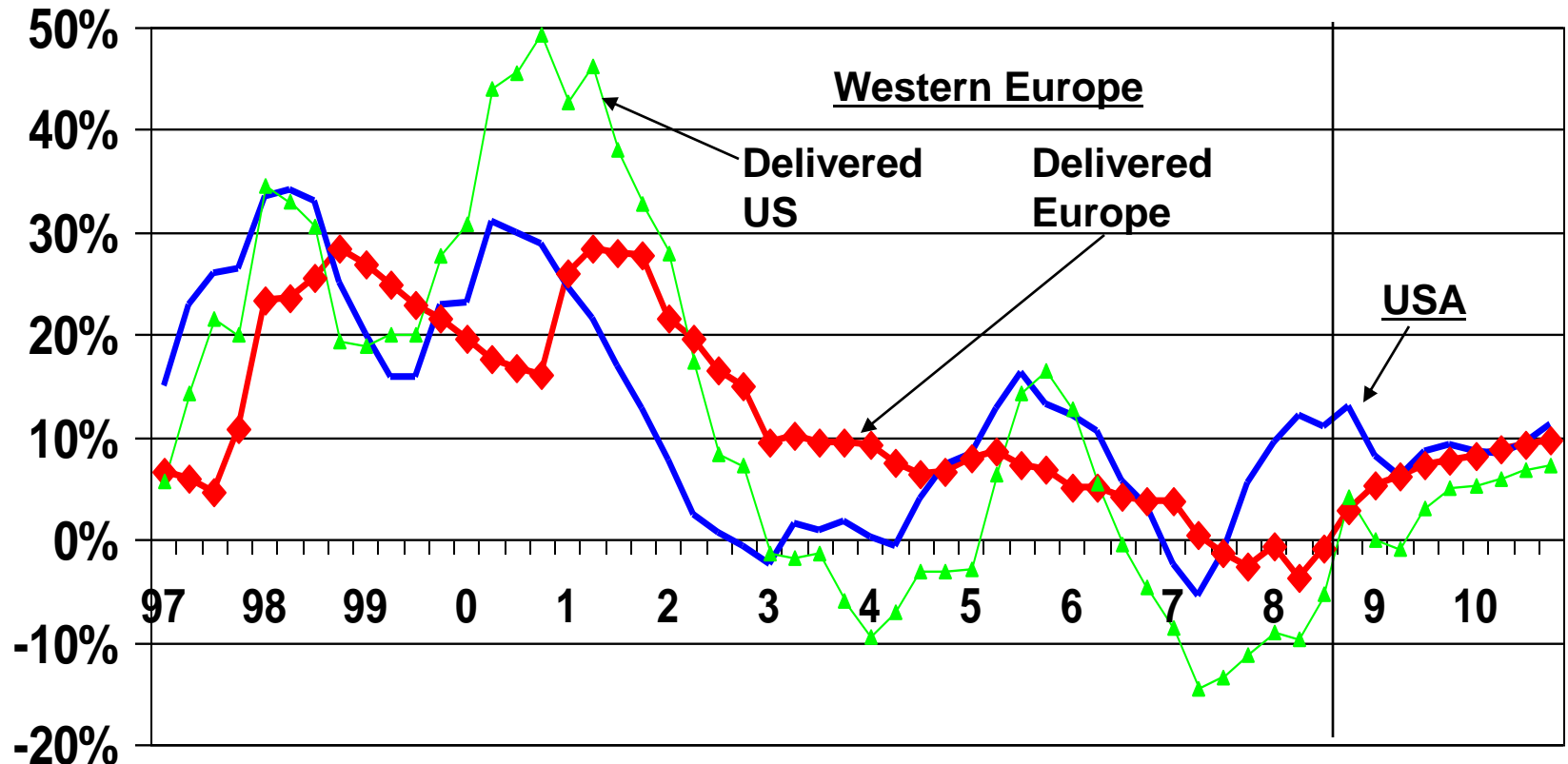
	2008	2009
Demand		
% Change	-11%	-4%
Tonnes	-660	-192
Supply		
% Change	-8%	-2%
Tonnes	-528	-114
NA Capacity	-261	-129
Offshore Imports	-267	+14

**2009 is based on currently announced closures; capacity data are prorated for the years based on the timing of the closure**

# US Coated No. 5 (40 lb) Historical Prices vs. Total Fully-Weighted US Manufacturing Costs Including Interest Depreciation and Overhead



# Average Profitability for Coated Mechanical Paper Producers in Europe and USA



Profitability defined as (price-cost)/cost. Costs are total costs including depreciation, interest, SG&A and delivery. Assumes \$50 extra delivery cost to US for European producers compared to home market delivery.