

Pulp and Paper



INTERNATIONAL PAPER
HAMMERMILL
Color Copy Gloss

32/80lb Paper Paper Pallet
90 98+ Bright Brilliant Brilliant

2004 INTERTECH TECHNOLOGY AWARDS
GATE FOR INNOVATIVE EXCELLENCE

OVER COVER
SAFEGUARD for doggies
8 1/2 x 11"

GUARANTEED for all color copiers and color laser printers*
GARANTIZADO para todos los copiales de color e impresoras láser de color*



Pulp and Paper Industry Presentation

Team Gold Standard



An International Paper mill in South Carolina

Presenters:

- Vernon Scott:
 - Introduction
 - Industry Analysis
 - Demand Factors
- Tim Leaumont:
 - Intl Paper
- Bill Wise:
 - Forecasts
 - Economics
 - Conclusion

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**“I have some paperwork to catch up. If I’m not back
in two days, organize a search and rescue team!”**



Introduction

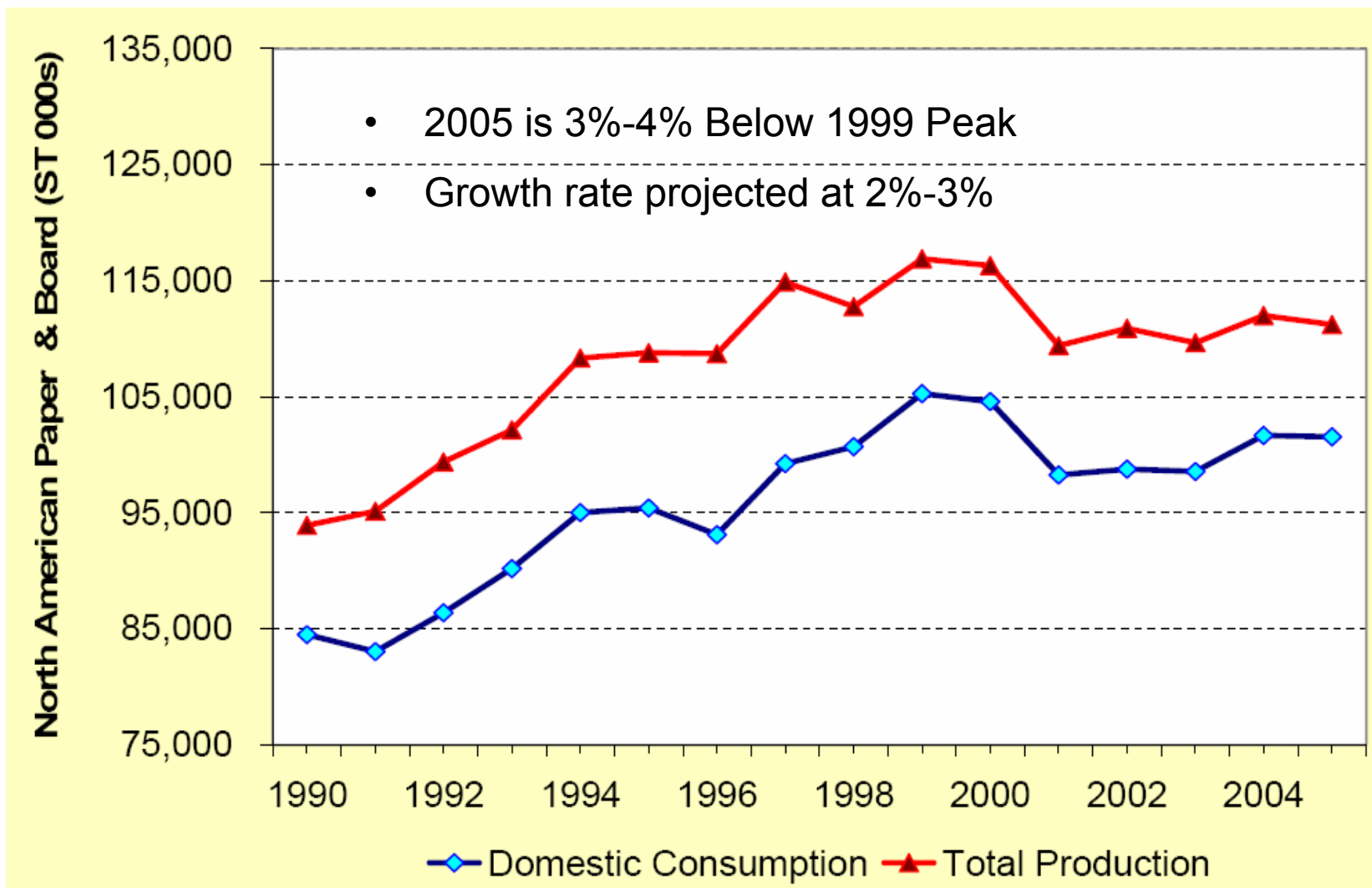
- The word *paper* comes from the ancient [Egyptian](#) writing material called [papyrus](#), which was woven from [papyrus plants](#). Papyrus was produced as early as 3000 BC in Egypt, and in ancient [Greece](#) and [Rome](#).
- Paper was invented in Ancient China by Ts'ai Lun in AD 105
- Global pulp and paper industry dominated by [United States](#), [Canada](#), [Sweden](#), [Finland](#) and [East Asian](#) countries (such as [Japan](#))
- [Australasia](#) and [Latin America](#) also have significant pulp and paper industries
- [Russia](#) and [China](#) expected to be key in the industry's growth over the next few years for both demand and supply

General Economic Growth

Real GDP Growth By Region	2002	2003	2004	2005
Advanced Economies				
US	1.9%			
Euro Area	0.8%	0.5%	2.2%	2.2%
Japan	-0.3%	2.5%	4.4%	2.3%
UK	1.8%	2.2%	3.4%	2.5%
Canada	3.4%	2.0%	2.9%	3.1%
Other Advanced Economies	3.6%	2.4%	4.3%	3.5%
Newly Industrialized Asian Economies				
	5.0%	3.0%	5.5%	4.0%
Other Emerging Markets				
	4.8%			
Africa	3.5%	4.3%	4.5%	5.4%
Central and Eastern Europe	4.4%	4.5%	5.5%	4.8%
Commonwealth of Independent States	5.4%			
Developing Asia	6.6%			
Middle East	4.3%	6.0%	5.1%	4.8%
Latin America	-0.1%	1.8%	4.6%	3.6%

Overall Economic Growth Projections Do Favor Continued Demand Growth In The Industry

Demand in North America Shows Little to No Growth

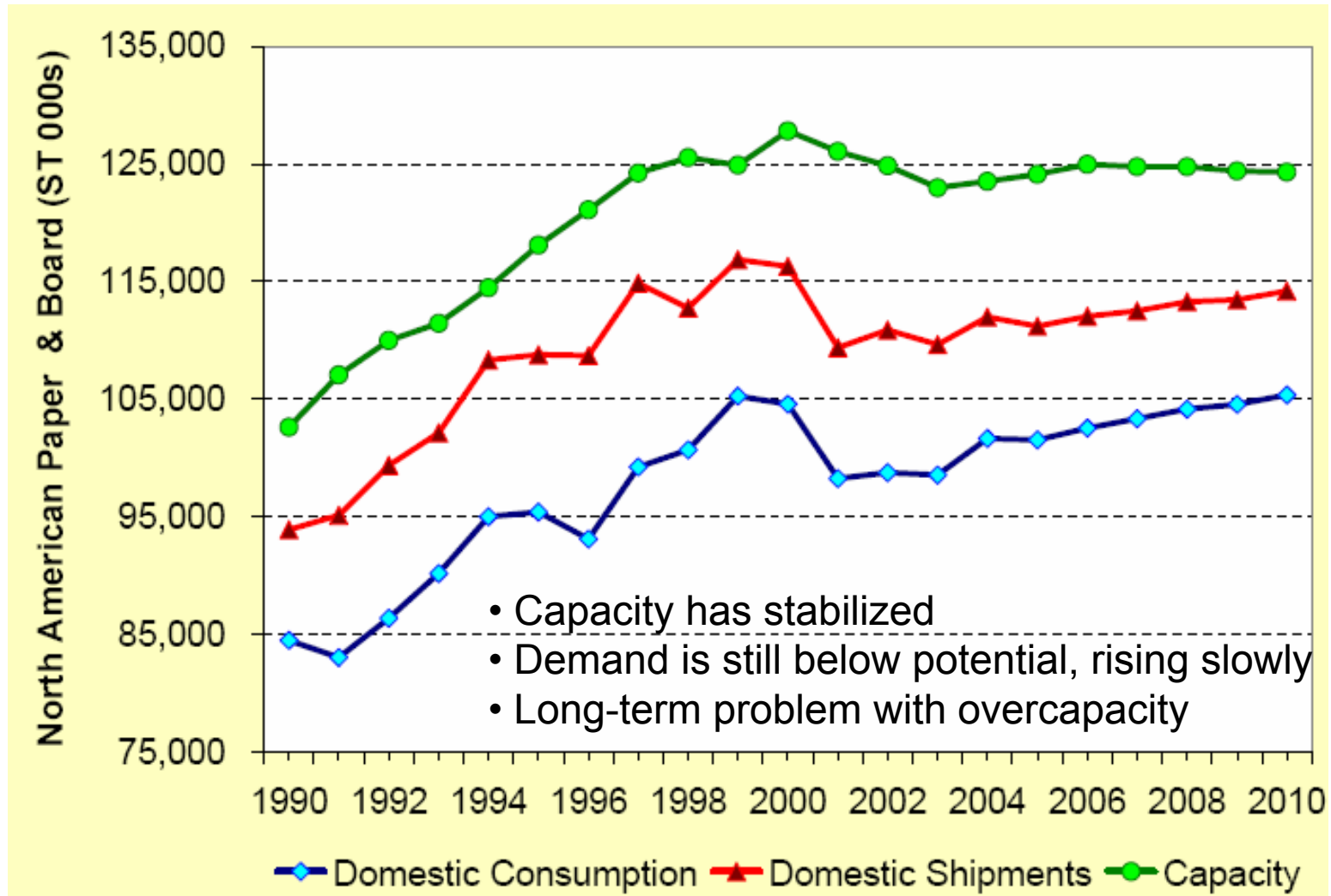


Industry Comparisons

North American sectors that directly drive Pulp & Paper demand are projected to be weaker than overall GDP, but remain positive

Economic Indicator	Industry Segment Impacted	1990-1995	1995-2000	2000-2004	2005	2006-2010
Real GDP	All	2.5%	4.1%	2.5%	3.4%	3.0%
Implicit Price Deflator	All	2.4%	1.6%	1.9%	3.6%	2.2%
Personal Consumption Expenditures	All	2.6%	4.4%	3.2%	3.1%	2.8%
Industrial Production	All	3.5%	6.0%	0.1%	3.7%	2.5%
Indust. Prod. - Non-Durables	Containerboard	1.8%	1.3%	-0.6%	2.2%	
Indust. Prod. - Durables	Packaging	4.9%	9.5%	0.7%	5.7%	5.3%
Food & Beverage Sales	Boxboard	1.9%	3.2%	3.6%	5.0%	3.1%
Food services and drinking places	Tissue	4.8%	5.5%	6.3%	7.4%	2.9%
Computer & Peripheral Sales	P&W Papers	21.6%	5.2%	2.0%	15.0%	
Professional Employment & Business Services	P&W Papers, Tissue	3.4%	5.3%	-0.4%	3.4%	2.7%
US Households	Tissue, Building Products	1.2%	1.1%	0.2%	1.0%	
Housing Starts	Tissue, Building Products	2.5%	2.9%	5.5%	1.0%	

US Industry Capacity

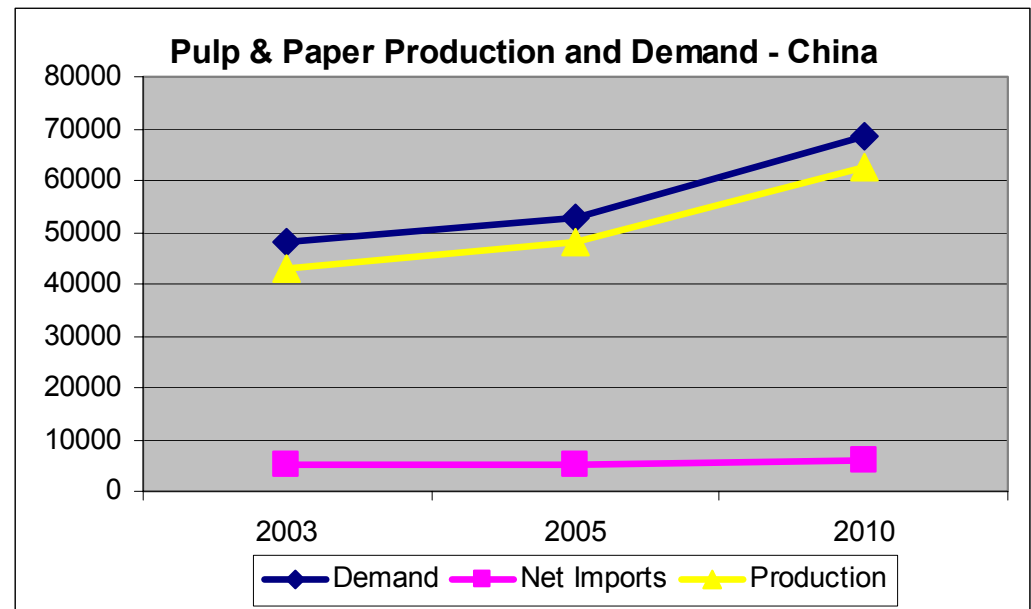


Capacity is Increasing in Low Cost Regions

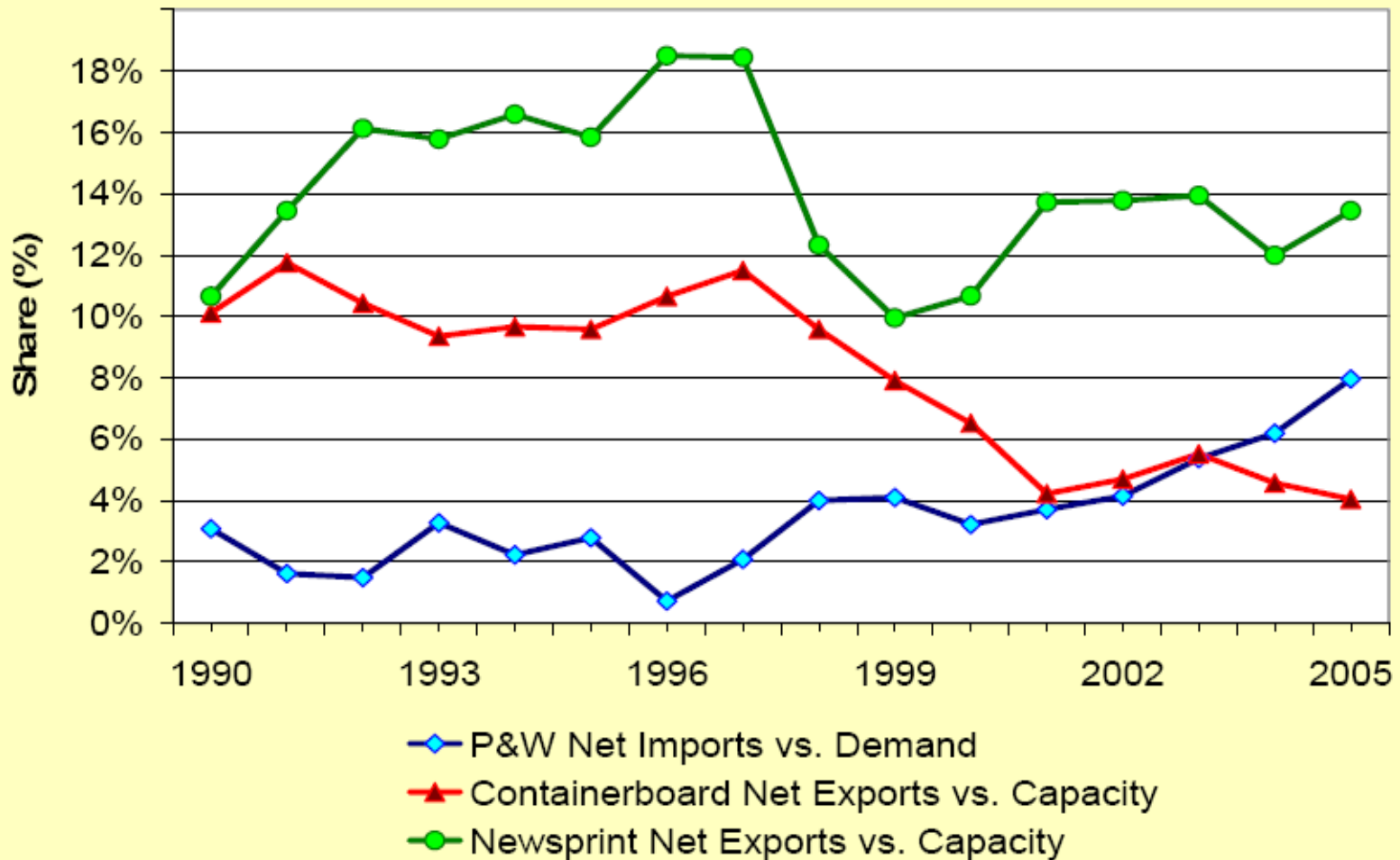
Grade Category	Low Cost Production Centers
Pulp	Brazil , Chile, Argentina, Indonesia and Canada (selected)
Printing & Writing Papers	Brazil , Russia, Indonesia, Thailand, Scandinavia, Western Europe
Newsprint	Eastern Europe, Brazil , Chile and Canada
Premium Folding Carton Grades	Brazil , Russia, Sweden, Chile and Finland

Demand in China Showing Significant Increase

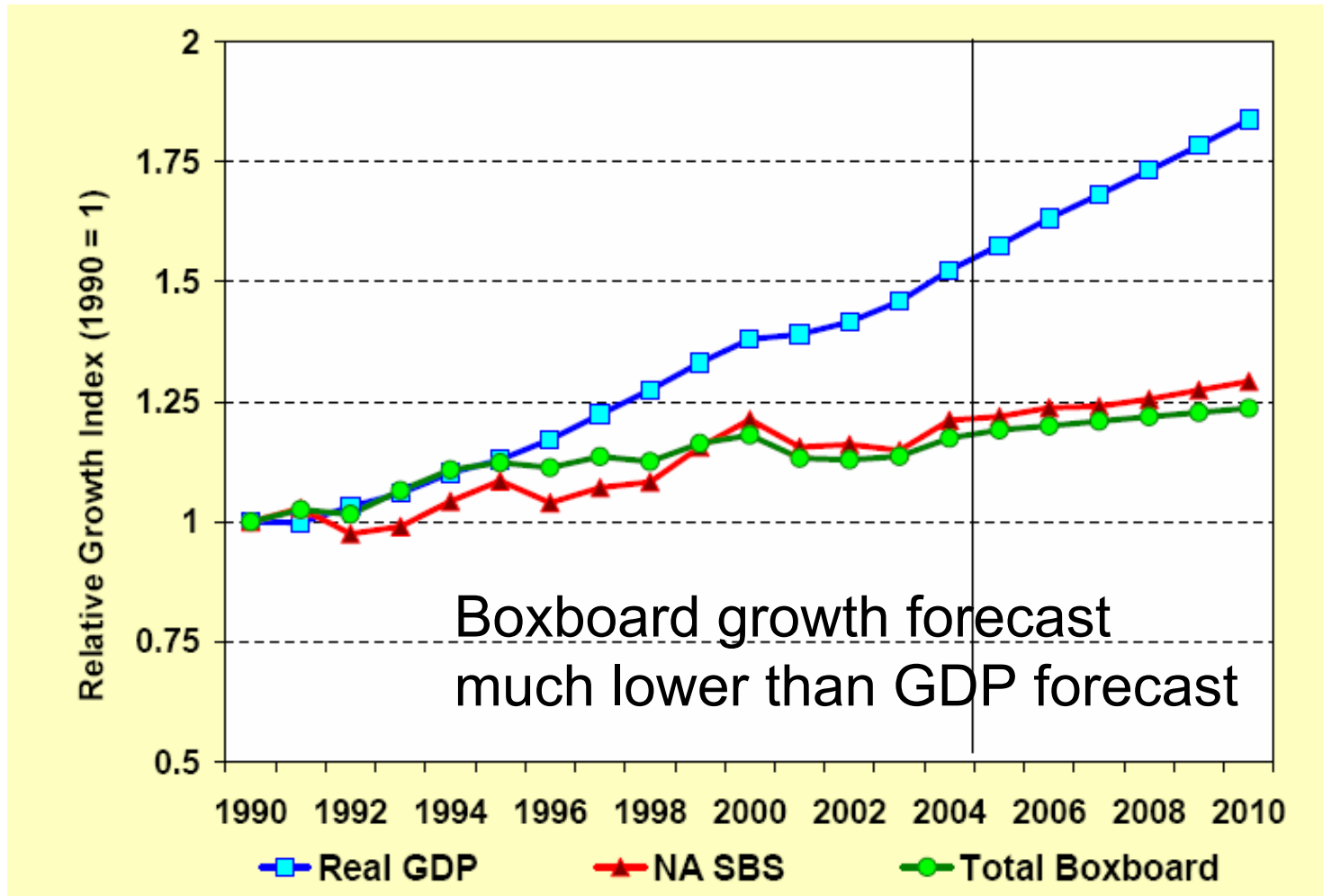
- 10% annual growth rate
 - 6% growth rate in other developing countries
- 50% of world growth
- Majority to be domestically produced
- Future projections remain strong
- Increased domestic production in China will limit growth of exports to China
- If domestic Chinese production increases faster than internal demand, China could become net exporter of low cost pulp & paper products



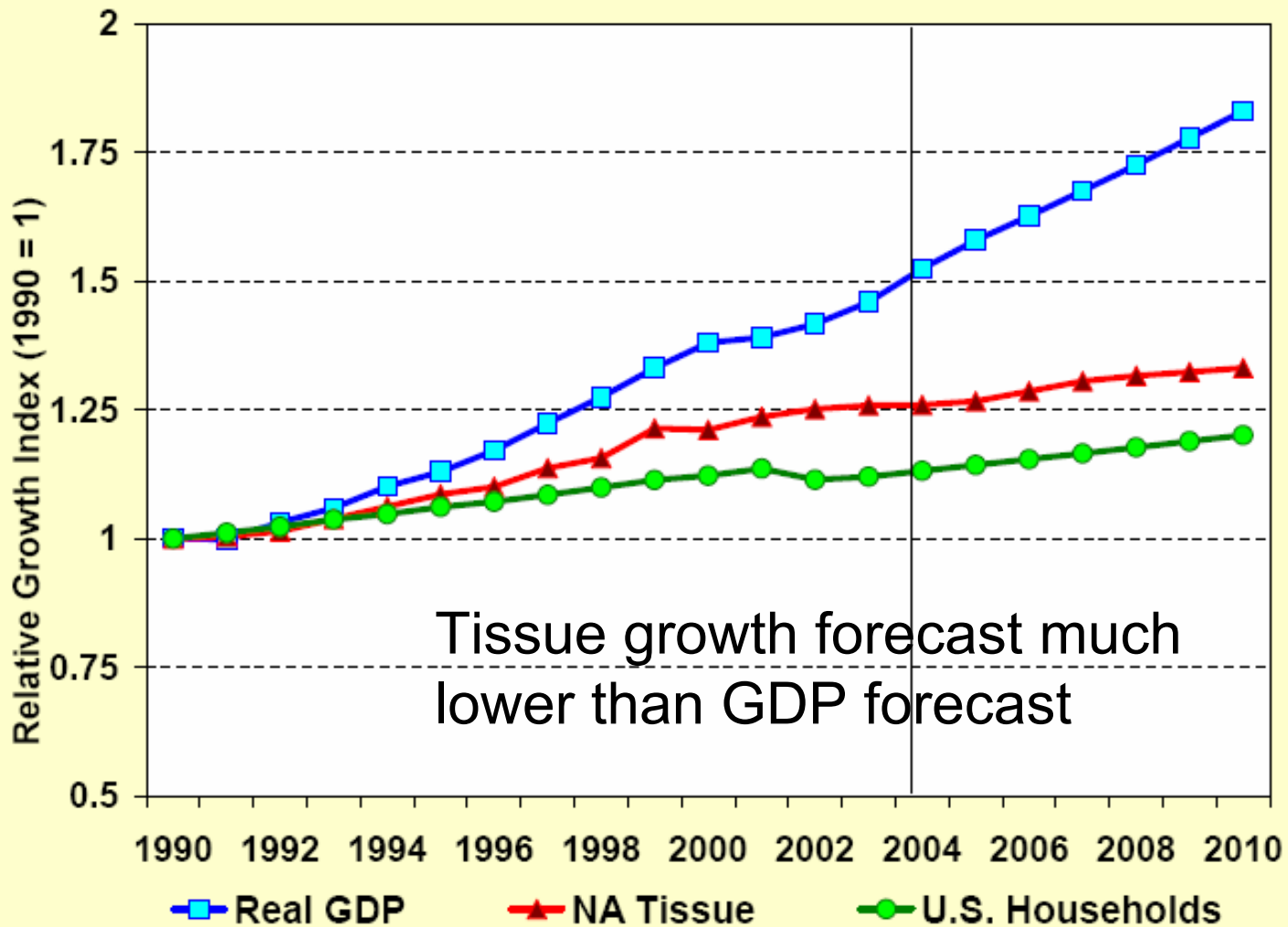
North American Imports Increase - Exports Flat or Decrease



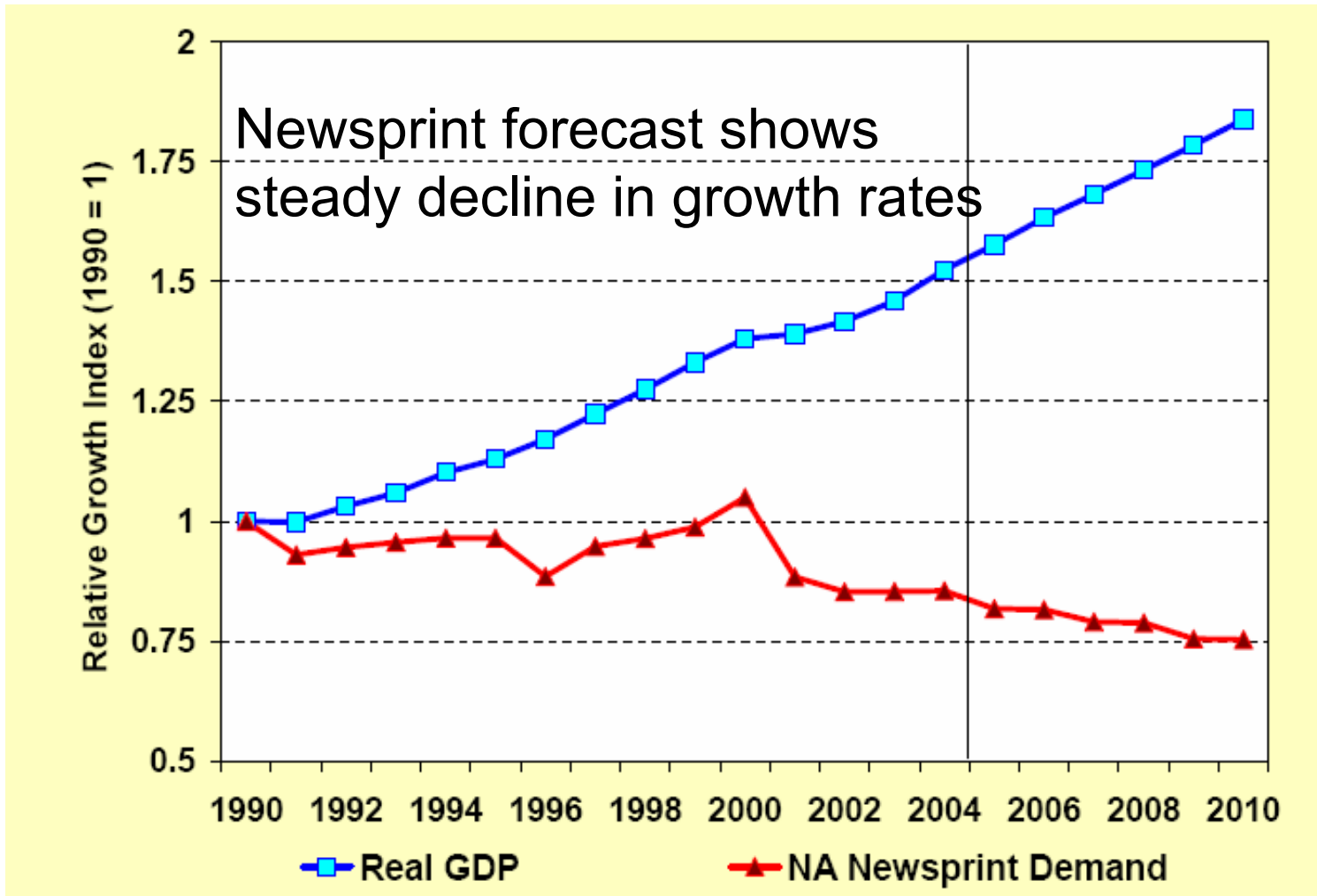
Boxboard GDP Comparison



Tissue GDP Comparison

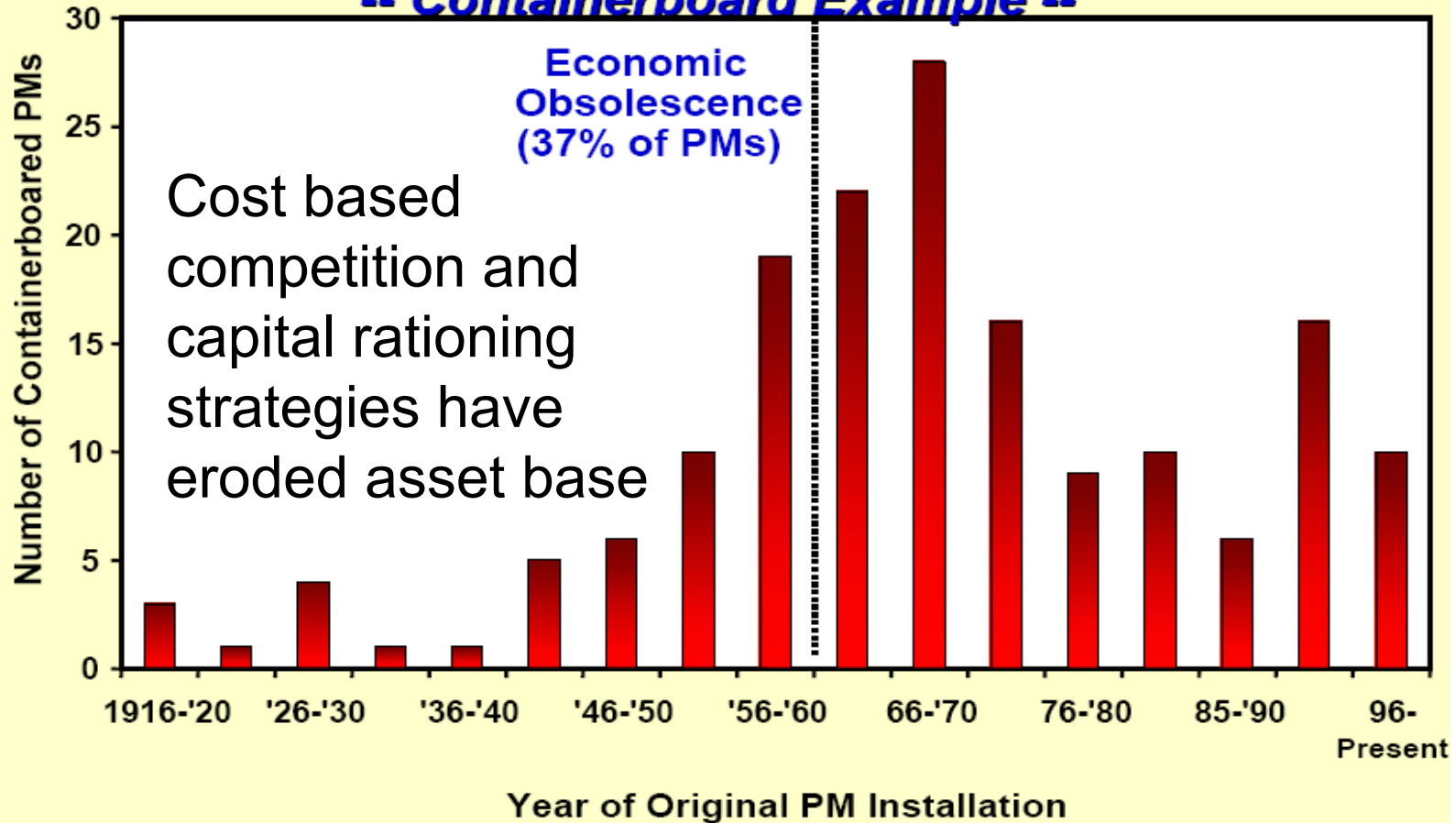


Newsprint GDP Comparison

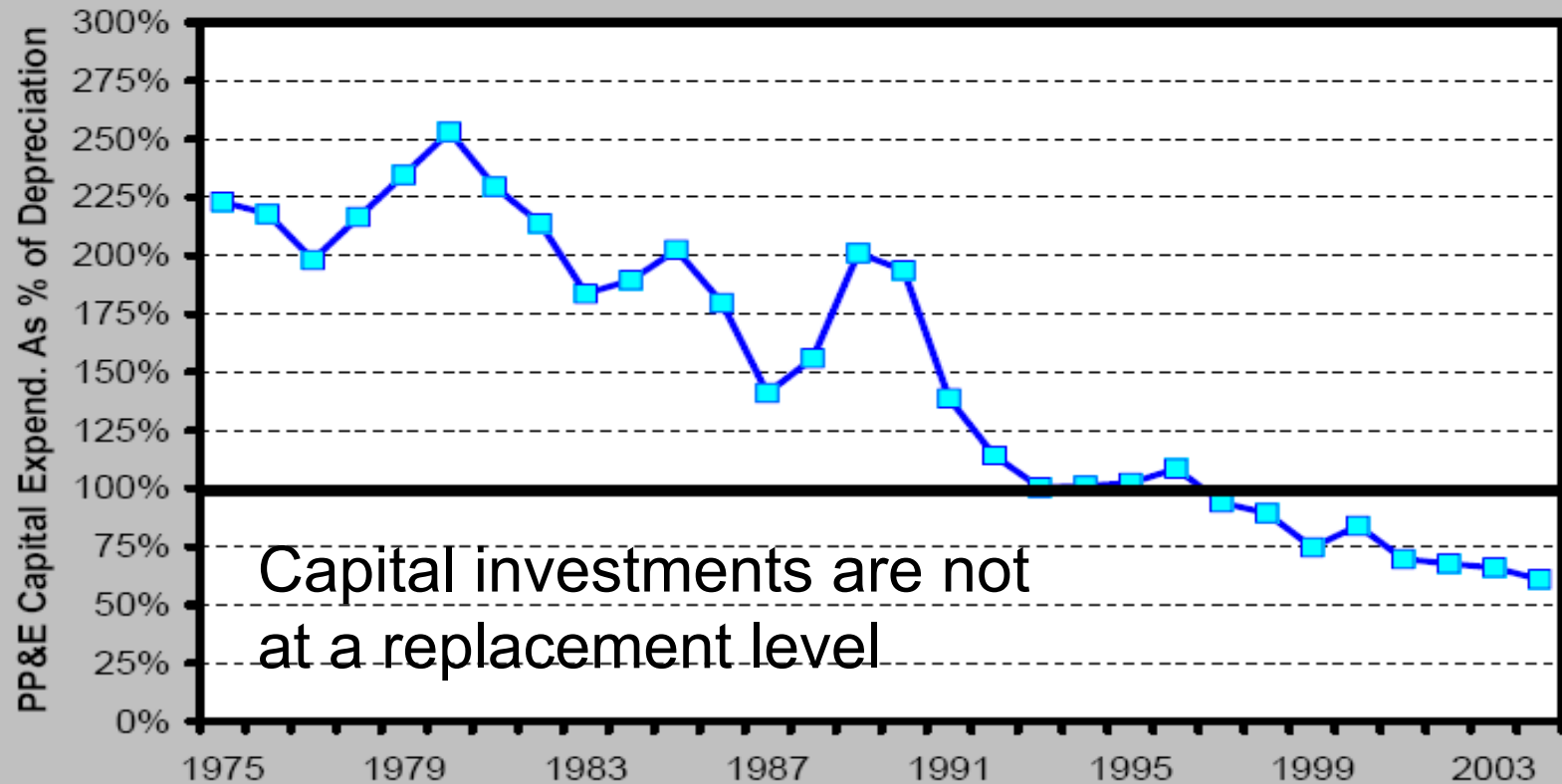


North America's Aging Asset Base (Machinery)

-- Containerboard Example --

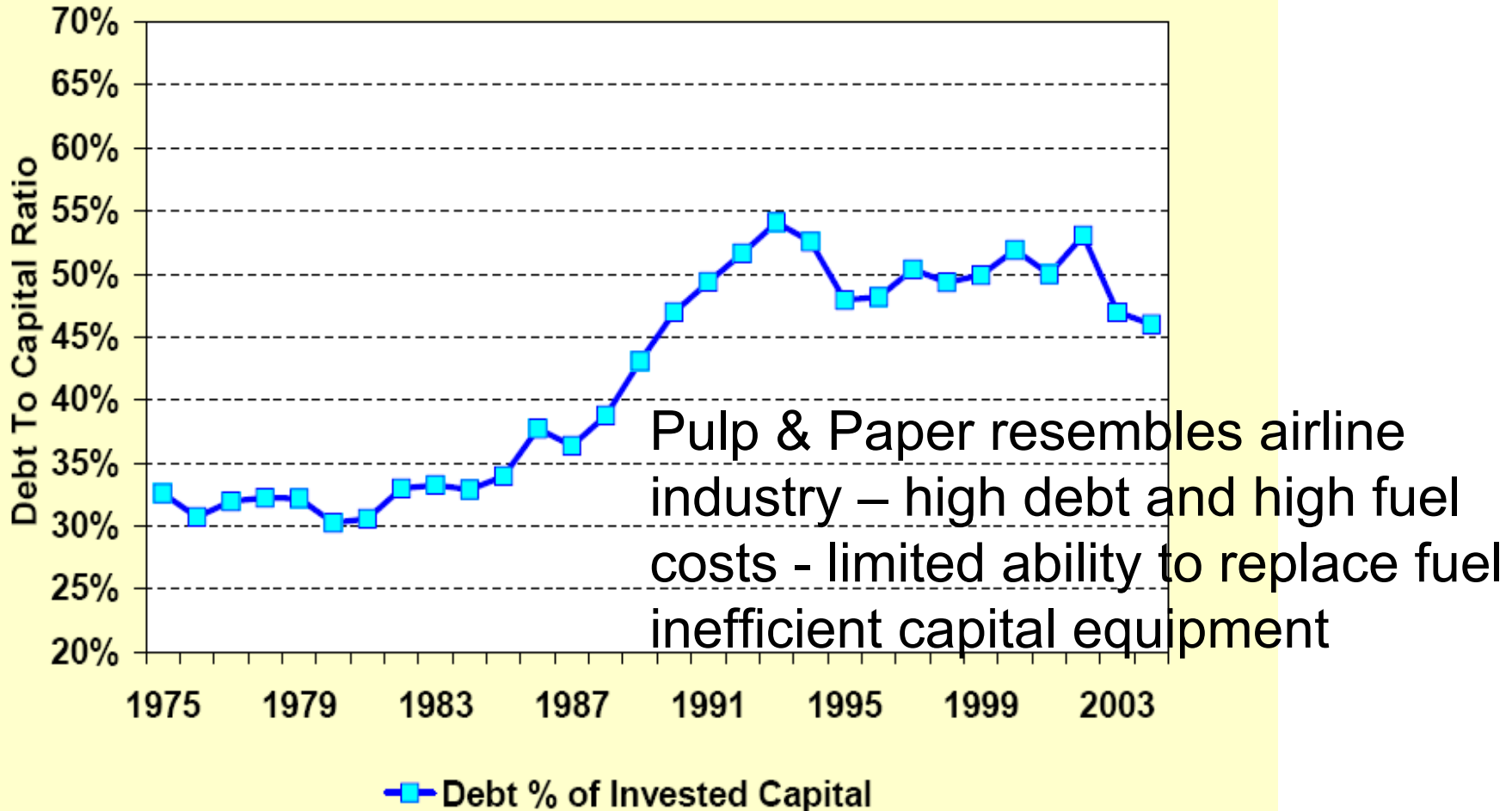


Depreciation Exceeds Capital Expenditures



Current Debt Ratios Will Make Re-Investment Difficult

Significantly Limit Investment Opportunities & Flexibility



Industry Challenges

Nature of Business is Subject to Environmentalist Attack

- Emit chemicals into water supplies
- Air pollution
- High energy consumption
- High Water consumption
- Large amount of solid waste
- Deforestation

International Trade Issues

- Capacity in other regions of the world exceeded demand – looking to the U.S. to sell at low prices
- Government subsidized expansion in other countries – China
- Free access to foreign markets difficult

International Paper

- International Paper established in 1898 with merger of 20 US paper mills
- In 1960s, IP began producing paper products internationally, diversified into land development, oil and gas, other non-paper products
- Diversification into disposable diapers and tissue in 1970s led to overcapacity and debt
- The 1980s and 1990s saw more acquisitions in U.S. and Europe
- IP and Union Camp are in the process of merging, will have:
 - 22% of US market for writing paper, computer printing, photocopying
 - 14% market share for container and linerboard

International Paper Overview

- Core products
 - Paper
 - Packaging
 - Forest Products
- \$24.1 billion in sales in 2005
- 2nd largest private land owner in US
- Global operations across Europe, Asia, and Latin America

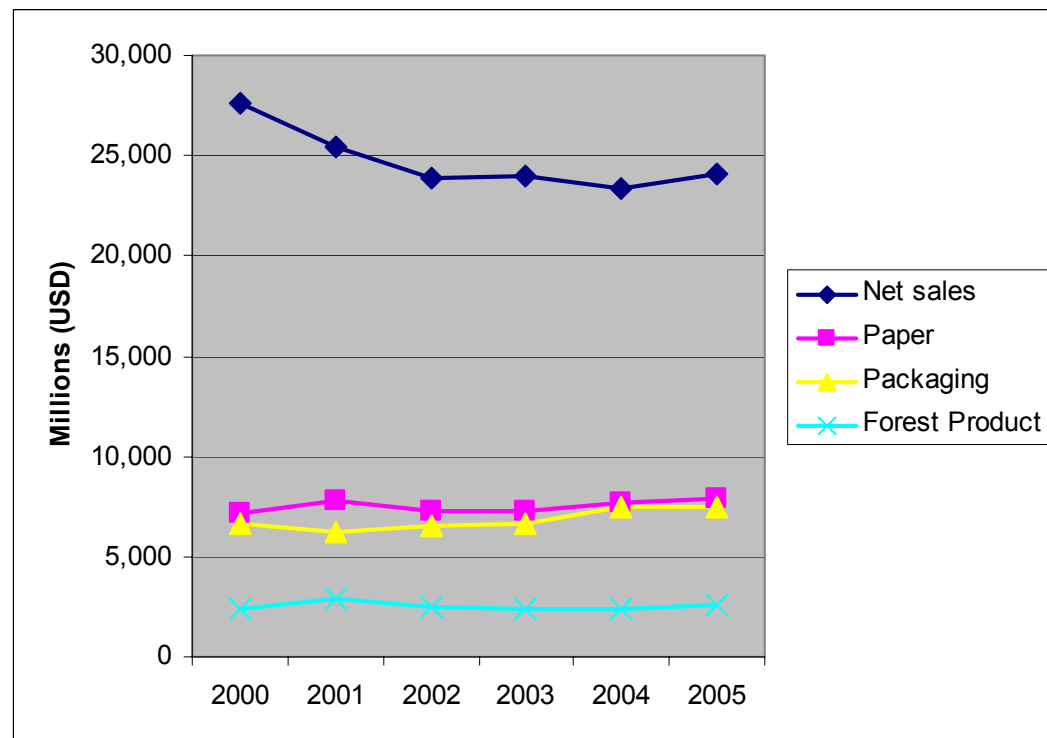
Top 20 Industry Rankings

(US \$ millions)

Rank		Company	Country	Net Sales		Net Income		Return On Capital Employed	
2004	2003			2004	2003	2004	2003	2004	2003
1	1	International Paper	US	\$25,548	\$25,179	(\$35)	\$302	3.9%	3.8%
2	3	Weyerhaeuser	US	20,170	17,844	844	13	5.0%	2.4%
3	2	Georgia-Pacific	US	19,656	20,255	532	254	5.2%	4.4%
4	5	Store Enso	Finland	15,417	13,745	920	165	5.6%	2.1%
5	4	Kimberly-Clark	US	15,083	14,348	1,800	1,694	14.2%	14.0%
6	7	Svenska Cellulosa	Sweden	12,245	10,562	495	629	4.6%	5.9%
7	6	UPM	Finland	12,213	11,234	1,191	415	6.8%	3.8%
8	9	Nippon Unipac	Japan	11,030	10,053	224	43	2.4%	1.3%
9	8	Oji Paper	Japan	10,917	10,465	289	105	3.0%	2.5%
10	11	Metsaliitto	Finland	10,639	9,393	(26)	(18)	0.4%	1.3%
11	13	Smurfit-Stone	US	8,291	7,722	(46)	(197)	2.6%	1.1%
12	14	MeadWestvaco	US	8,227	7,553	(349)	18	4.5%	1.9%
13	15	Annglo American (Mondi)	UK	6,919	5,628	267	350	6.3%	10.0%
14	12	Boise Cascade	US	5,735	4,654	94	(47)	4.7%	2.1%
15	18	Worms	France	5,377	4,759	(78)	126	1.4%	5.4%
16	16	Jefferson Smurfit	Ireland	5,340	5,359	(115)	(76)	3.2%	4.0%
17	17	Amcor	Australia	5,305	4,856	187	234	6.9%	6.4%
18	20	Sappi	South Africa	4,728	4,299	98	149	3.7%	5.8%
19	31	PaperlinX	Australia	4,615	2,364	80	86	4.7%	7.3%
20	19	Asia Pulp & Paper	Singapore	4,500	4,550	N/A	N/A	N/A	N/A

Total Sales vs. Core Products

- Total sales continue to drop but core sales are flat
- Must control cost or diversify product line for future growth



Transformation Plan

Focus on Key Platform Businesses

- ❖ Uncoated Papers, Global
- ❖ Packaging, Global

Improve Profitability

- ❖ Ongoing improvement initiatives
- ❖ Reduce cost base
- ❖ Realign U.S. mills

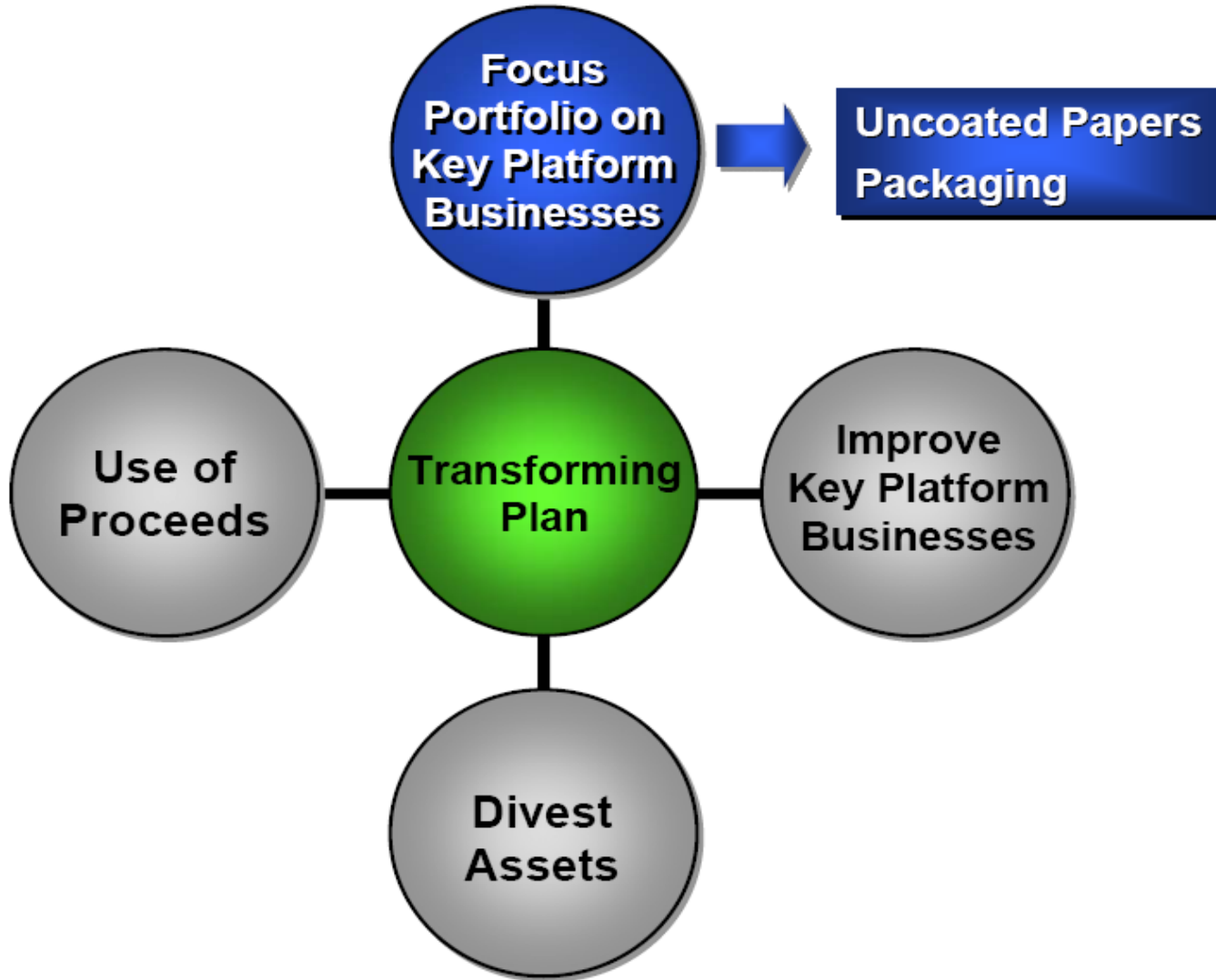
Evaluate/Divest Selected Assets

- ❖ 50.5% stake in Carter Holt Harvey (Sold Sept. 2005)
- ❖ Coated Papers
- ❖ Beverage Pkg.
- ❖ Kraft Papers
- ❖ Arizona Chemical
- ❖ U.S. Forestlands –(selected)
- ❖ Wood Products

Use Divestment Proceeds and Free Cash Flow to Improve Business

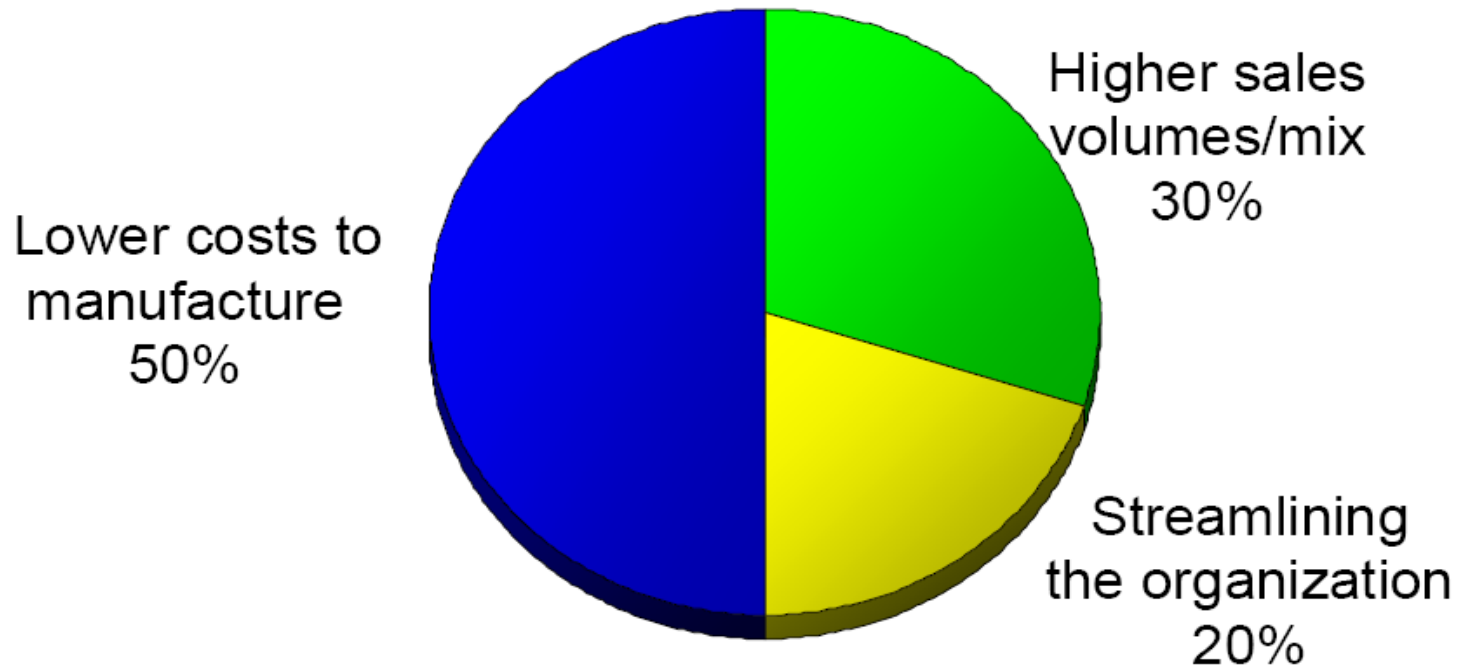
- ❖ Improve balance sheet – repay debt
- ❖ Return value to shareowners
- ❖ Consider selective investments in best assets / new opportunities

International Paper Transforming Plan



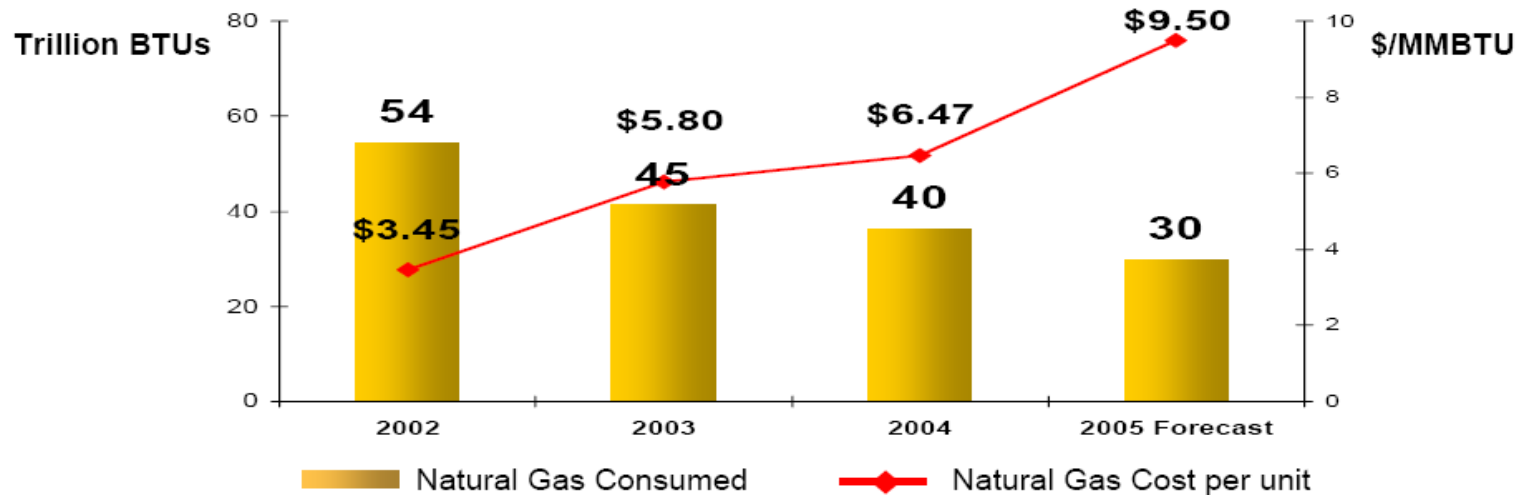
Improving Key Platform Businesses

Targeting \$400 million per year or \$1.2 billion of cumulative profit improvement over three years



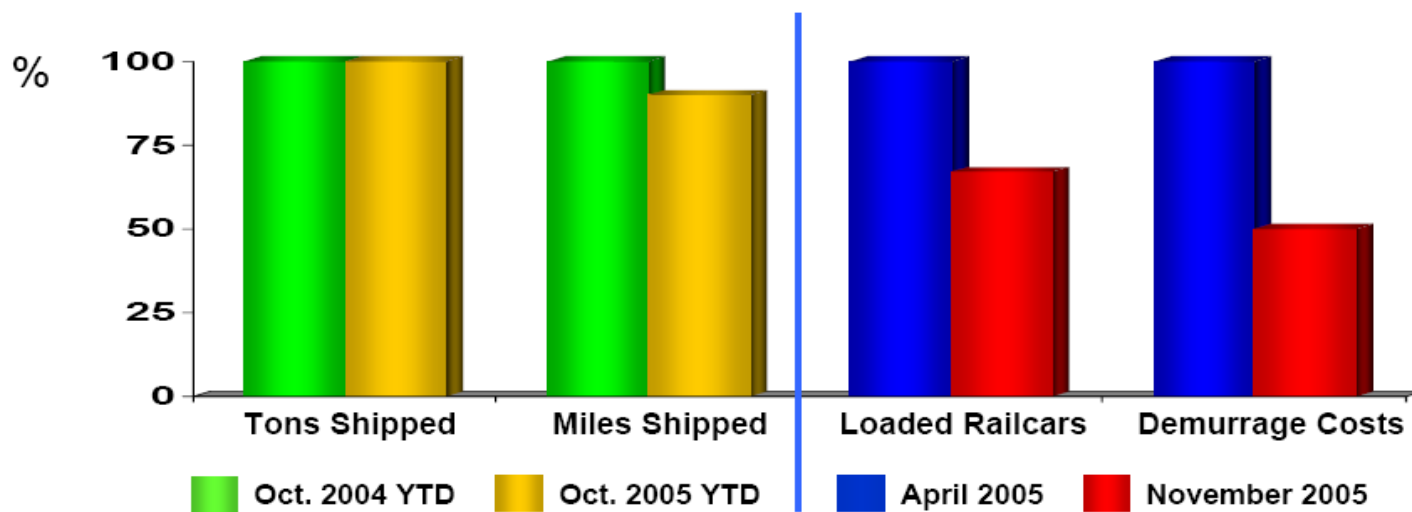
Lowering Energy Costs in Manufacturing

- ▶ Energy conservation and substitution remain key imperatives for the enterprise
 - Fuel cost reduction projects have >50% ROI
 - Targeting \$50-75 million in spending on energy and chemical reduction projects for 2006
 - Natural gas consumption down 45% at U.S. mills since 2002



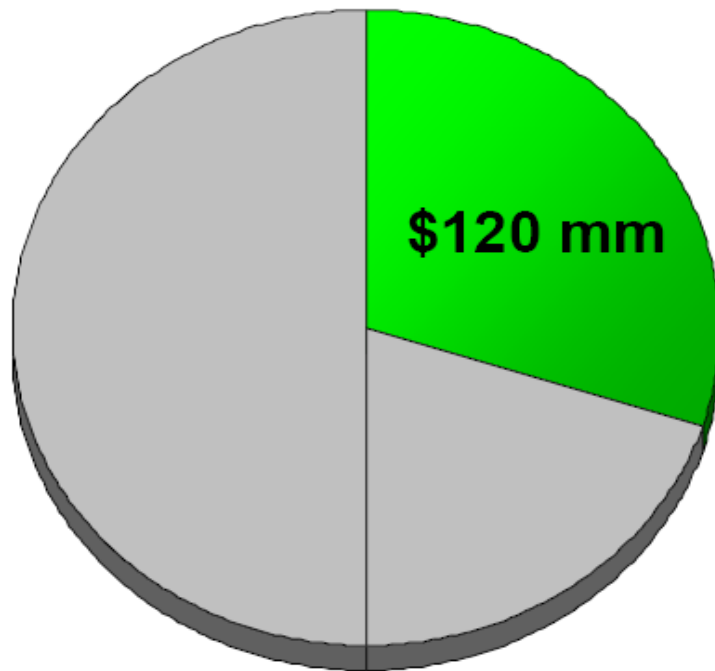
Logistics Improvement for Manufacturing

- ▶ IP's containerboard mill system is using a centralized transportation effort to lower logistics costs
 - Tons shipped October 2005 YTD = October 2004 YTD
 - 10% or 4 million fewer miles shipped October 2005 YTD
 - Proactive railcar management reduced loaded railcars by 1,000 cars per week and demurrage costs by 50% since April 2005



Improving Profits

Adding \$120 million per year from higher sales volumes and improved mix is achievable

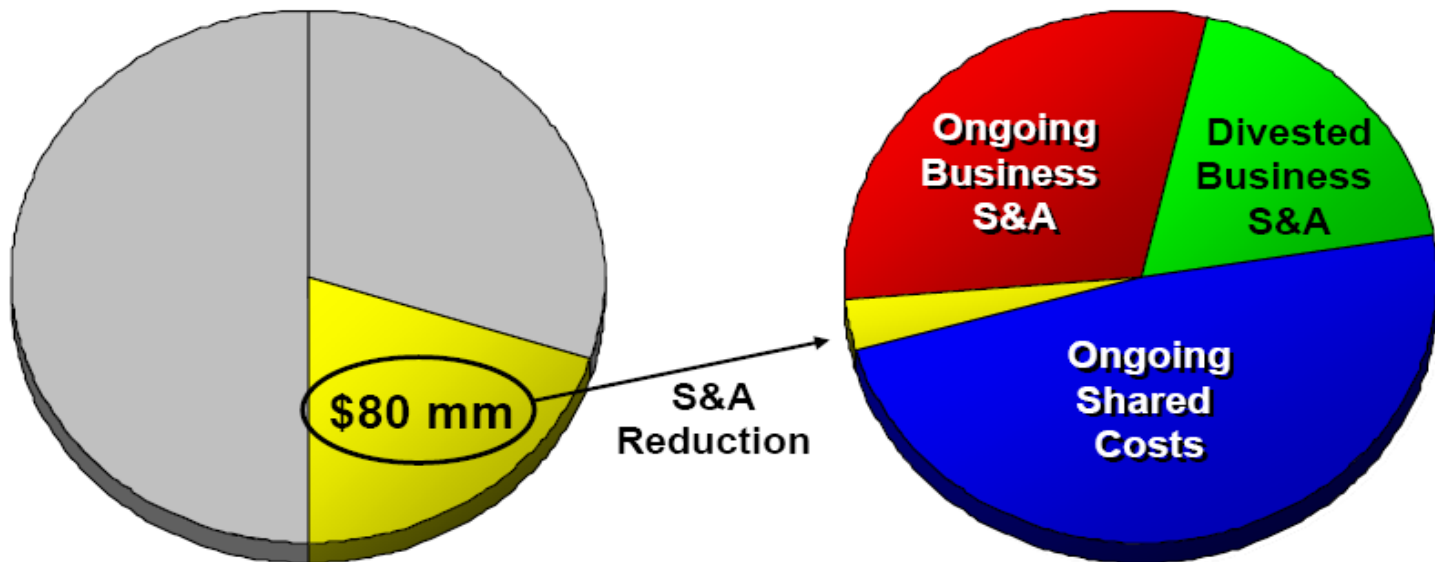


▶ Volume assumptions:

- U.S. uncoated paper flat
- Eastern European and Latin American uncoated paper growth
- Global packaging and coated board growth

Streamline the Organization

Taking \$80 million per year of overhead costs out of a \$3.1 billion cost base will happen



Annual Profit Improvement Target

Total Overhead Costs \$3.1 Billion

Holding Divestiture and Proceeds

- Eliminate holdings outside of key platform businesses over 4 years
- Use proceeds (8-10 Billion) for:
 - Debt repayment
 - Return value to shareholders
 - Selective Reinvestment in growth markets
 - Notes: Brazil, China, Russia, and Europe

Forecasts & Projections

- Industry analysts* project IP will have negative earnings growth for the Q1/Q2 of '06, low single digit growth for full year
 - Performing at 60% of industry average in '06
 - Expected rebound next year above industry and S&P averages
 - **Five year earnings growth projections for IP are only 92% of industry average, 57% of S&P average**

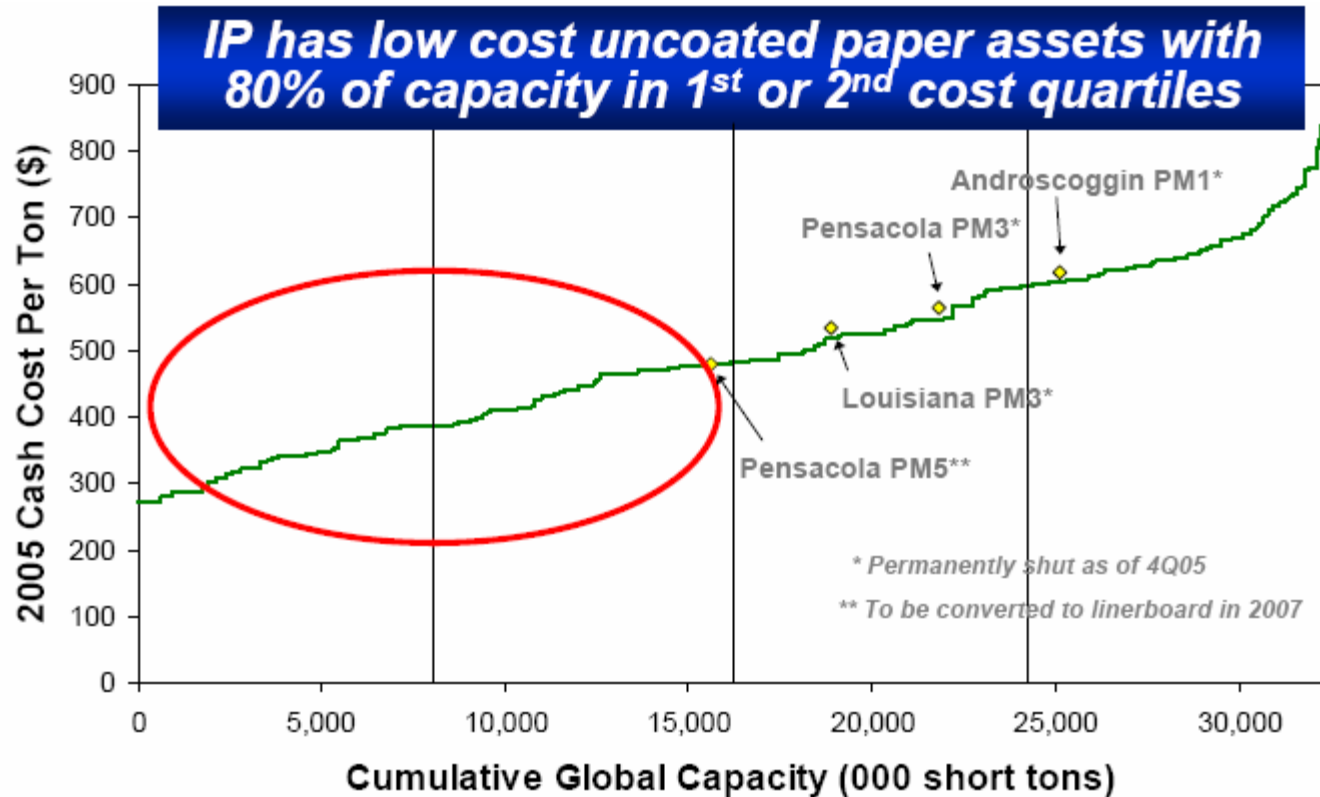
Earnings Forecast	IP	Industry	Sector	S&P 500
Current Qtr.		-40.30%	-4.60%	
Next Qtr.		-11.60%	10.40%	
This Year		4.70%	14.60%	
Next Year		17.50%	5.90%	
Next 5 Years (per annum)		6.54%	10.35%	

Recommendations

- Challenges for International Paper:
 - Lack of significant growth prospects in existing lines of business
 - Markets for IP products are flat or slow-growth, with much lower projections compared to GDP growth forecast
 - Threat of lower-cost competition from emerging market countries (China)
 - Higher prices for raw materials and energy put downward pressure on earnings
- International Paper must:
 - Continue to reduce costs and debt
 - Pursue new markets, specifically Bio-mass fuel
- Bio-mass fuel will:
 - Reduce International Paper energy costs
 - Bio-mass fuel opens up substantial growth opportunities over time
 - Leverages existing company expertise

Reduce Production Costs

- IP has recently taken aggressive steps to become lower cost producer
- Will see better returns as lower cost facilities allow higher margins
- Company has low-cost positions in U.S., Eastern Europe and Brazil, needs to continue drive to lower costs

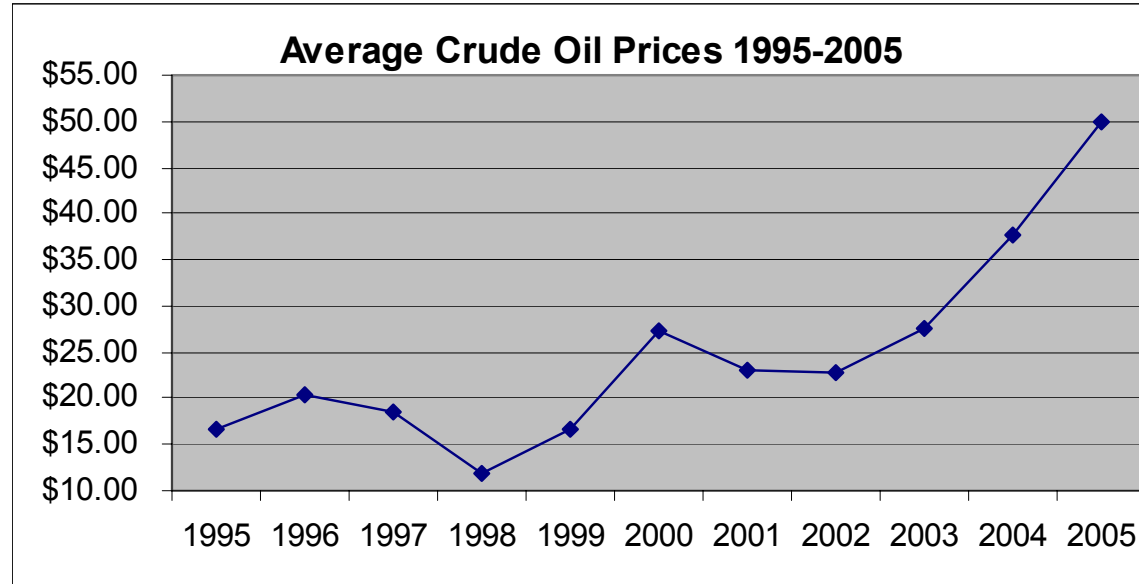


Data from Jaakko Poyry CostTrac Model and IP Data for 3Q 2005

Expand Into New Markets

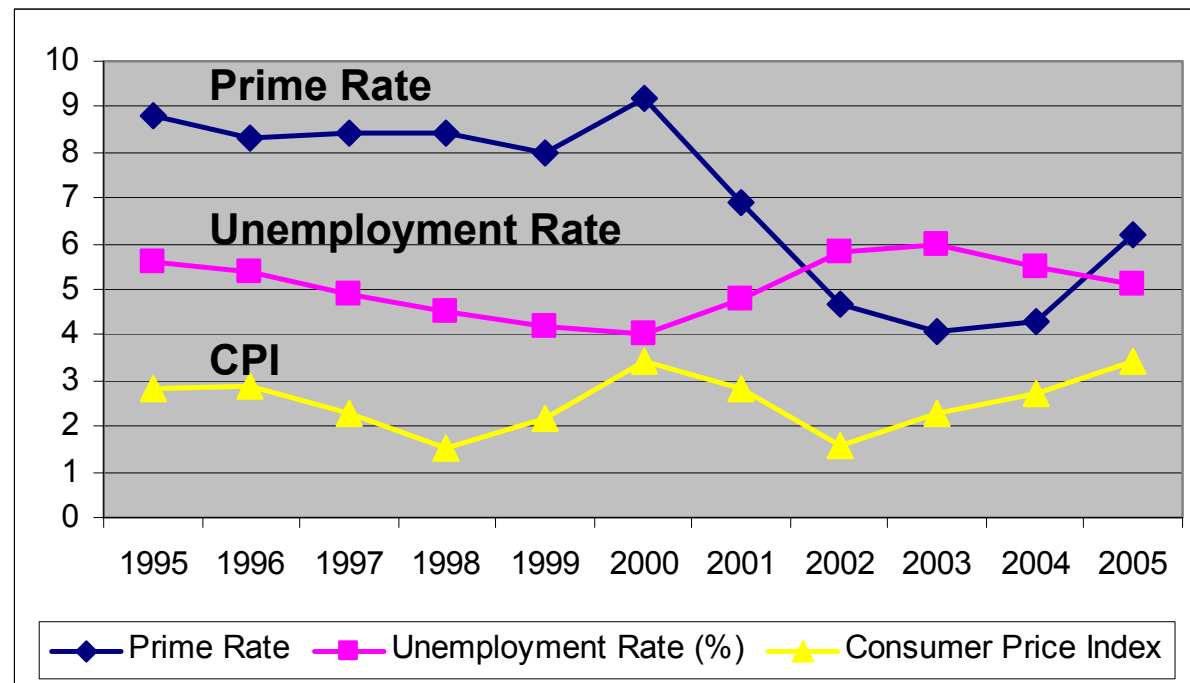
Bio-Mass Fuel

- Biomass has surpassed hydro-electric power as largest domestic source of renewable energy
- Provides over 3% of U.S. total energy consumption
- Biomass-derived [ethanol](#) and [biodiesel](#) provide the only renewable alternative liquid fuel for transportation
- With oil prices staying higher than \$50 per barrel, bio-mass fuel represents substantial long-term growth opportunity
- Recommendation – begin ramping up substantial R&D efforts



Current Economic Environment

- 2001-2005 economy saw mild recession, then modest recovery that gained strength in last two years
- The FED moved to lower Interest rates as the economy slowed, and is now raising rates again as the recovery builds momentum
- Unemployment rate showed steady declines in late 90's, followed by modest increase in recession, still higher than 2000 levels
- Inflation rose pre-recession, dropped in 2001-2002, now on the rise again



GDP and Components 1995-2005

- Growth from 1995-2000, mild recession in 2001, recovery 2002-2005
- Residential construction stronger in post-recession period
- Structures spending has not recovered to level of 1990's
- Federal purchases dropped in 1995-2000, big increases since 2001
- Only 5 of 10 categories declined in 2001 recession

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Real GDP % Change											
Details of Real GDP--% change											
Final Sales	3.0	3.7	4.0	4.2	4.5	3.8	1.4	3.2	3.9	3.6	
Expenditures	2.7	3.4	3.8	5.0	5.1	4.7	2.7	2.9	3.9	3.6	
Investment	10.5	9.3	12.1	9.8	7.8	5.7	-2.6	3.9	11.9	5.8	
Producers Durable Equip.	12	10.6	13.8	13.3	12.7	9.4	-6.2	3.2	11.9	10.8	
Structures											
Residential Construction											
Exports	10.1	8.4	11.9	2.4	4.3	8.7	-2.3	1.8	8.4	6.7	
Imports	8.0	8.7	13.6	11.6	11.5	12.4	3.4	4.6	10.7	6.2	
Federal Purchases											
State & Local Purchases	2.6	2.3	3.6	3.6	4.7	2.7	3.1	0.6	0.4	1.5	

Forecast of Future Changes

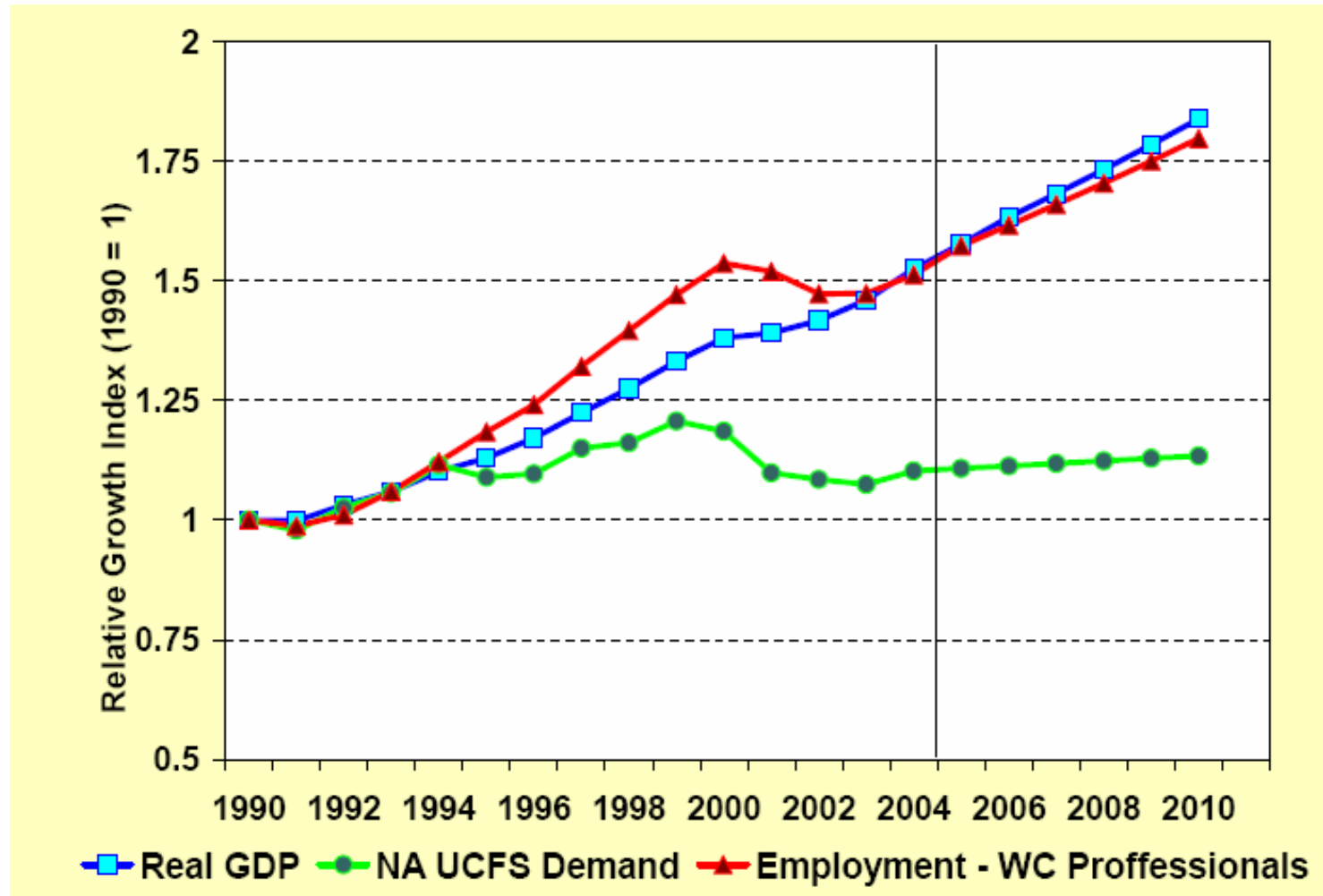
- Drive towards lower cost production - needs significant investment & relocation away from North American base of Intl. Paper – highlights importance of cash from divestiture program
- Increasing capacity in China will limit growth potential
- China may become new low cost competitor as domestic production capacity increases
- Companies will continue to try to remove packaging costs from products to increase margins = lower growth for packaging
- Companies will continue to reduce paper consumption by driving higher use of electronic documents and paperless workflow systems = lower growth for printing paper
- Intl. Paper must pursue new business opportunities with long-term prospects for high revenue and high profit growth = Bio-mass fuels

Macro Impact on Firm and Industry

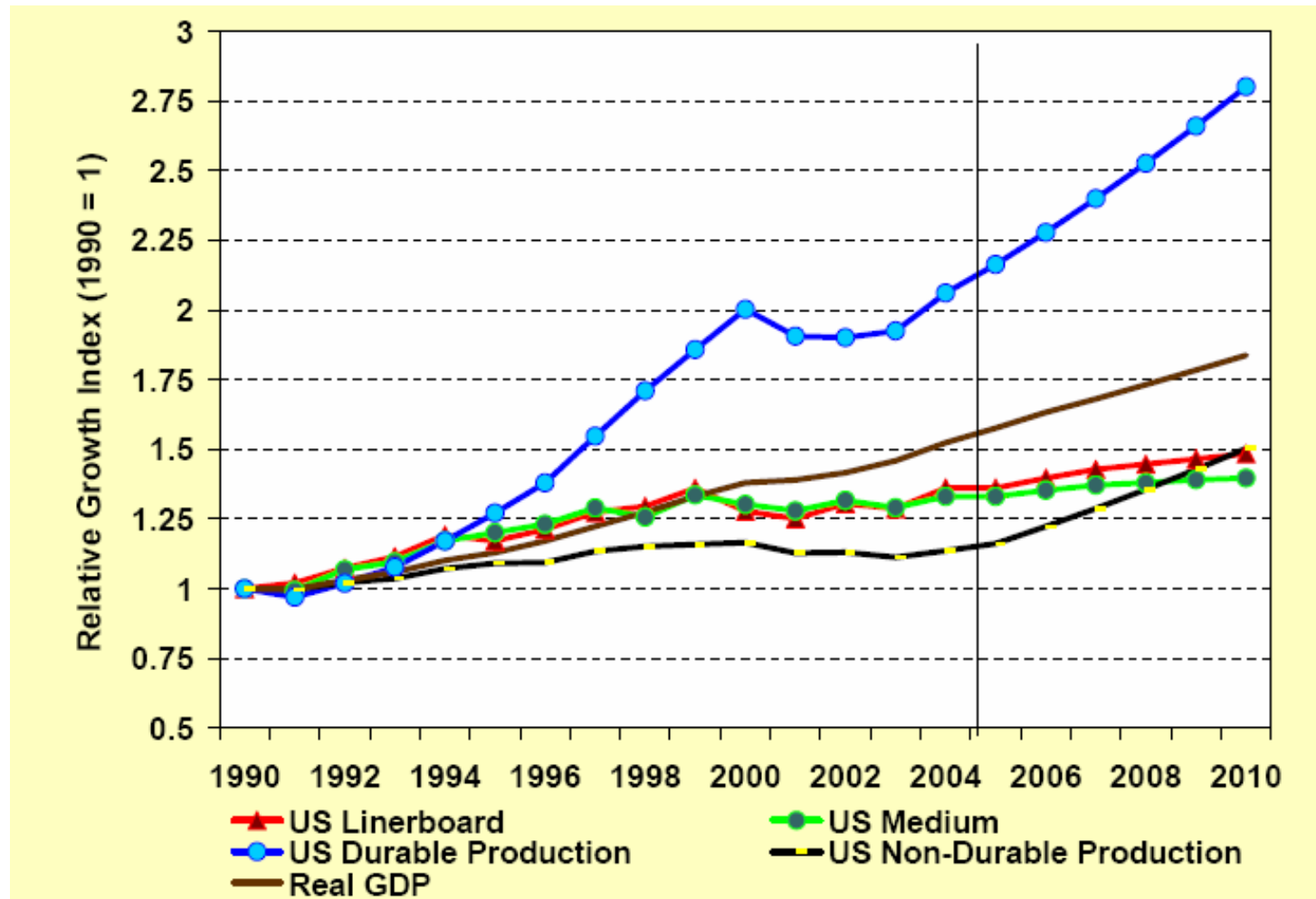
- Recent trend of solid economic growth in key markets has not produced strong growth in Intl. Paper or industry group core products
- Soft demand
 - + high fuel costs
 - + high cost of raw materials
 - + high debt
 - + higher interest rates= difficult for Intl. Paper and competitors to add more fuel efficient production capacity
- Strong growth in developing markets is offset by rapid increase in production capacity in these same markets Export growth from North America has been flat or in decline - limited export potential

Appendix

Printing and Writing Papers GDP Comparison



Containerboard GDP Comparison



Market Pulp Size Comparison

