

North American & European Pulp & Paper Industry Update

Jim McNutt & Dan Cenatempo

Date: August 2002

Contents

- **Introduction**
- **Key Findings**
- **Pulp & Paper Industry Outlook**
- **Capital Spending Implications**
- **Company Assessments**

Introduction

Introduction

Key Questions on the Direction of the Industry Are:

- Forecast the supply, demand and price outlook by major pulp and paper grade segment for the U.S. and Europe
- Establish pulp and paper performance trends for selected companies and their impact on capital spending
- Develop the 2002-2006 outlook for pulp and paper capital spending on property, plant and equipment for selected companies
- Rate overall company attractiveness for capital spending based on historic spending level, outlook, grade participation and known tactics and strategies.
- The data in this package is directed primarily to the U.S.

Introduction

Specific companies analyzed include:

- Georgia-Pacific
- International Paper
- Mead-Westvaco
- Kimberly-Clark
- Smurfit-Stone
- Stora-Enso
- SCA
- Total U.S. Composite
- Total W. European Composite

Introduction

Key capital spending indicators examined included the following:

- Output growth by country / region for industry segments which consume pulp and paper products
- Current and expected pulp and paper pricing, supply and demand by major product segment
- Industry concentration
- Pulp and Paper investment fundamentals – return, cash flow and debt-burden
- Pulp and Paper industry and company capital spending patterns.

Key Findings

Key Findings – U.S.

- The future of the U.S. pulp and paper industry is a point of extensive debate within management circles.
- Some believe that the industry has begun a long-term decline and will follow in the path of U.S. steel and textiles
- Others believe that the industry will restructure and reassert itself.
- The true U.S. industry path is not clear. However, the degree to which U.S. demand returns, and U.S. capacity fulfills the demand, when the overall economy improves will be a good early indicator of the industry's fate.
- It is clear that the U.S. industry is currently plagued with over-capacity, weak pricing, poor cash flows and dismal returns. Overall U.S. industry capacity actually contracted in 2001 and 2002.
- U.S. 2002 Capital expenditures on pulp and paper property plant and equipment are expected to drop 15% versus 2001.

Key Findings – U.S.

- Despite this bleak situation, it is reasonable to believe that rebounding U.S. pulp and paper demand, closure of economically unviable facilities, a weaker U.S. dollar and improving overall economic conditions will drive improvements in U.S. industry performance starting in 2003.
- Further the U.S. industry's capacity will begin to grow again through productivity improvements, equipment upgrades and replacements. The net impact will be an increase in capital spending beginning in 2004.
- This scenario has two significant risks – a prolonged overall economic downturn and / or greater than anticipated substitution of U.S. produced pulp and paper by international competitors or non-fiber based products.
- Given these qualifications, the net capital outlook follows.

Key Findings – U.S.

U.S. Capital Expenditures On Pulp & Paper Property, Plant & Equipment (Nominal \$ Millions)

	1999	2000	2001P	2002F	2003F	2004F	2005F	2006F
Expected Expenditures	7,051	8,144	6,906	5,870	6,000	7,400	8,510	7,300
Expected - High				6,164	6,900	8,510	9,787	8,395
Expected - Low				5,577	5,100	6,290	7,234	6,205
Primary Pulp & Paper	4,470	5,163	4,378	3,793	3,819	4,715	5,431	4,666
Converting	2,581	2,981	2,528	2,077	2,181	2,685	3,079	2,634

Key Findings – Europe

- The European pulp and paper situation is similar to the U.S. but less severe.
- European demand for pulp and paper products is less mature than the U.S. and overall market fundamentals are stronger.
- European producers will cut capital spending approximately 18% in 2002.
- Continued capacity increases and selected facility upgrades will offset the declining capital spending in existing facilities by 2004.
- The net result will be a return to the 4 billion Euro capital expenditures level starting in 2004.
- Like the U.S., this scenario has two significant risks – a prolonged overall economic downturn and / or greater than anticipated substitution of European pulp and paper by international competitors or non-fiber based products.
- Given these qualifications, the net capital outlook follows.

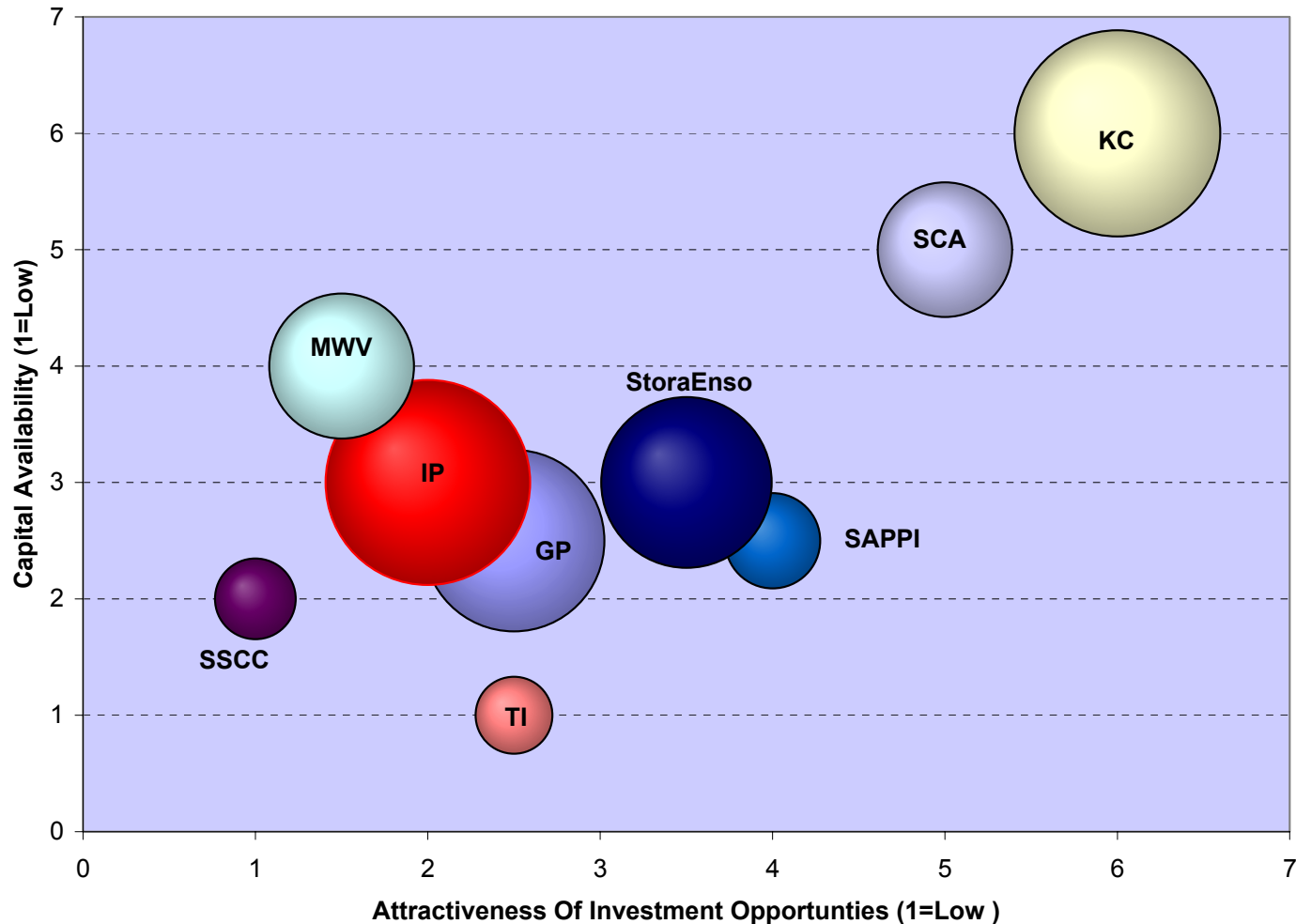
Key Findings – Europe

Capital Expenditures On Pulp & Paper Property, Plant & Equipment (Nominal Euros - Millions)

	1999	2000	2001	2002F	2003F	2004F	2005F	2006F
Expected Expenditures	4,280	4,053	3,940	3,231	3,100	4,116	4,039	3,902
Expected - High				3,392	3,410	4,527	4,443	4,292
Expected - Low				3,069	2,790	3,704	3,635	3,512

Key Findings – Key Clients

Pulp & Paper Capital Spending Landscape
(relative circle size = relative size of 2002 PPE Capex)



Economic Outlook

Economic Outlook

- The overall economic outlook is a strong driver of pulp and paper consumption.
- Holding all other factors constant, sustained economic growth drives the demand for pulp and paper products.
- Further, investment fundamentals like interest rates and inflation impact the ability of companies to invest in capacity expansion and upgrades.
- Therefore, we reviewed and incorporated the latest economic forecasts into our capital spending projections
- The base economic assumption is persistent economic weakness in the North American and European economies through 2002 with a full recovery in 2003.
- The following summarizes our findings.

Economic Outlook

North American Economic Drivers of Pulp & Paper Capital Spending:

Positive

- Lower interest rates lower project hurdle rates
- Weaker U.S. dollar supports prices and pulp and paper exports, dissuades imports

Negative

- Short-term decline / stagnation of industries that drive pulp and paper demand
- Risk of double dip recession
- Increased perception of risk throughout the investing community raises project hurdle rates

Economic Outlook

European Economic Drivers of Pulp & Paper Capital Spending:

Positive

- Lower interest rates lower project hurdle rates
- Milder economic contraction than in the U.S.
- Stronger long-term growth in end-use segments that consume pulp and paper than in U.S.

Negative

- Short-term decline / stagnation of industries that drive pulp and paper demand
- Weakening U.S. dollar hurts export business
- Increased perception of risk throughout the investing community raises project hurdle rates

Economic Outlook

The Overall Economic Forecast Calls For A Gradual Recovery - The Risk of a “Double Dip” Recession Persists.

Line Item	2002	2003-2006
U.S. Real GDP Growth	1.5%-2.8%	2.5%-4.0%
U.S. Inflation (GDP Deflator)	1.5%-2.0%	2.0%-3.0%
European Real GDP Growth	2.0%-2.5%	
European Inflation (GDP Deflator)	1.5%-2.0%	2.0%-3.0%

Economic Outlook

North American Pulp & Paper Demand Growth Drivers Have Stalled

Economic Segment	Pulp & Paper Segment Impacted	1999- 2000 Real Growth	2000-02 Real Growth
Food & Beverage Mfg.	Boxboard	+5%	+2%
Restaurants & Hotels	Boxboard, Tissue	+6%	+5%
General Manufacturing	Containerboard	+10%	-5%
Office & Computing	P&W Papers, Containerboard	+75%	0%
Electric Appliances & Housewares	Boxboard, Containerboard	+11%	-5%
Business Services	P&W Papers	+9%	+6%
Publishing & Printing	P&W Papers, Newsprint	+4%	-13%
Construction	Tissue, Forest Products	+1%	-1%
Household Formation / Starts	Tissue	-3%	+3%

Economic Outlook

European Pulp & Paper Demand Drivers Are Better Than The North America But Still Weak

Economic Segment	Pulp & Paper Segment Impacted	1999- 2000 Real Growth	2000-02 Real Growth
Food & Beverage Mfg.	Boxboard	+1%	+3%
Restaurants & Hotels	Boxboard, Tissue	+12%	+2%
General Manufacturing	Containerboard	+9%	+1%
Office & Computing	P&W Papers, Containerboard	+80%	+4%
Electric Appliances & Housewares	Boxboard, Containerboard	+18%	+1%
Business Services	P&W Papers	+14%	+10%
Publishing & Printing	P&W Papers, Newsprint	+3%	0%
Construction	Tissue, Forest Products	+7%	+1%

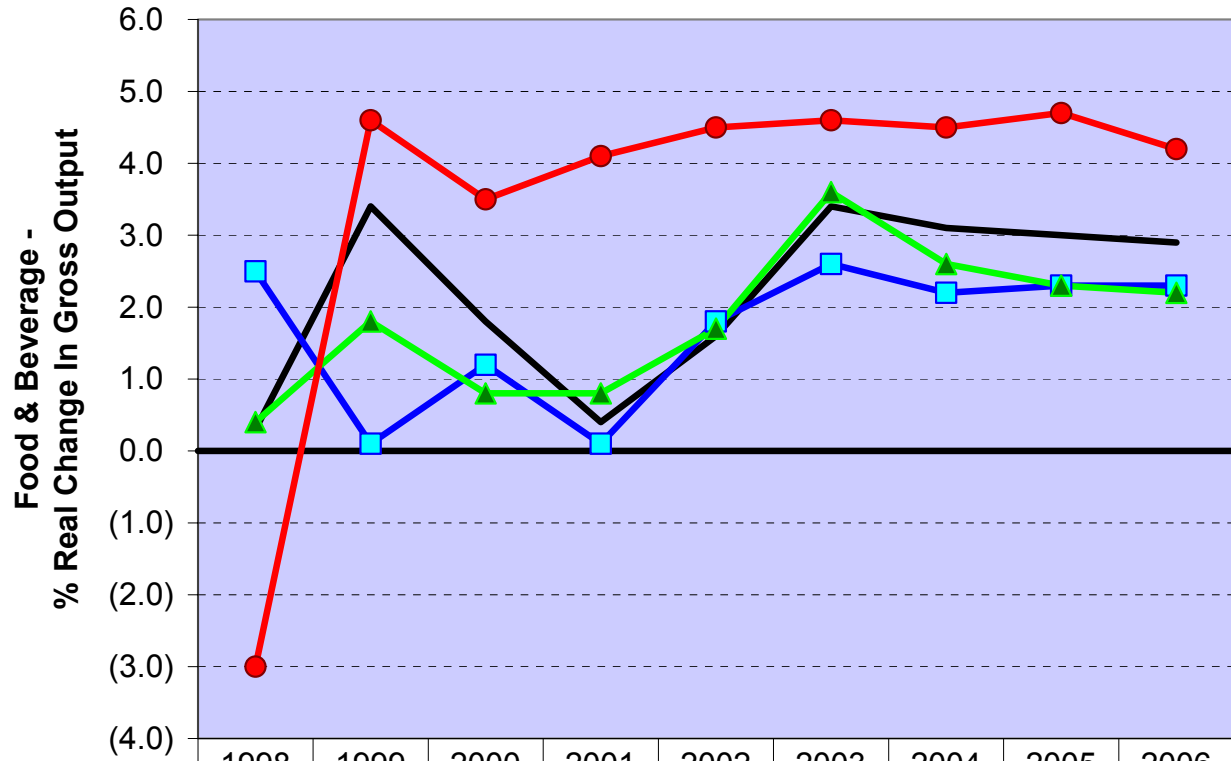
Economic Outlook

It Will Take Several Years For These Economic Segments To Push Pulp & Paper Demand Back To Their Pre-Recession Trajectories

Pulp & Paper Segment	North American Return To Trajectory	European Return To Trajectory
Boxboard	2005 / 2006	2004
Containerboard	2004 / 2005	2004
Newsprint	2006	2004
P&W Papers	2003	2003
Tissue	2003	2003
Pulp	2004 / 2005	2004 / 2005
Forest Products	2004	2003

Economic Outlook

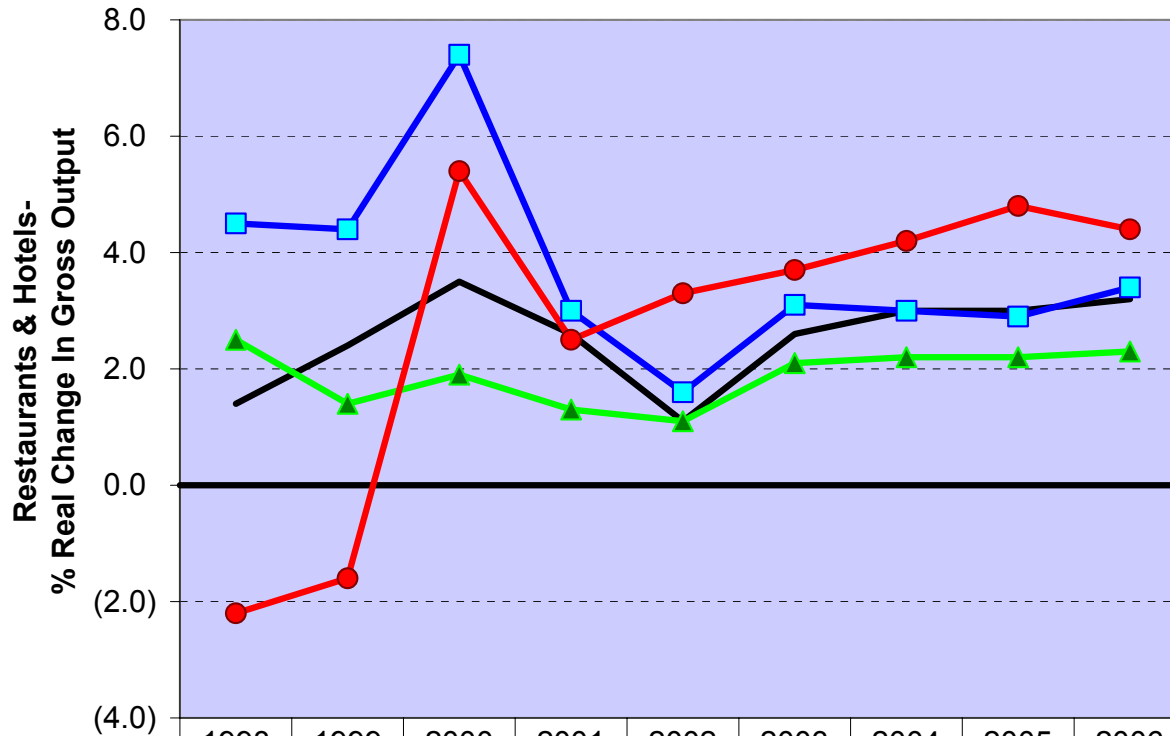
Food & Beverage Growth Has Been Unspectacular For Boxboard But Will Return To Historic Growth Rates Starting In 2003



	1998	1999	2000	2001	2002	2003	2004	2005	2006
World	0.3	3.4	1.8	0.4	1.6	3.4	3.1	3.0	2.9
North America	2.5	0.1	1.2	0.1	1.8	2.6	2.2	2.3	2.3
W. Europe	0.4	1.8	0.8	0.8	1.7	3.6	2.6	2.3	2.2
E. Europe	(3.0)	4.6	3.5	4.1	4.5	4.6	4.5	4.7	4.2

Economic Outlook

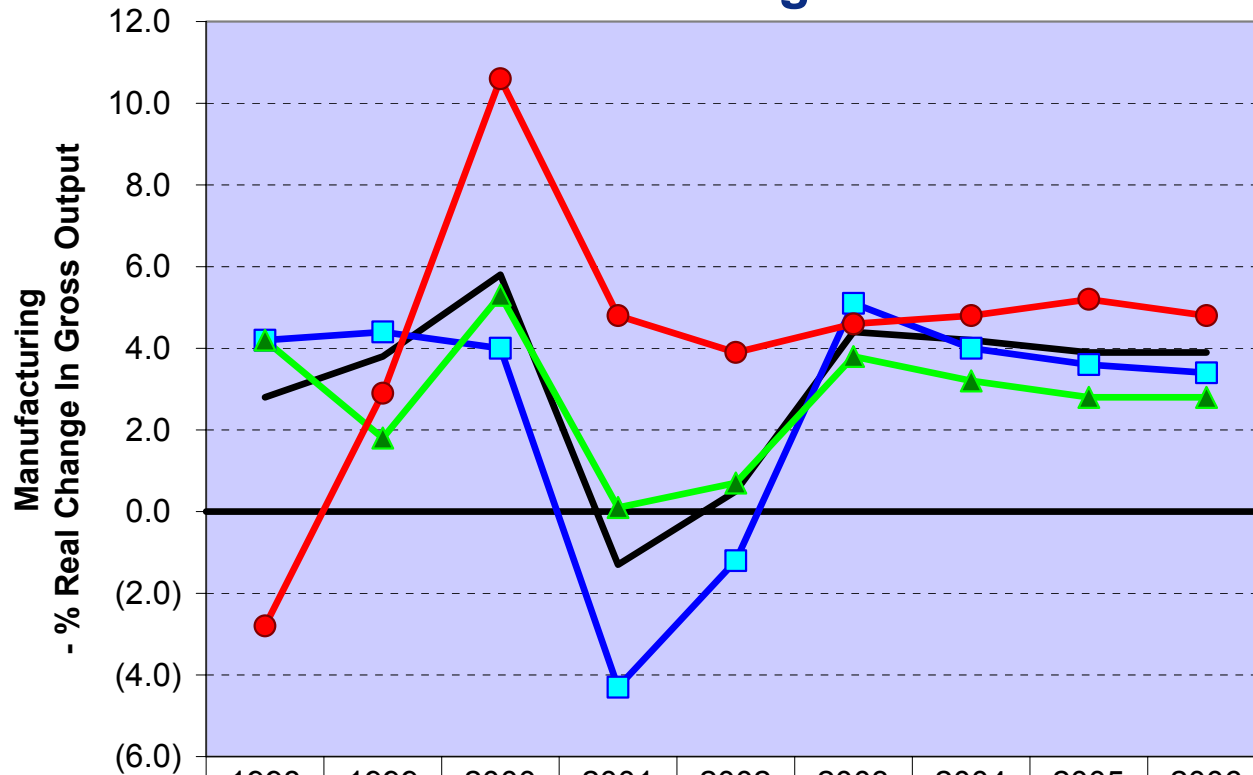
Continued Restaurant & Hotel Services Growth Will Help Boxboard & Tissue



	1998	1999	2000	2001	2002	2003	2004	2005	2006
— World	1.4	2.4	3.5	2.6	1.1	2.6	3.0	3.0	3.2
— North America	4.5	4.4	7.4	3.0	1.6	3.1	3.0	2.9	3.4
— W. Europe	2.5	1.4	1.9	1.3	1.1	2.1	2.2	2.2	2.3
— E. Europe	(2.2)	(1.6)	5.4	2.5	3.3	3.7	4.2	4.8	4.4

Economic Outlook

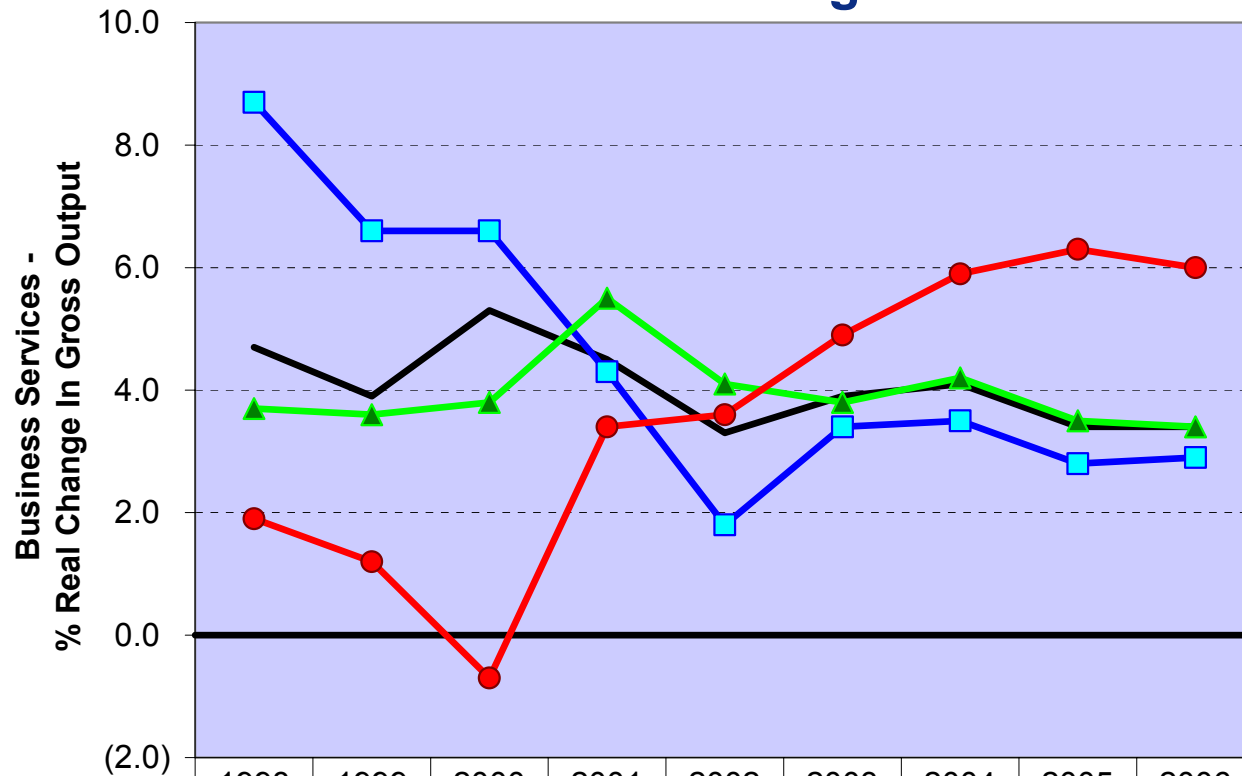
Slowing / Decline In Manufacturing Has Hurt Containerboard But Will Rebound Starting In 2003



	1998	1999	2000	2001	2002	2003	2004	2005	2006
— World	2.8	3.8	5.8	(1.3)	0.5	4.4	4.2	3.9	3.9
— North America	4.2	4.4	4.0	(4.3)	(1.2)	5.1	4.0	3.6	3.4
— W. Europe	4.2	1.8	5.3	0.1	0.7	3.8	3.2	2.8	2.8
— E. Europe	(2.8)	2.9	10.6	4.8	3.9	4.6	4.8	5.2	4.8

Economic Outlook

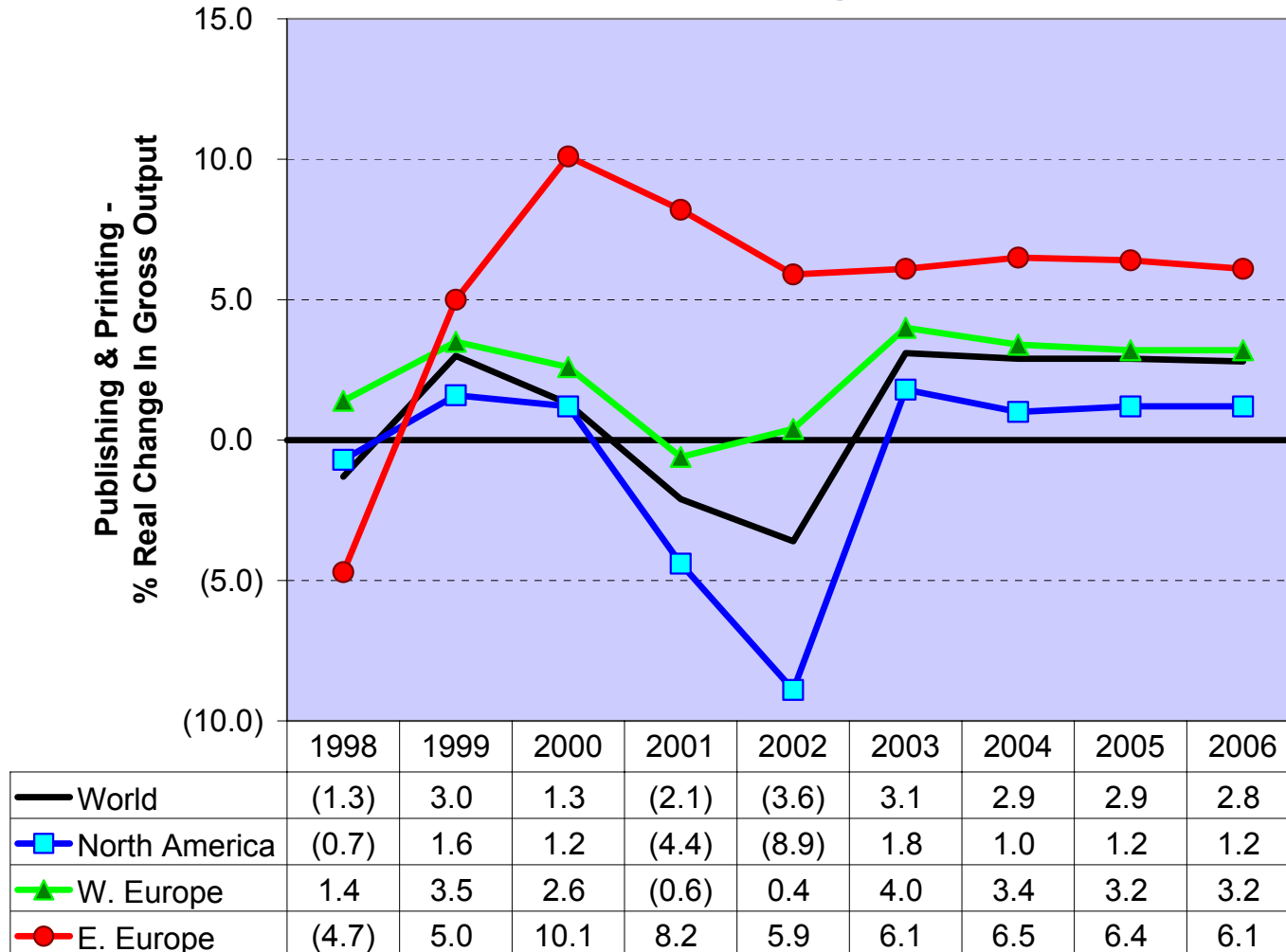
Strong Business Services Growth Has Buoyed P&W Paper Demand & Will Continue Through 2006



	1998	1999	2000	2001	2002	2003	2004	2005	2006
World	4.7	3.9	5.3	4.5	3.3	3.9	4.1	3.4	3.4
North America	8.7	6.6	6.6	4.3	1.8	3.4	3.5	2.8	2.9
W. Europe	3.7	3.6	3.8	5.5	4.1	3.8	4.2	3.5	3.4
E. Europe	1.9	1.2	(0.7)	3.4	3.6	4.9	5.9	6.3	6.0

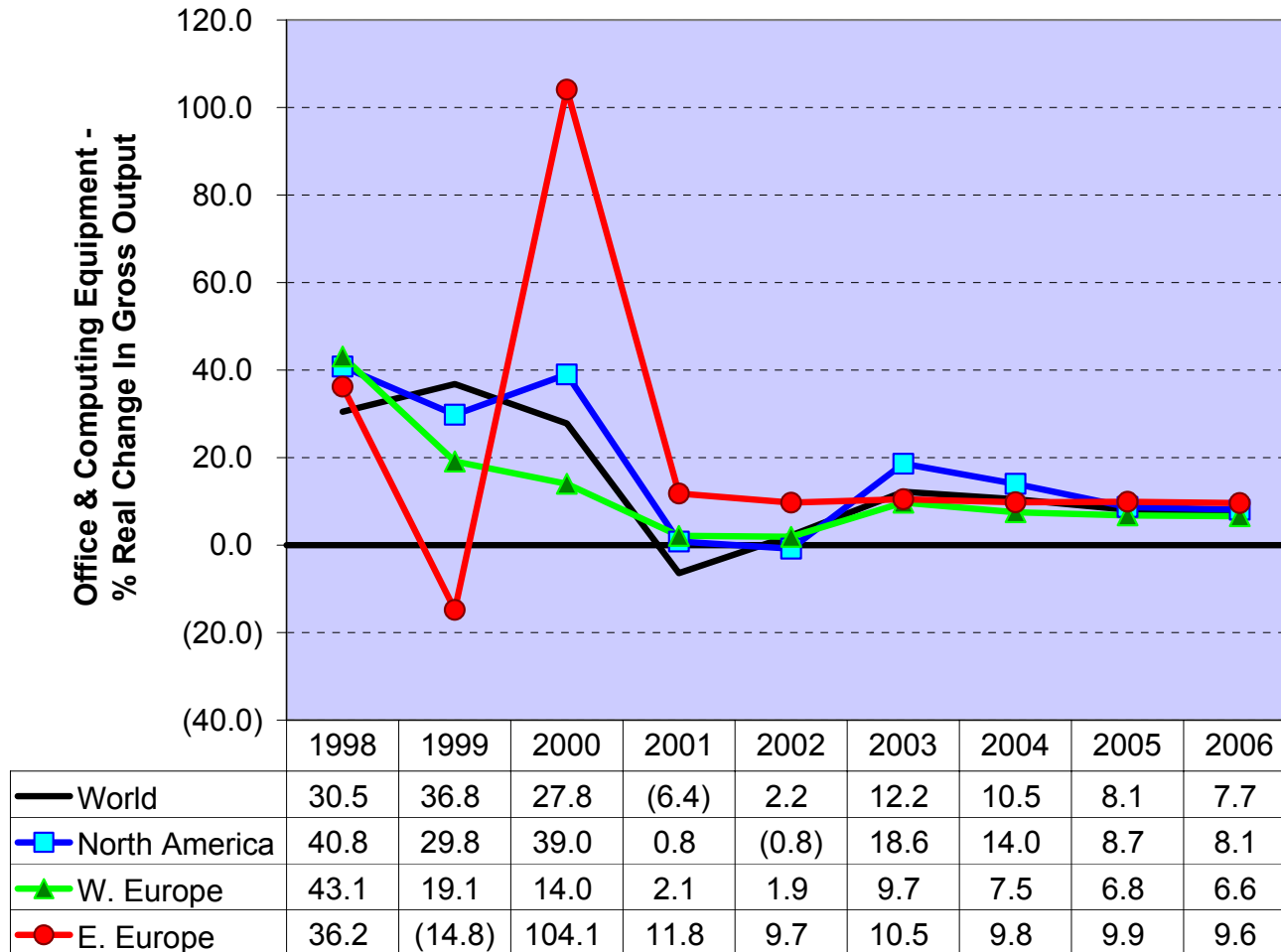
Economic Outlook

Contractions In Publishing & Printing Demand Have Hurt Newsprint & P&W Papers – Strong Relief Will Not Come Soon



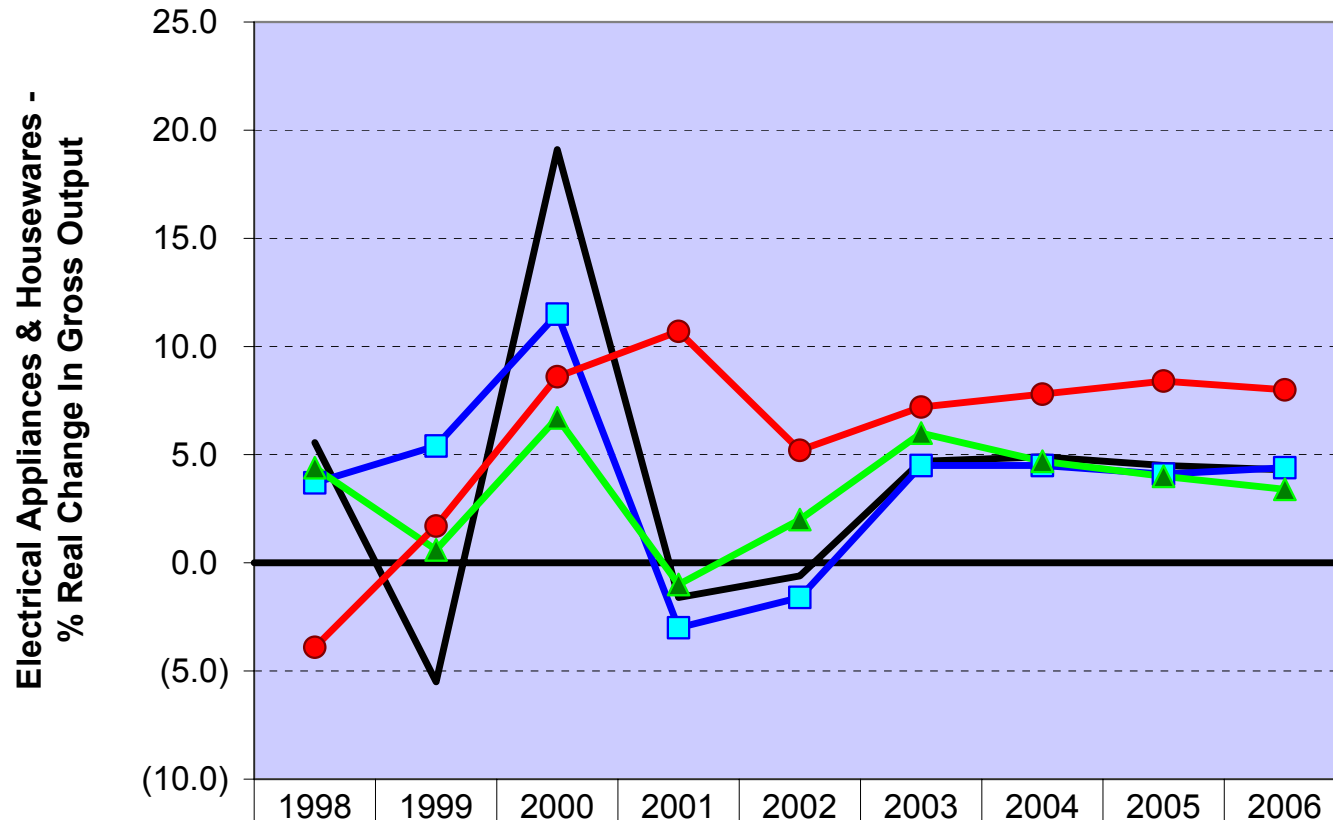
Economic Outlook

The Office & Computing Equipment Crash In 2001 and 2002 Hurt Containerboard – Future Growth Will Be Modest Relative To History



Economic Outlook

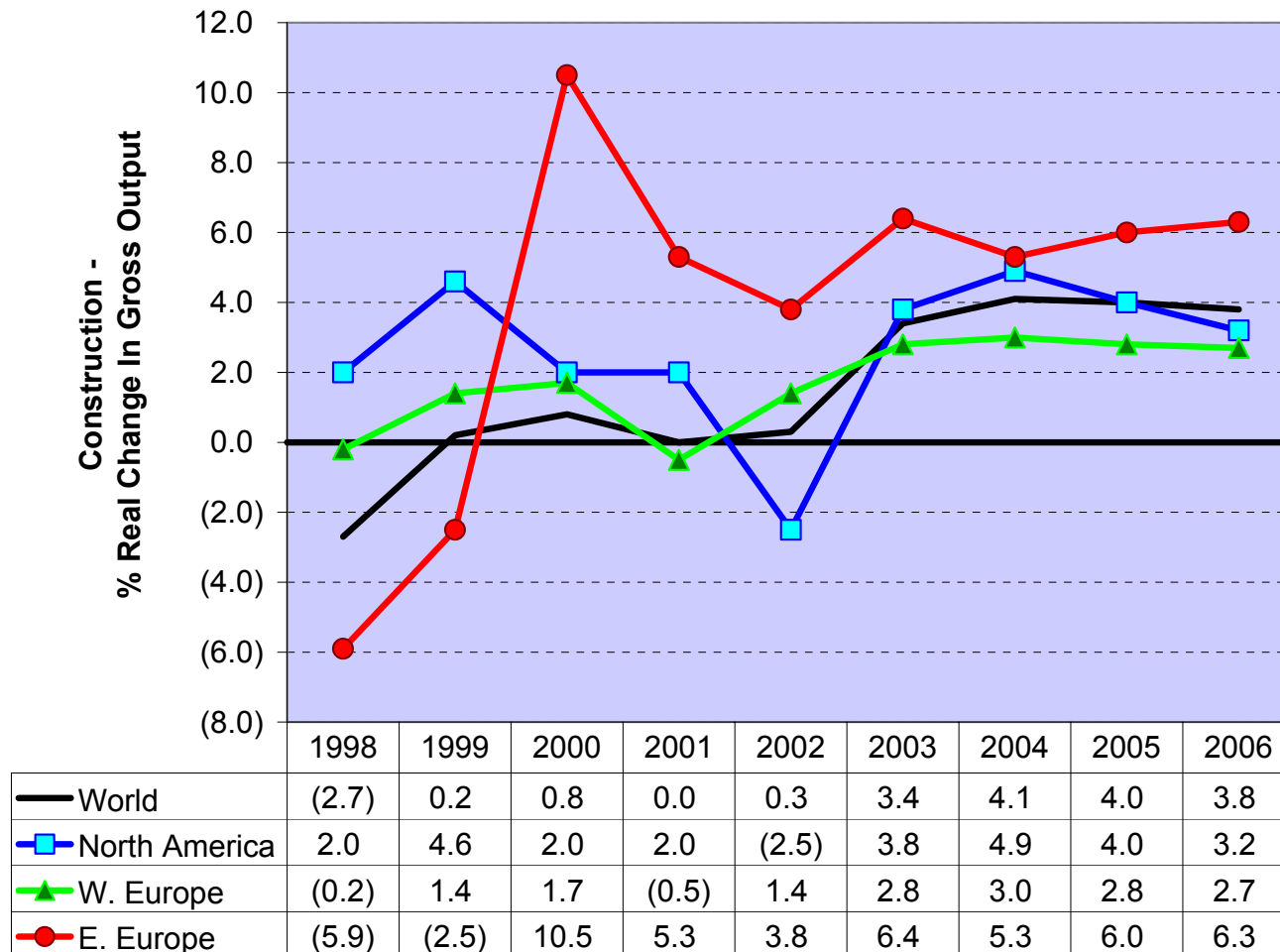
Electrical Appliances & Housewares Demand Contraction Hurt Boxboard and Containerboard – Growth Will Resume In 2003



— World	5.6	(5.5)	19.1	(1.6)	(0.6)	4.7	4.9	4.5	4.3
— North America	3.7	5.4	11.5	(3.0)	(1.6)	4.5	4.5	4.1	4.4
— W. Europe	4.4	0.6	6.7	(1.0)	2.0	6.0	4.7	4.0	3.4
— E. Europe	(3.9)	1.7	8.6	10.7	5.2	7.2	7.8	8.4	8.0

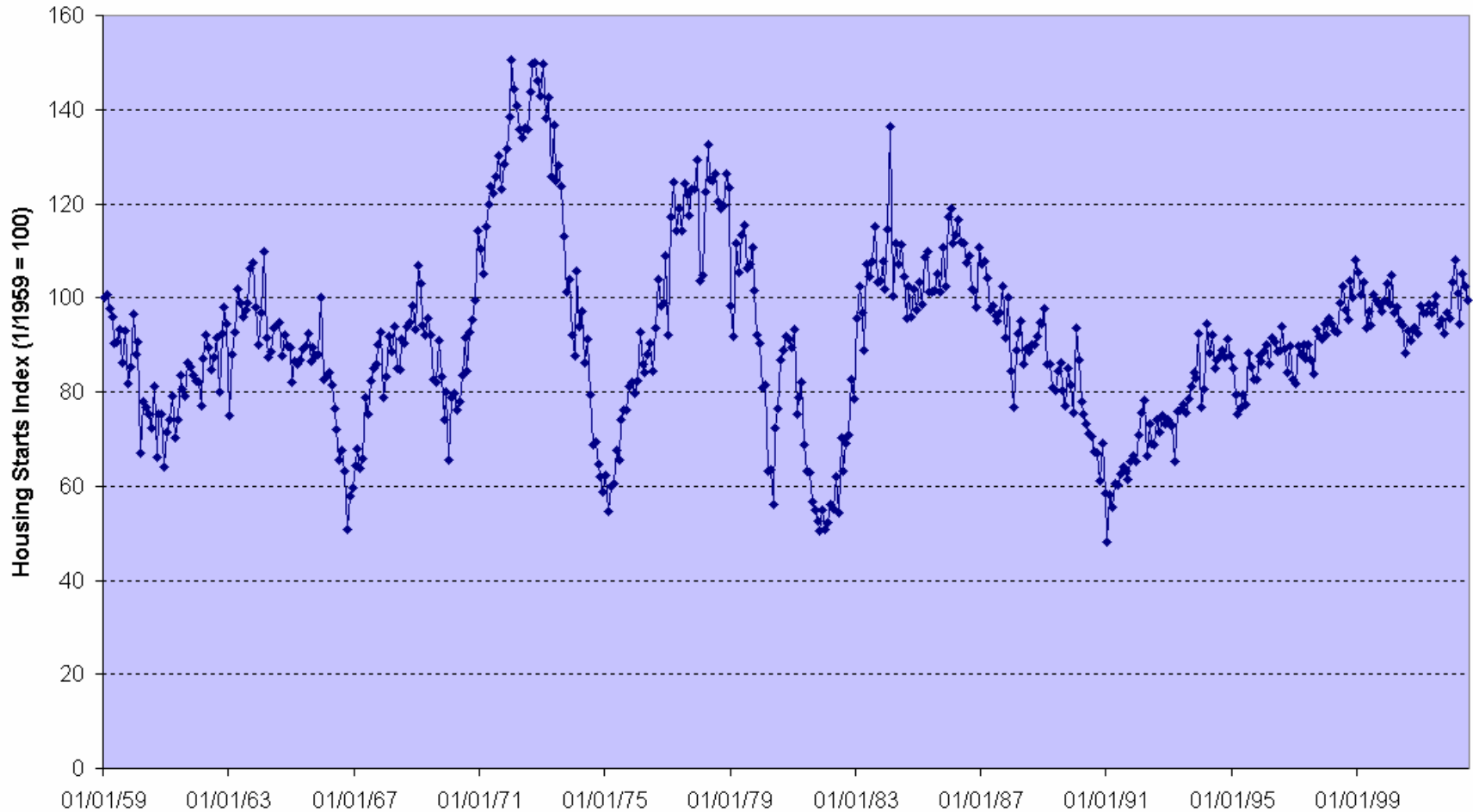
Economic Outlook

Slow Growth In Construction Dampened Tissue & Forest Products Demand – Consistent Growth Will Resume In 2003



Economic Outlook

Housing Starts Have Flattened After Strong Growth In The 1990s



Pulp & Paper Outlook

Pulp & Paper Outlook

- In the previous section, we highlighted the weakness in downstream demand drivers for pulp and paper products.
- Weakness in these demand drivers is expected to improve between 2003 and 2006.
- However, weak downstream demand in 2001 and 2002 combined with a range of competitive factors has resulted in significant excess capacity.
- This excess capacity has, in turn, undermined pulp and paper prices.
- The net result is persistent poor, but improving performance, in the North American and European pulp and paper industries during the outlook period.

Pulp & Paper Outlook

North American Market:

- The North American Pulp and Paper industry is a mature web of businesses generally characterized by:
 - ✓ Highest per capita consumption in the world across all grades
 - ✓ Slower than GDP level of growth
 - ✓ High capital intensity
 - ✓ Cost and price based competition
 - ✓ Below cost of capital returns
 - ✓ Cyclical pricing and profitability.
- Historically, the North American industry expanded after each cyclical peak. Excess capacity was pushed onto international markets.
- However, a combination of a strong dollar, maturing domestic demand, poor returns, unifying European markets and aggressive industry growth in developing regions, like Asia and Latin America, have interrupted this growth pattern.

Pulp & Paper Outlook

North American Market:

- The North American Industry did not recognize this change in the competitive landscape until the mid 1990s.
- It continued to behave as it did in the past - investing all of its available cash in new capacity in the late 1980's and early 1990s.
- This new capacity was reliant on increasingly competitive export markets in order to maintain volume. Simultaneously, developing regions began to aggressively export back to North America.
- The result has been persistent North American over-capacity, globalization of markets and, as a result, weak pricing and profitability.
- In response, the North American industry is restructuring to better compete in the changing global market. The industry was poised for greater profitability and increased capital spending going into 2000. However, the subsequent recession in 2001 / 2002 have undermined this position.

Pulp & Paper Outlook

North American Market:

The net effect of these factors is a decline in North American pulp and paper capacity through 2002 with growth through “creep” through 2006. Several scenarios are possible where net capacity reductions will continue.

Grade Segment	Change In Capacity (Short Tons 000s)	
	2000-2002	2003-2006
Boxboard	-220	-25
Containerboard	-926	1,325
Newsprint	-1,213	-350
Printing & Writing	-699	2,166
Tissue	588	473
Pulp	-2,412	-503
Total Change	-4,882	3,086

Pulp & Paper Outlook

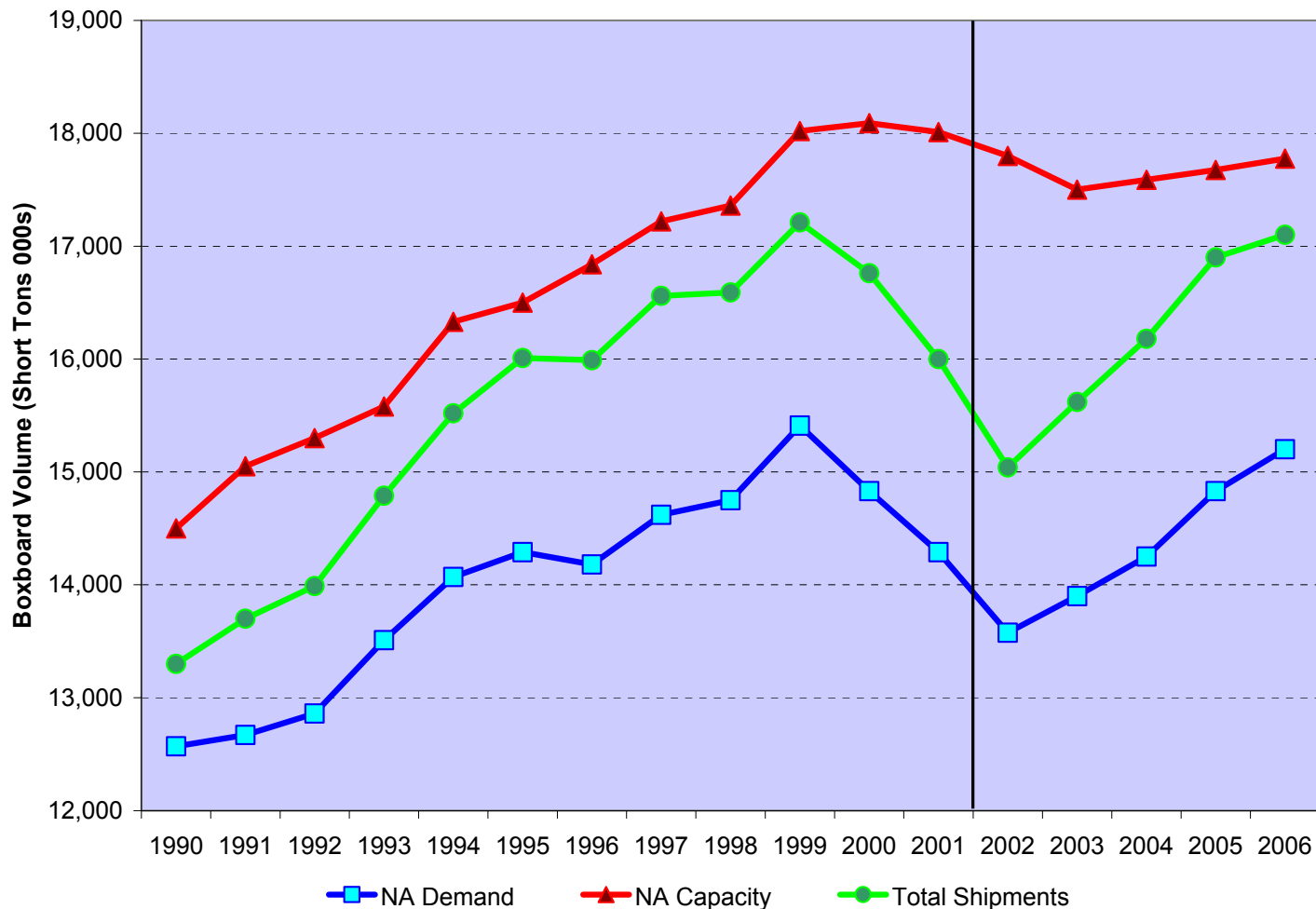
North American Boxboard:

- Boxboard is one of the weakest overall segments in North America
- Slow growth in industries that consume boxboard, increased competition from overseas producers and widespread substitution by plastics and alternative packaging materials has hurt producers
- Profitability and returns are better than industry average despite these poor fundamentals due to a relatively concentrated supply base
- Facility closures and over-capacity persist.

Capital Implications: Don't expect any expansion capital. Expect more closures and productivity improvement initiatives at remaining facilities. Continued investments to upgrade facilities are likely. Continued net declines in capacity are possible.

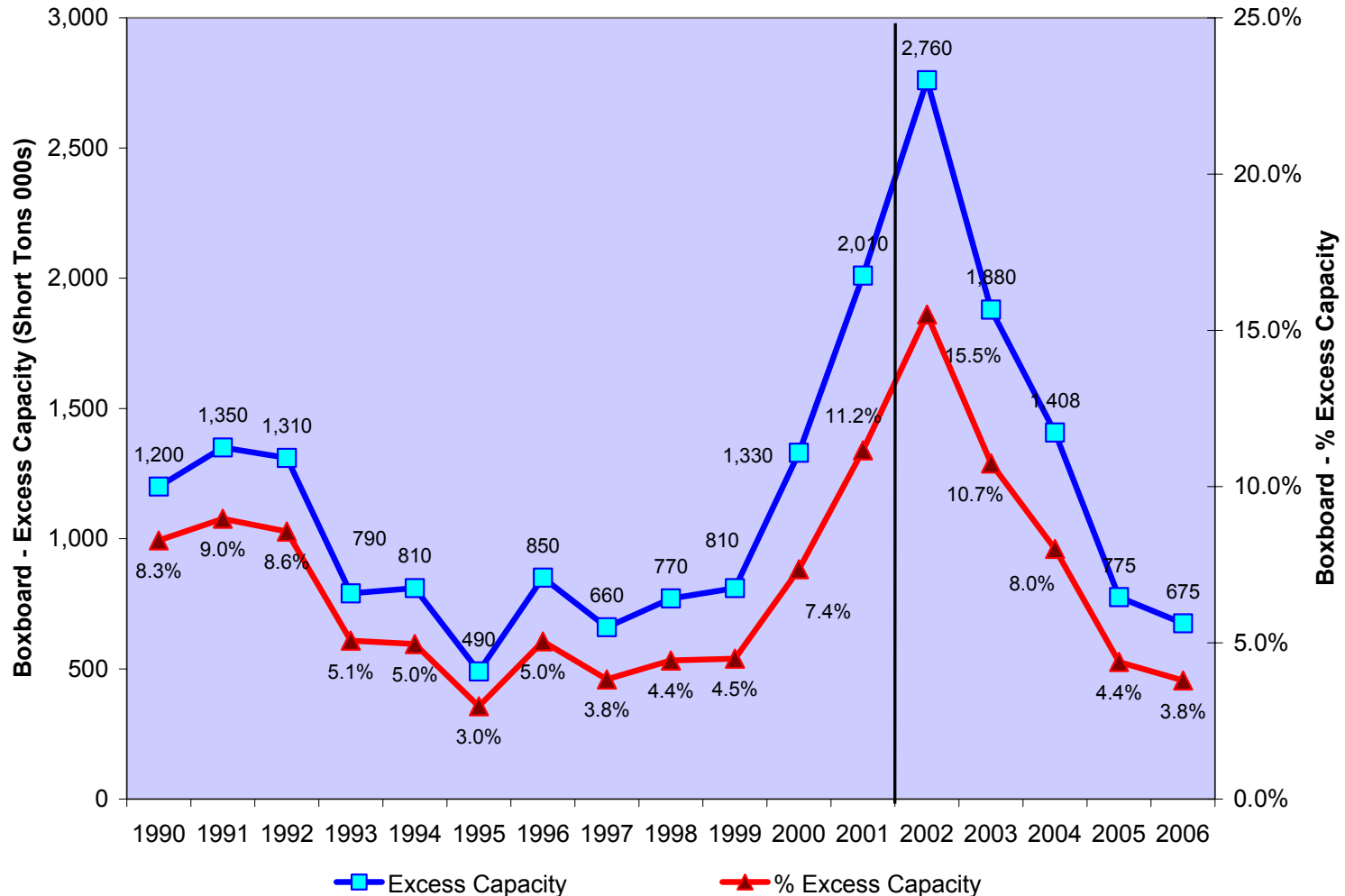
Pulp & Paper Outlook

NA Boxboard Demand Shipments and Capacity Have Fallen Three Years In A Row – Recovery Will Be Slow



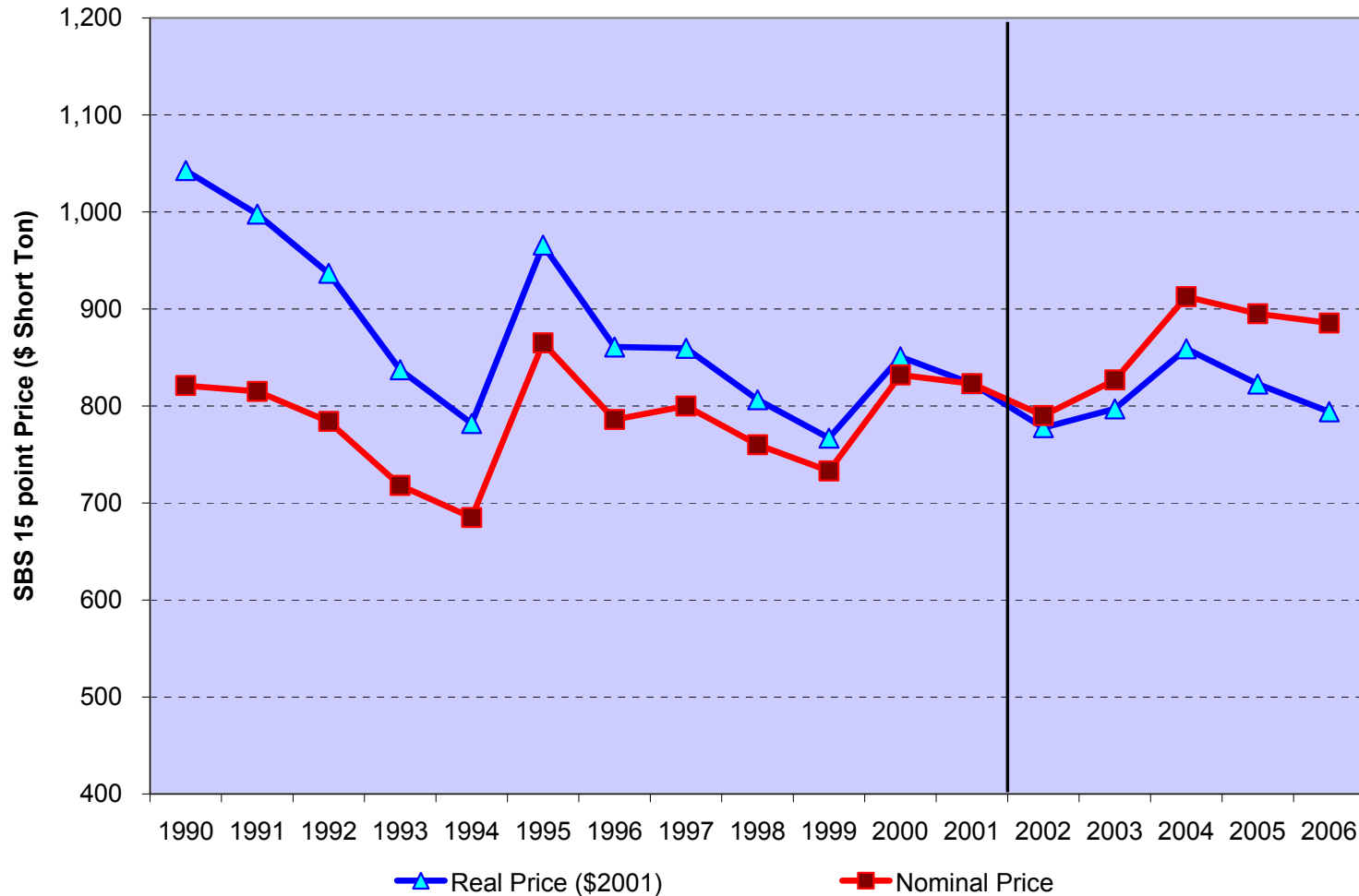
Pulp & Paper Outlook

NA Boxboard Is Struggling With Significant Overcapacity Which Will Require Additional Rationalization



Pulp & Paper Outlook

NA Boxboard Prices Are Near Historic Lows But Will Improve By 2004



Pulp & Paper Outlook

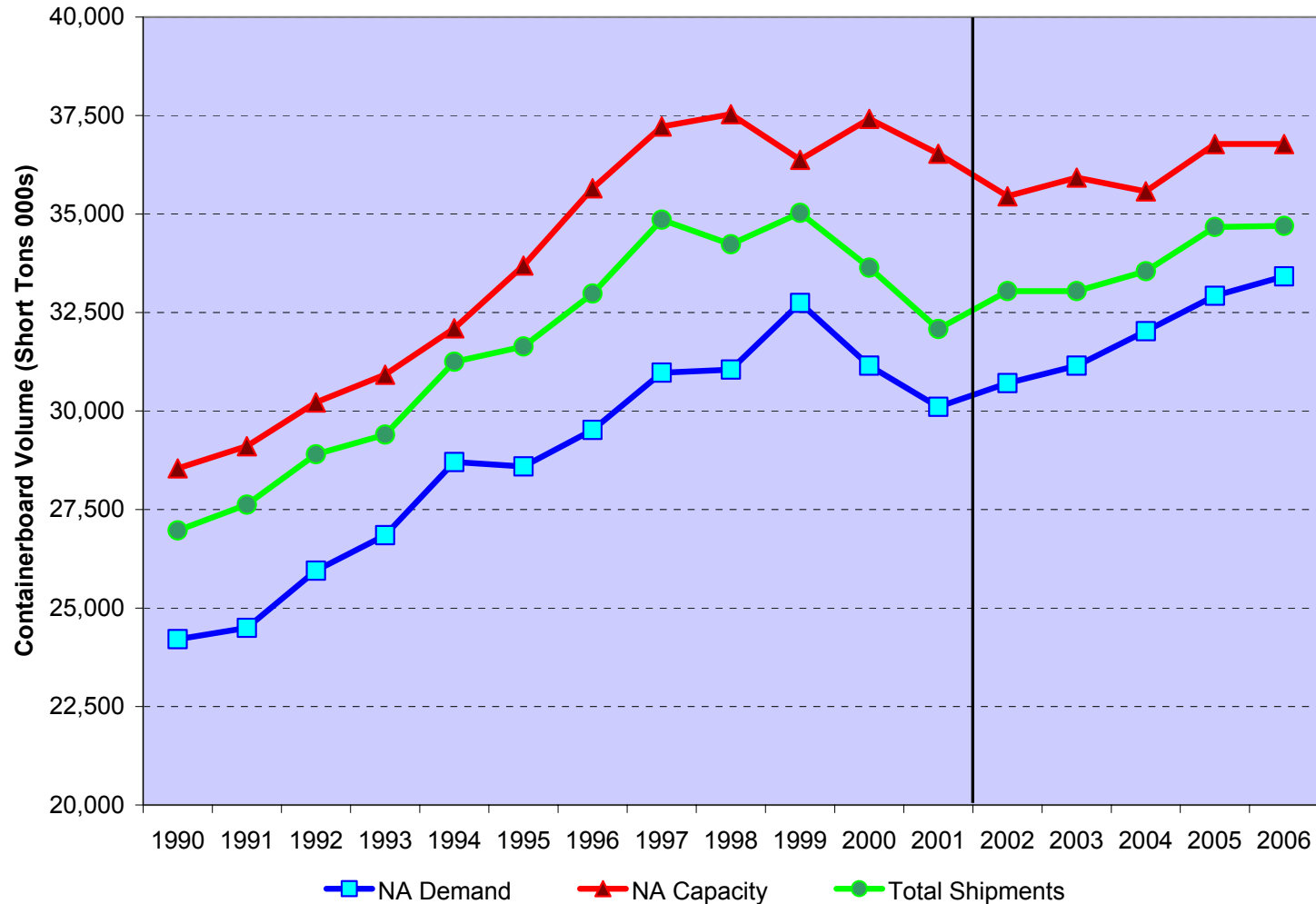
North American Containerboard:

- The Containerboard segment is undergoing significant restructuring
- Concentration of top producers has gone from one of the lowest to highest in the industry – improved capacity utilization and expansion discipline has followed.
- Further acquisitions by large players will be difficult.
- However, North American producers have lost their export market to new overseas capacity, especially in China and Germany.
- Profitability and returns are lower than industry average
- Slack capacity should be taken up quickly with an improved economy.

Capital Implications: No major expansions. Expect more closures and some improvement initiatives. Containerboard producers spend minimal capital.

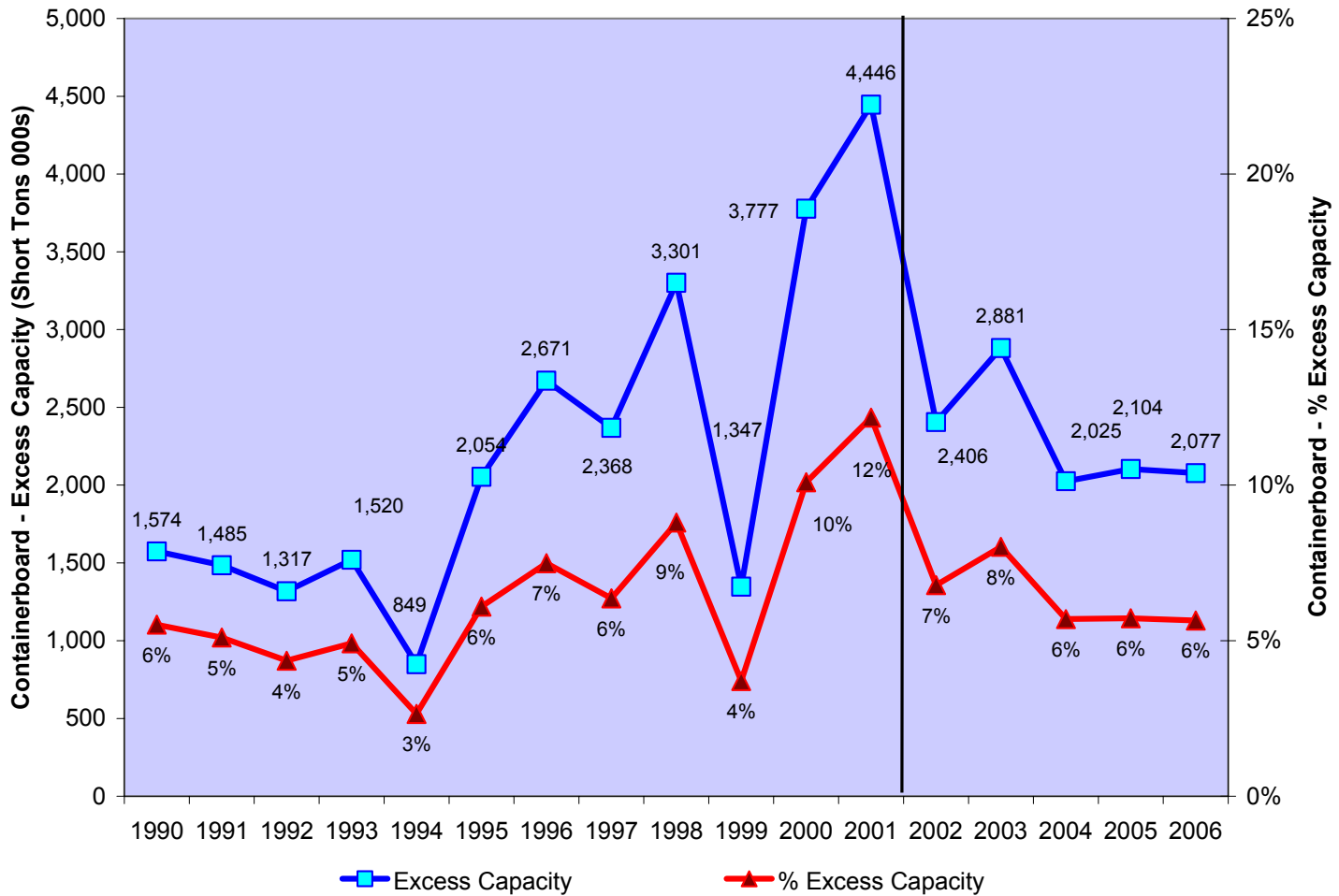
Pulp & Paper Outlook

NA Containerboard Demand Has Improved In 2002 – Significant Blocks Of Capacity Were Retired Between 1998 and 2002



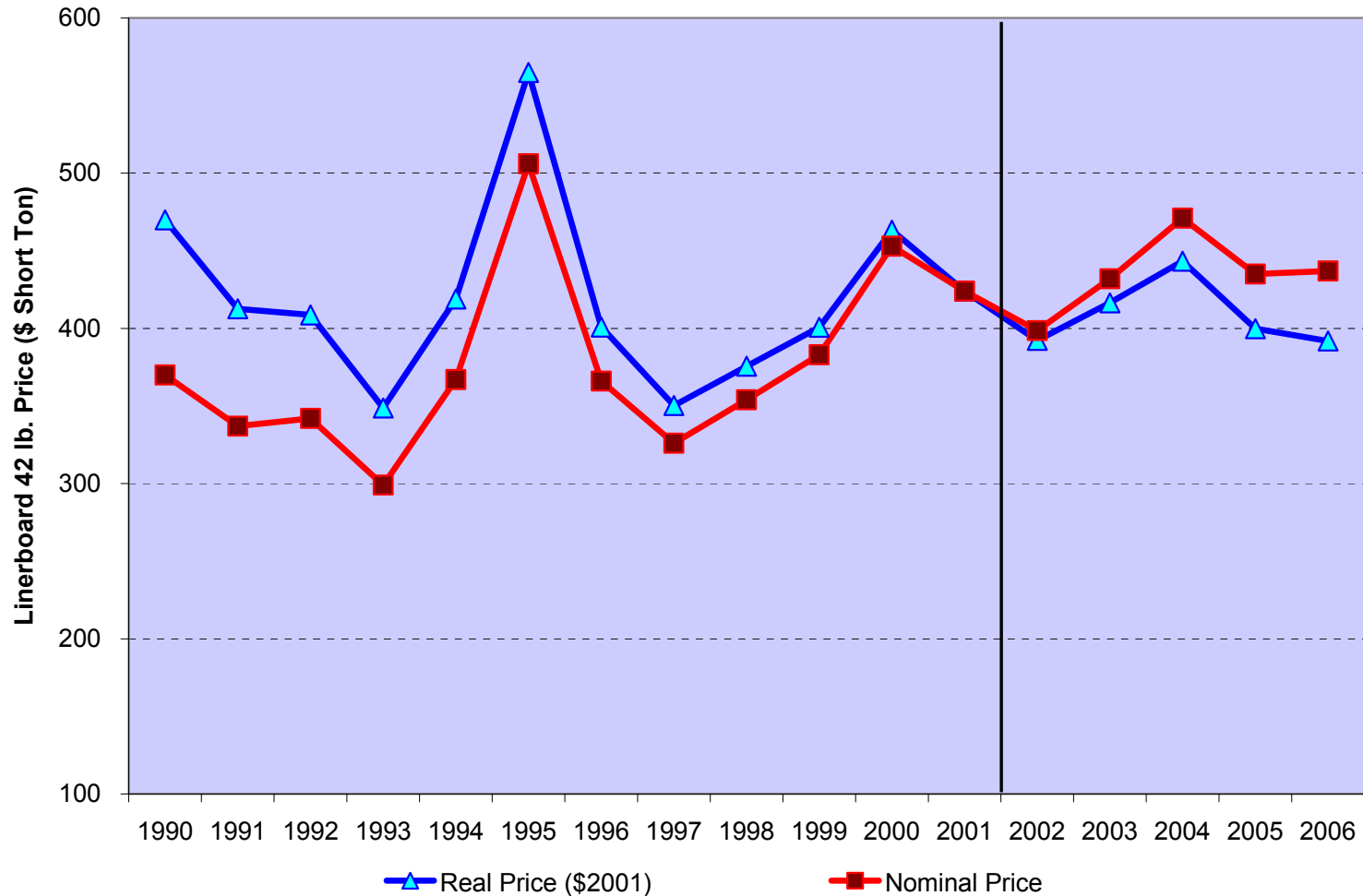
Pulp & Paper Outlook

NA Containerboard's Excess Capacity Is Coming Back In Line



Pulp & Paper Outlook

NA Capacity Reductions Helped Containerboard Producers Maintain Prices – Will Facilitate Price Increases Going Forward



Pulp & Paper Outlook

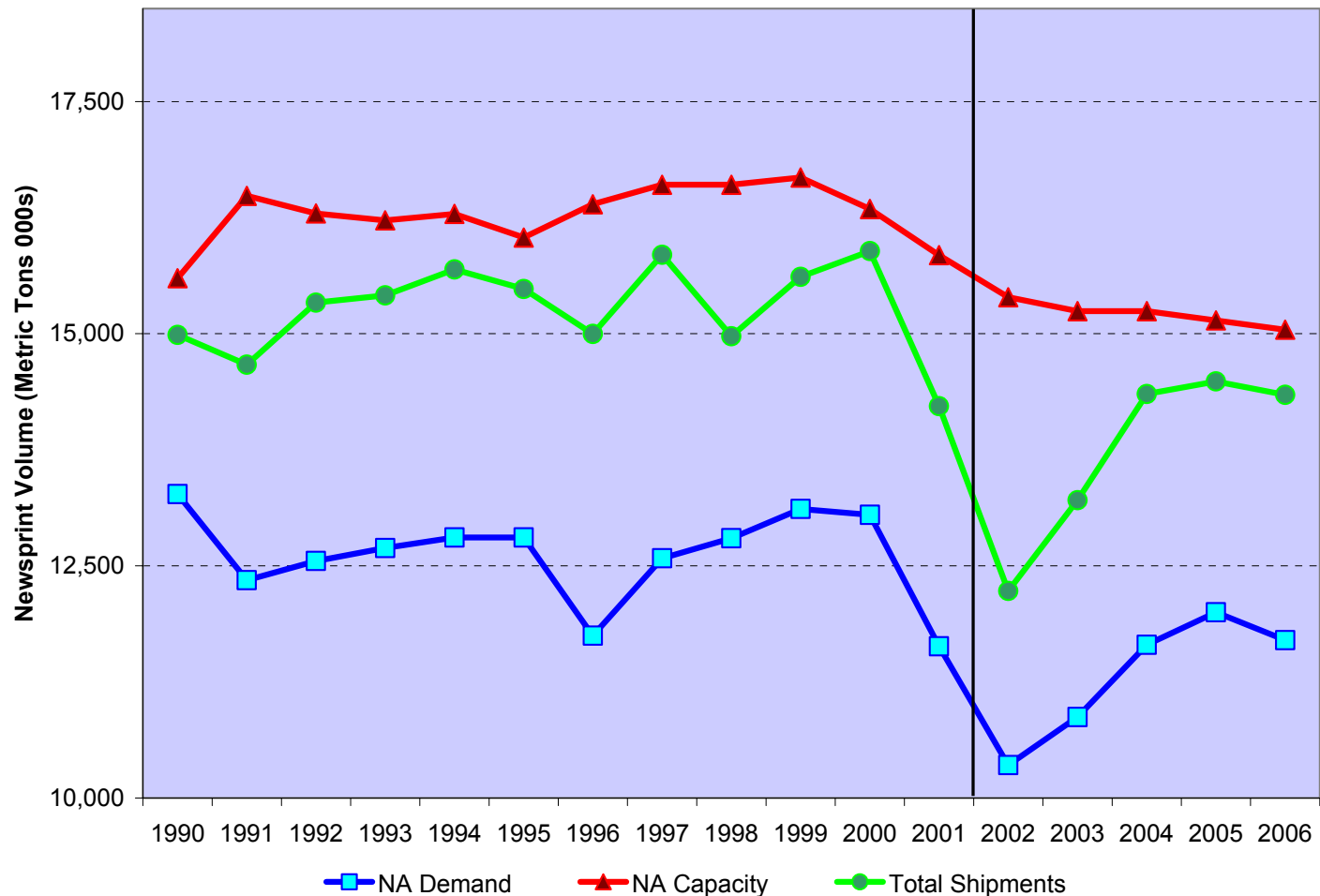
North American Newsprint:

- Newsprint is the weakest overall segment in pulp and paper
- Short-term publishing and printing declines have been exacerbated by substitution to alternative media
- National and local papers continue to reduce page size
- Newsprint is in decline in the long-term
- Opportunities for further consolidation exist
- Significant capacity reductions will continue.

Capital Implications: Rational players will spend a minimum of capital. No new Newsprint mills are likely to ever be built in North America.

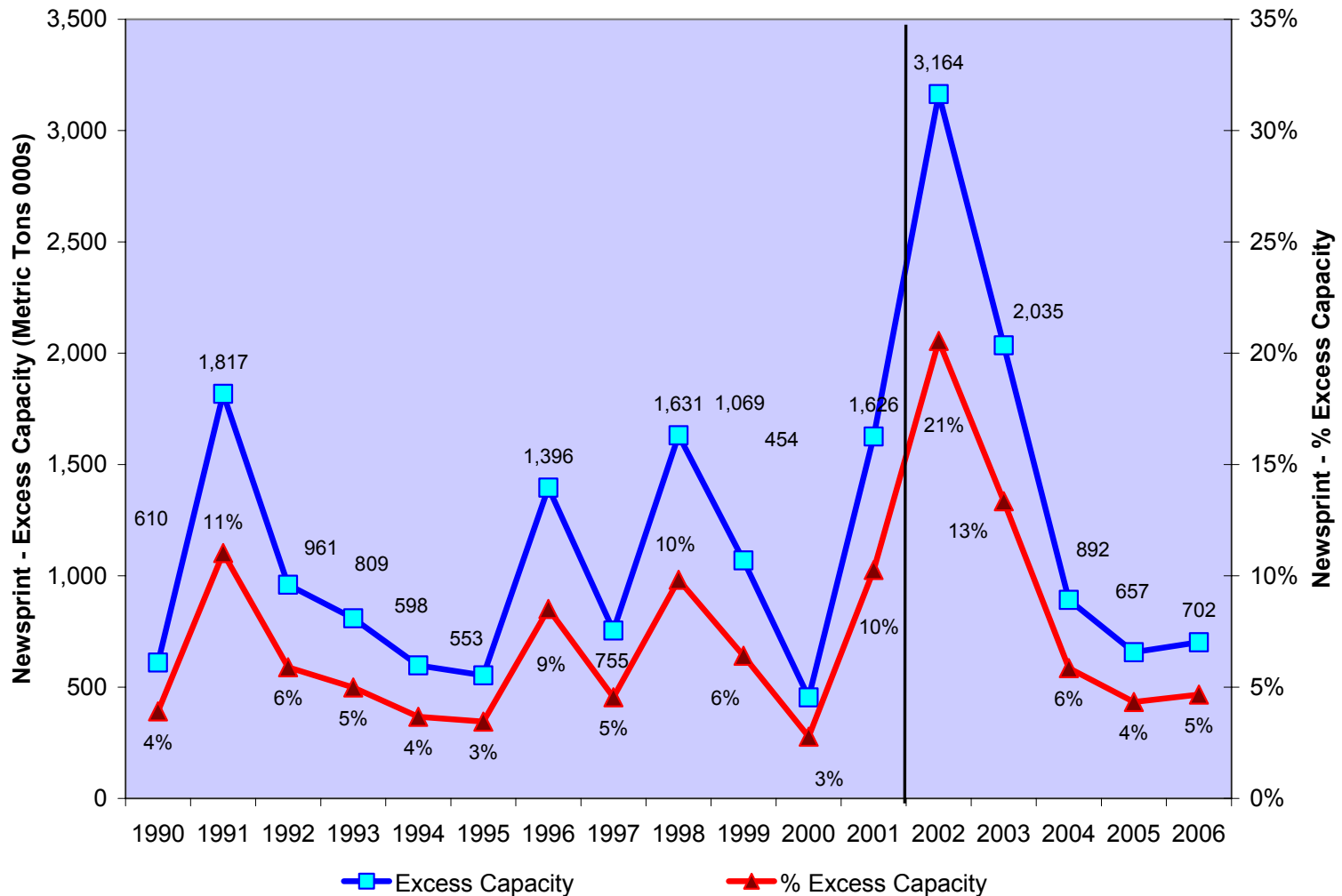
Pulp & Paper Outlook

NA Newsprint Is A Declining Segment In the Long-Term – But A Mild Recovery From 2002 Lows Is Expected



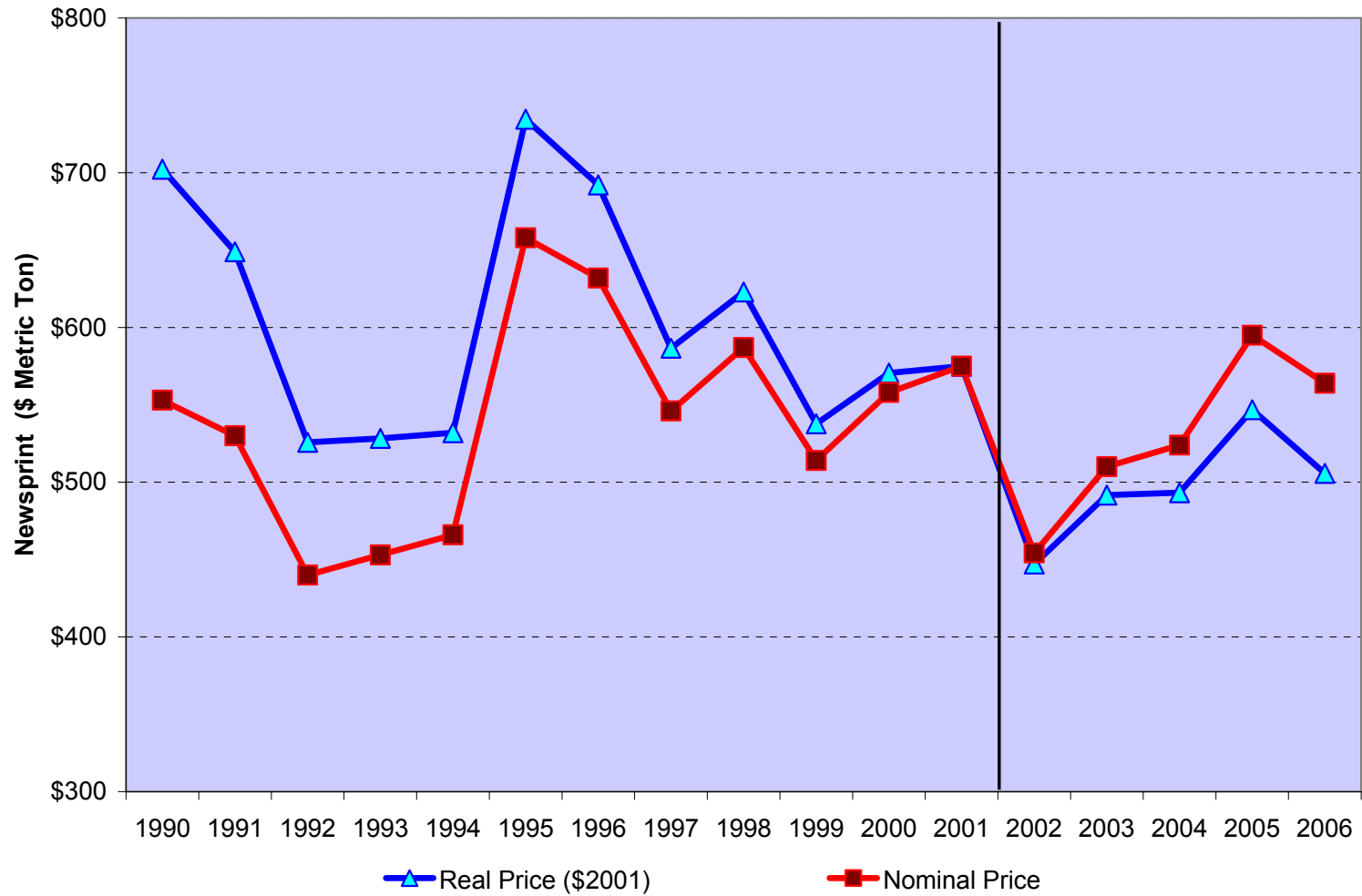
Pulp & Paper Outlook

Excess Capacity In NA Newsprint Persists Despite Significant Facility Closures – Supply & Demand Will Balance By 2004



Pulp & Paper Outlook

NA Newsprint Is At Historic Low Prices – Weak End-User Demand Will Dampen Price Increases



Pulp & Paper Outlook

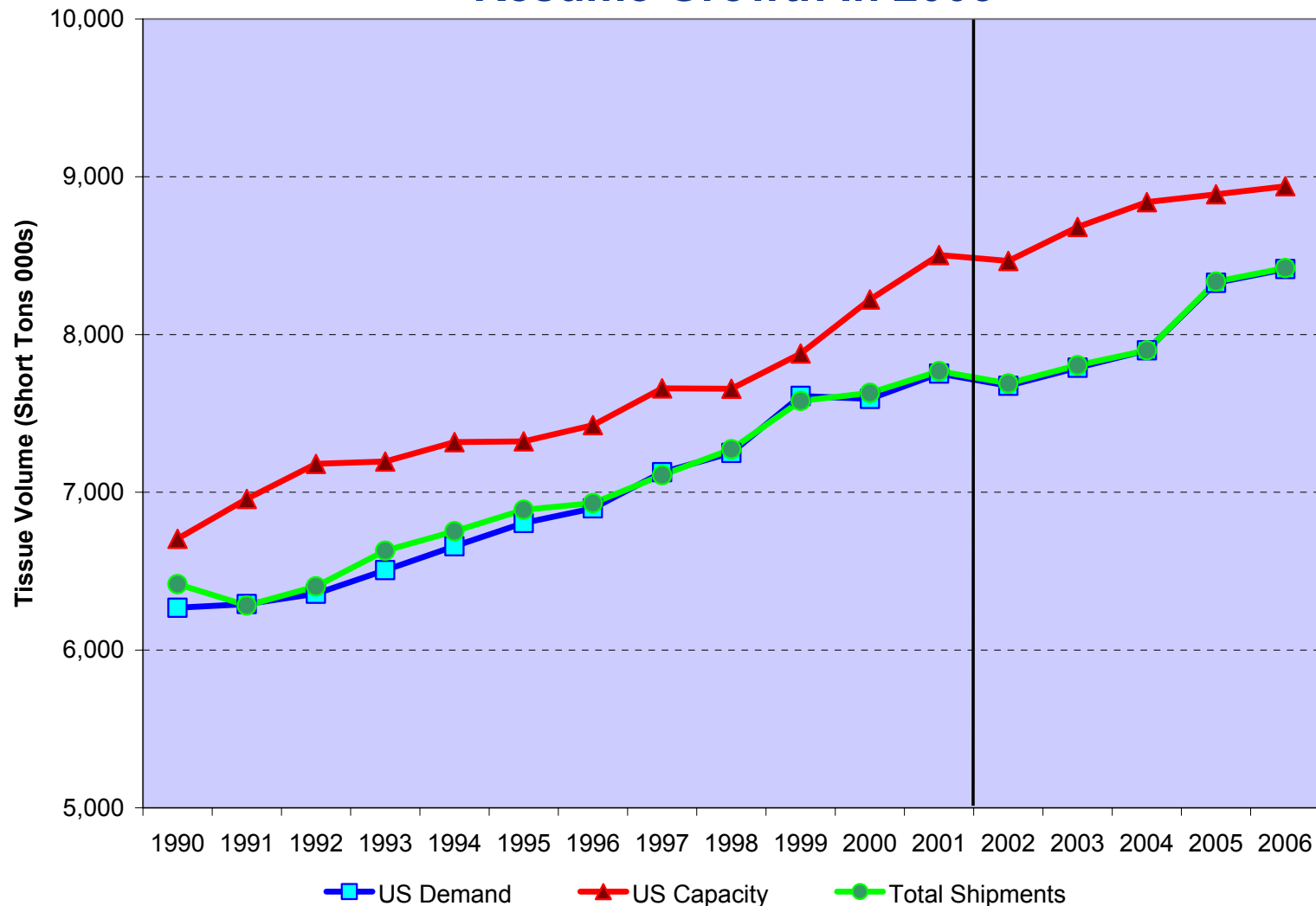
North American Tissue:

- Tissue is the strongest overall segment in North America
- End-product demand is mature (i.e. Americans are the highest per-capita consumers in the world and incremental demand generation is difficult)
- Demand is off in 2002 and excess capacity is building
- However, overall company financial returns are less sensitive to supply / demand dynamics at the mill level than other grades
- Regulatory considerations will limit large M&A activity
- Both technology changes and new entrepreneurial entrants will drive spending.

Capital Implications: The segment may be losing some of its luster, but capital spending for expansion and upgrades will continue to lead the pulp & paper industry.

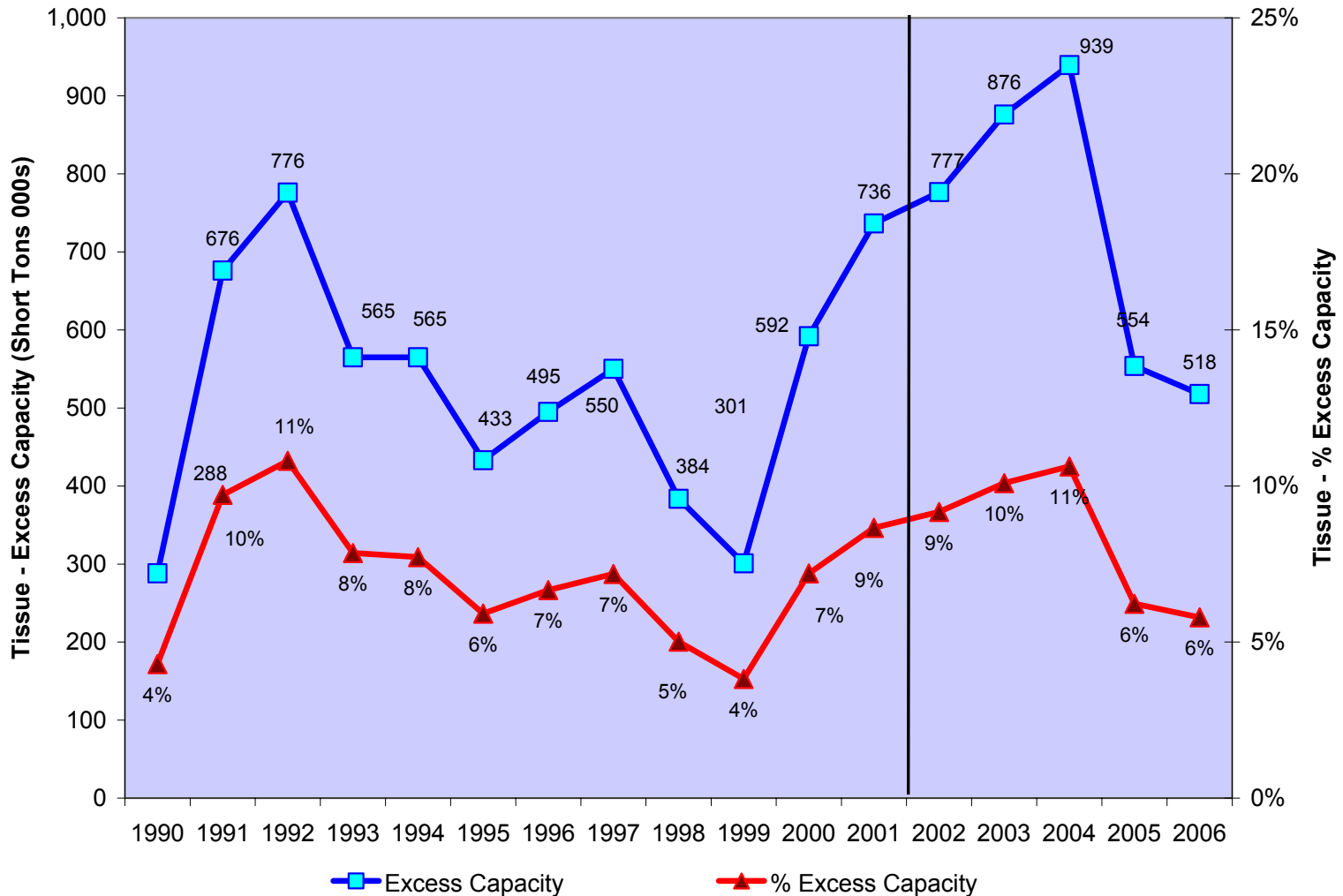
Pulp & Paper Outlook

NA Tissue Will Experience A Rare Drop In Demand In 2002 But Will Resume Growth In 2003



Pulp & Paper Outlook

Excess Tissue Capacity Will Build In NA Through 2004 Before Coming Back In Balance



Pulp & Paper Outlook

North American Printing & Writing (P&W) Papers:

- The recent economic slowdown and substitution from alternative media have negatively impacted demand for P&W papers
- Uncompetitive capacity is being closed and modest increases in demand will reign in excess capacity
- Coated Freesheet is quickly becoming commoditized and displaced by improved Coated Groundwood grades. High end uses like auto brochures and annual reports are being replaced by website versions
- High volume Uncoated Freesheet is under pressure from overseas competitors. Newsprint producers are converting capacity to Uncoated and Coated Groundwood grades.

Pulp & Paper Outlook

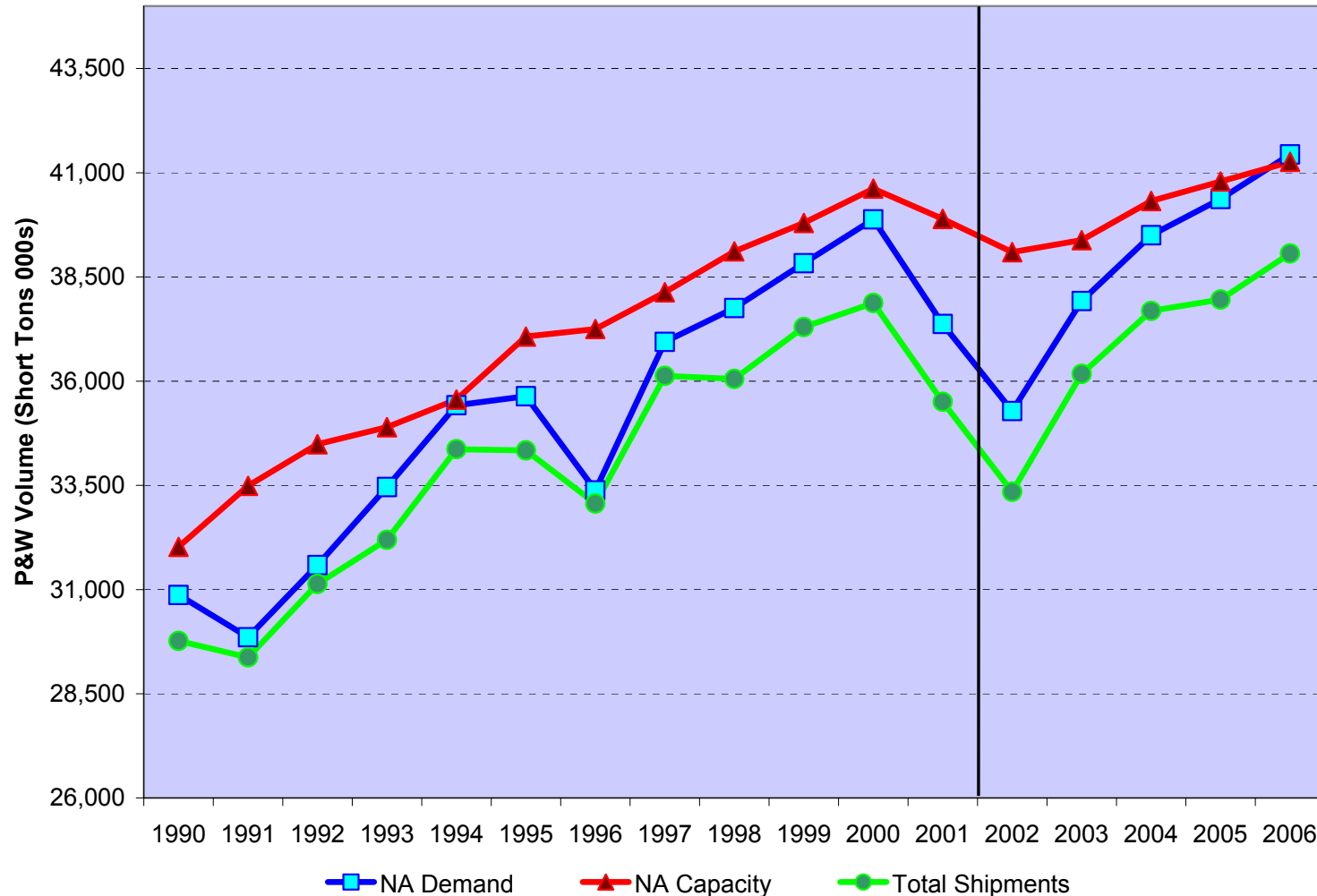
North American Printing & Writing (P&W) Papers:

- Financial returns and growth prospects are similar to the industry average
- Room exists for continued M&A activity.

Capital Implications: There will be a need for significant capital projects as companies reposition and redeploy their assets. However, these needs will be held in check by M&A and financial constraints. Certain segments will suffer net reductions in capacity.

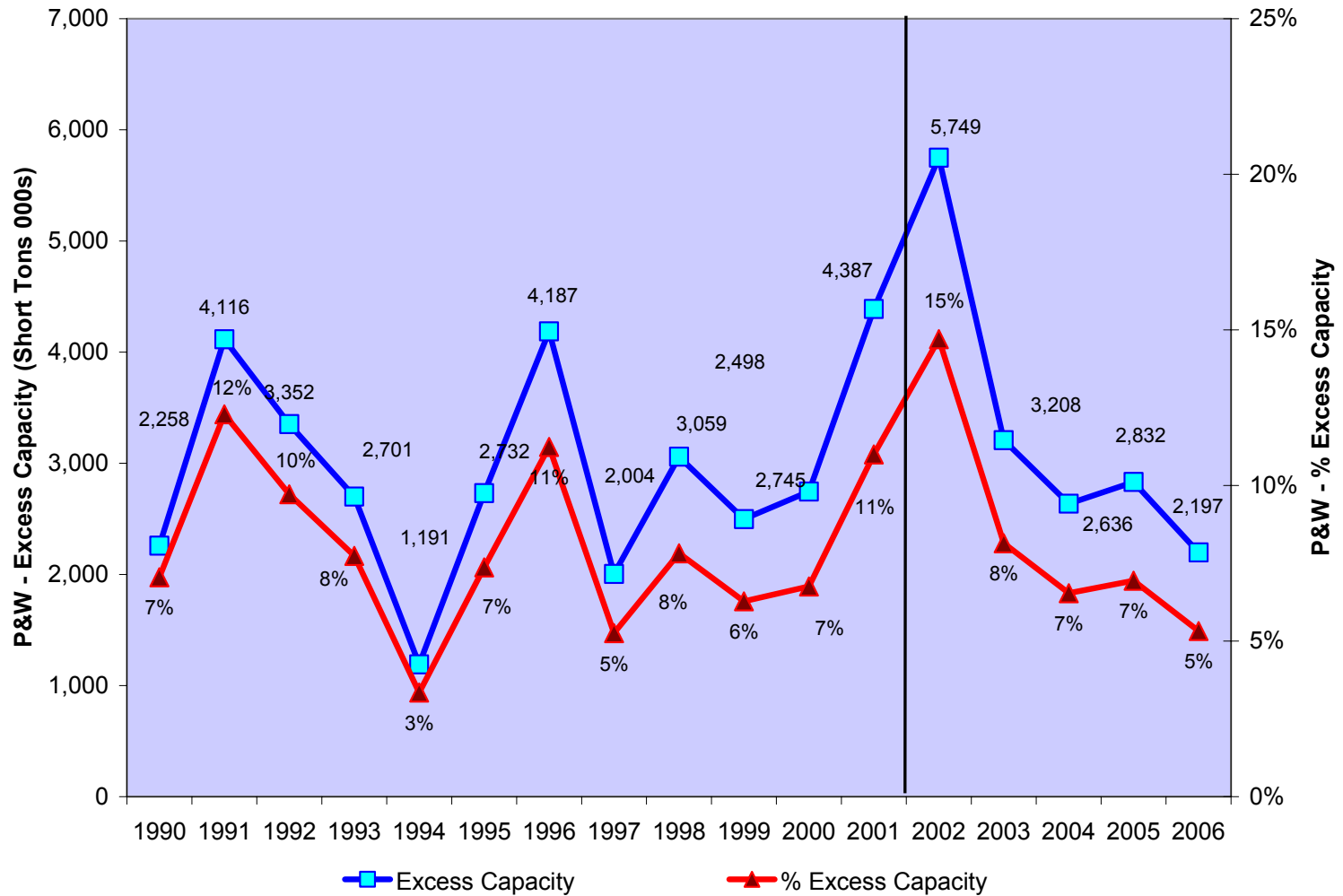
Pulp & Paper Outlook

North American P&W Demand & Capacity Contracted Between 2000 and 2002 – A Slow Recovery Will Begin In 2003



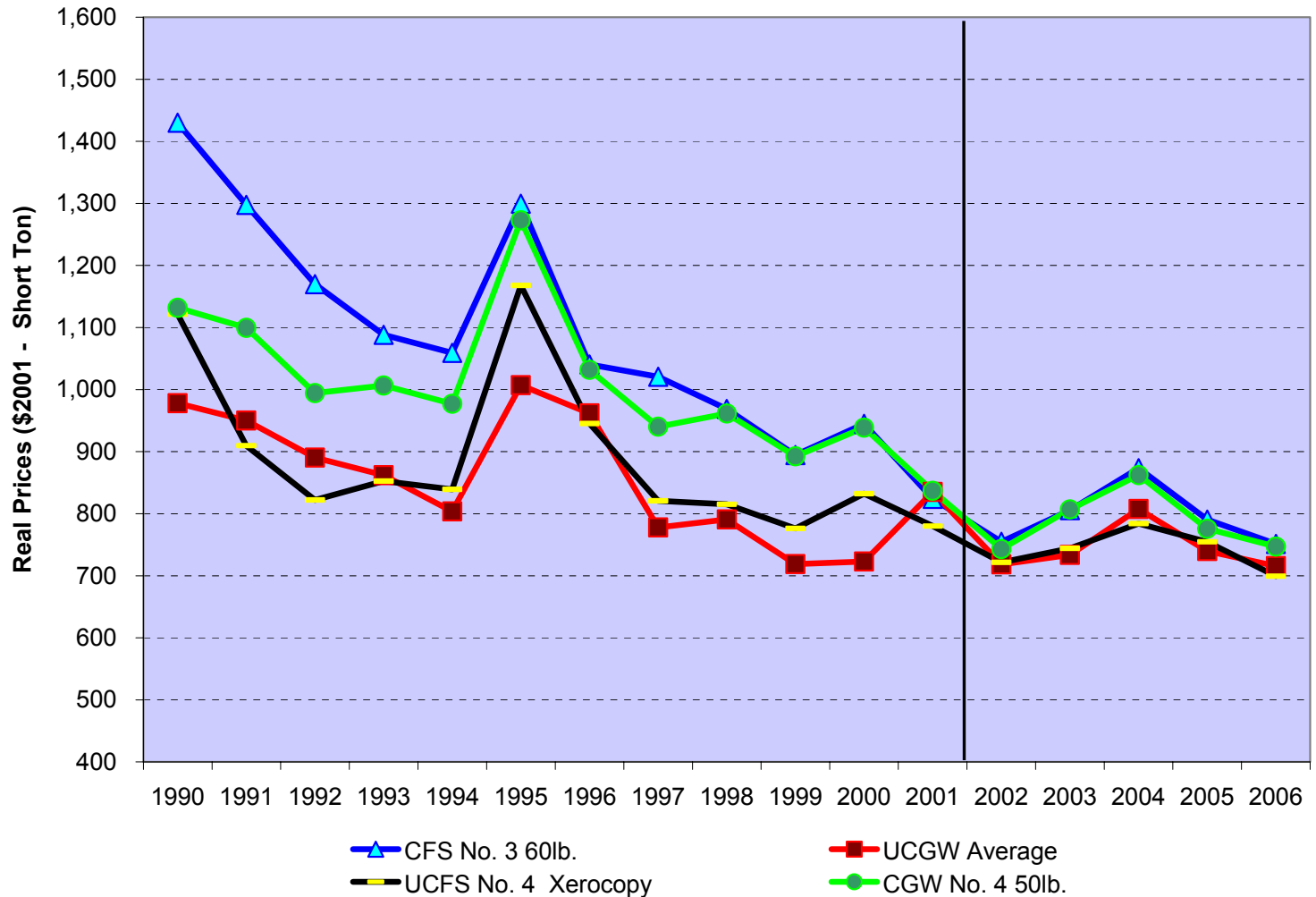
Pulp & Paper Outlook

Significant NA P&W Overcapacity Will Dissipate By 2004



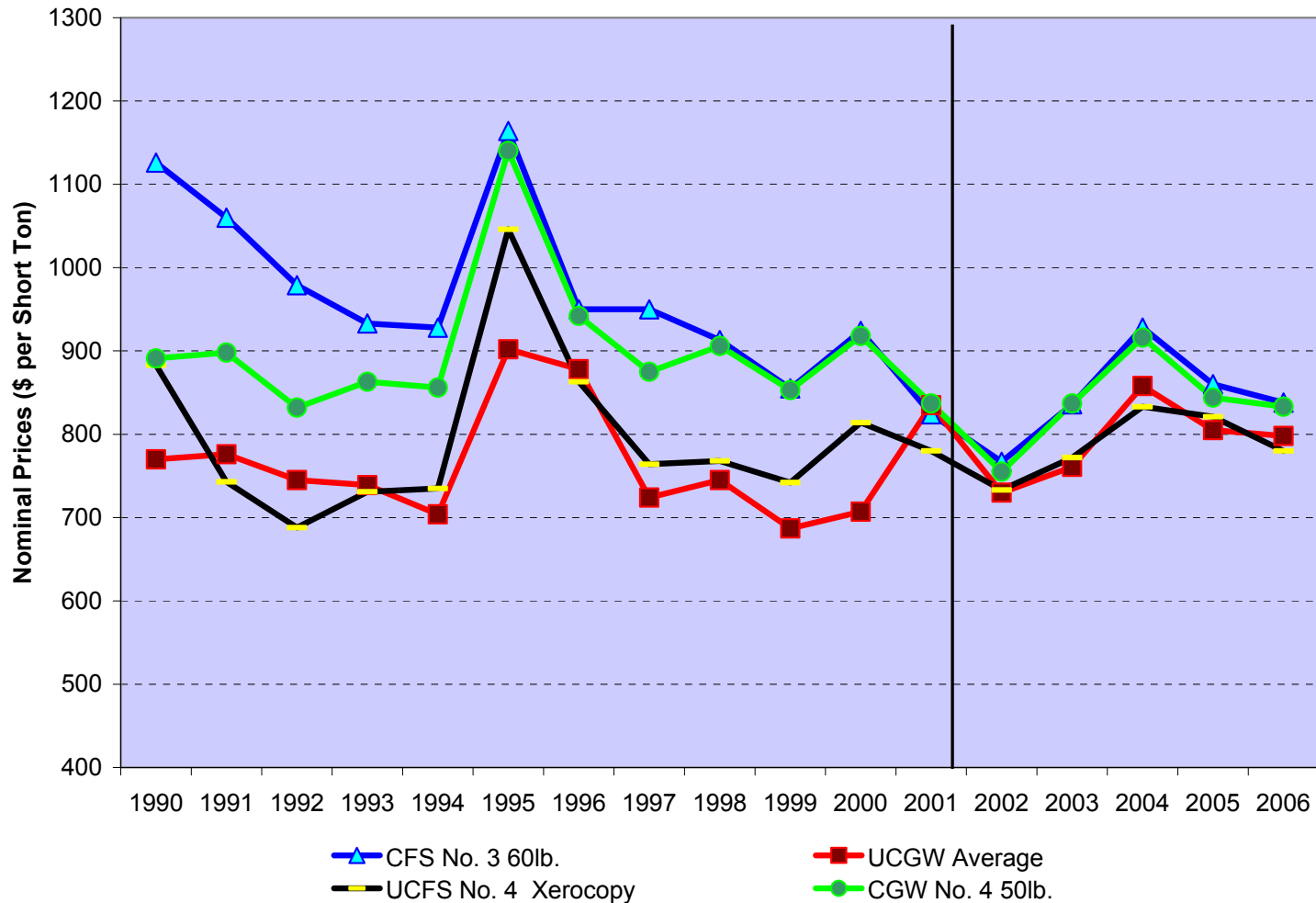
Pulp & Paper Outlook

Real NA P&W Pricing Is At Historically Low Levels – Grade Prices Have Converged



Pulp & Paper Outlook

NA P&W Prices Will Improve In 2003 & 2004



Pulp & Paper Outlook

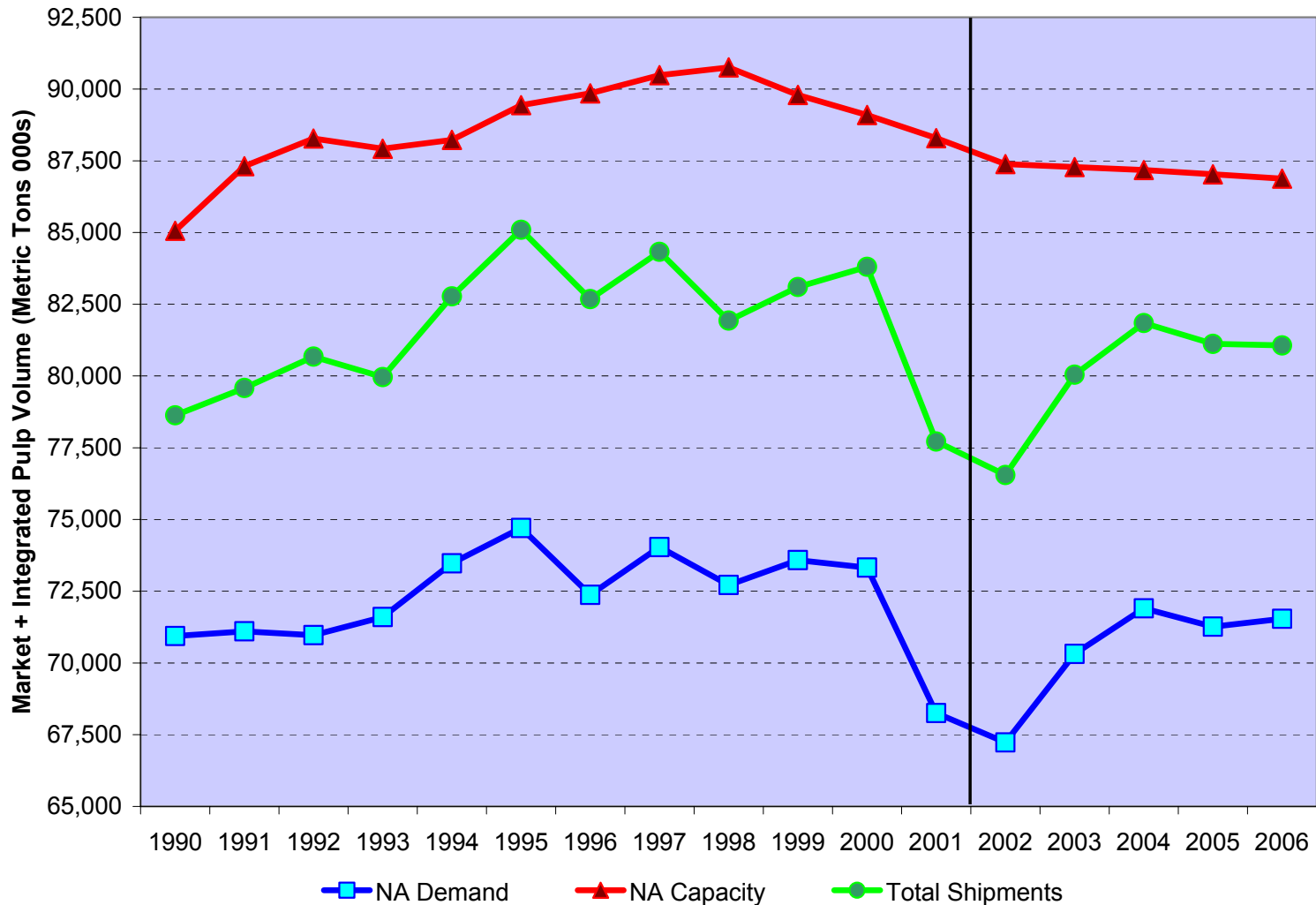
North American Pulp:

- Pulp is an intermediate good in the production of the other paper and paperboard grades
- The returns on investments in pulp are among the poorest in the industry
- Environmental restrictions make the additions of new capacity difficult
- International producers can import pulp to the U.S. competitively
- Deinked pulps are relatively more attractive than virgin.

Capital Implications: Some capital will be spent on integrated DIP facilities. Virgin pulp mill investments will only be made if forced for maintenance and environmental purposes.

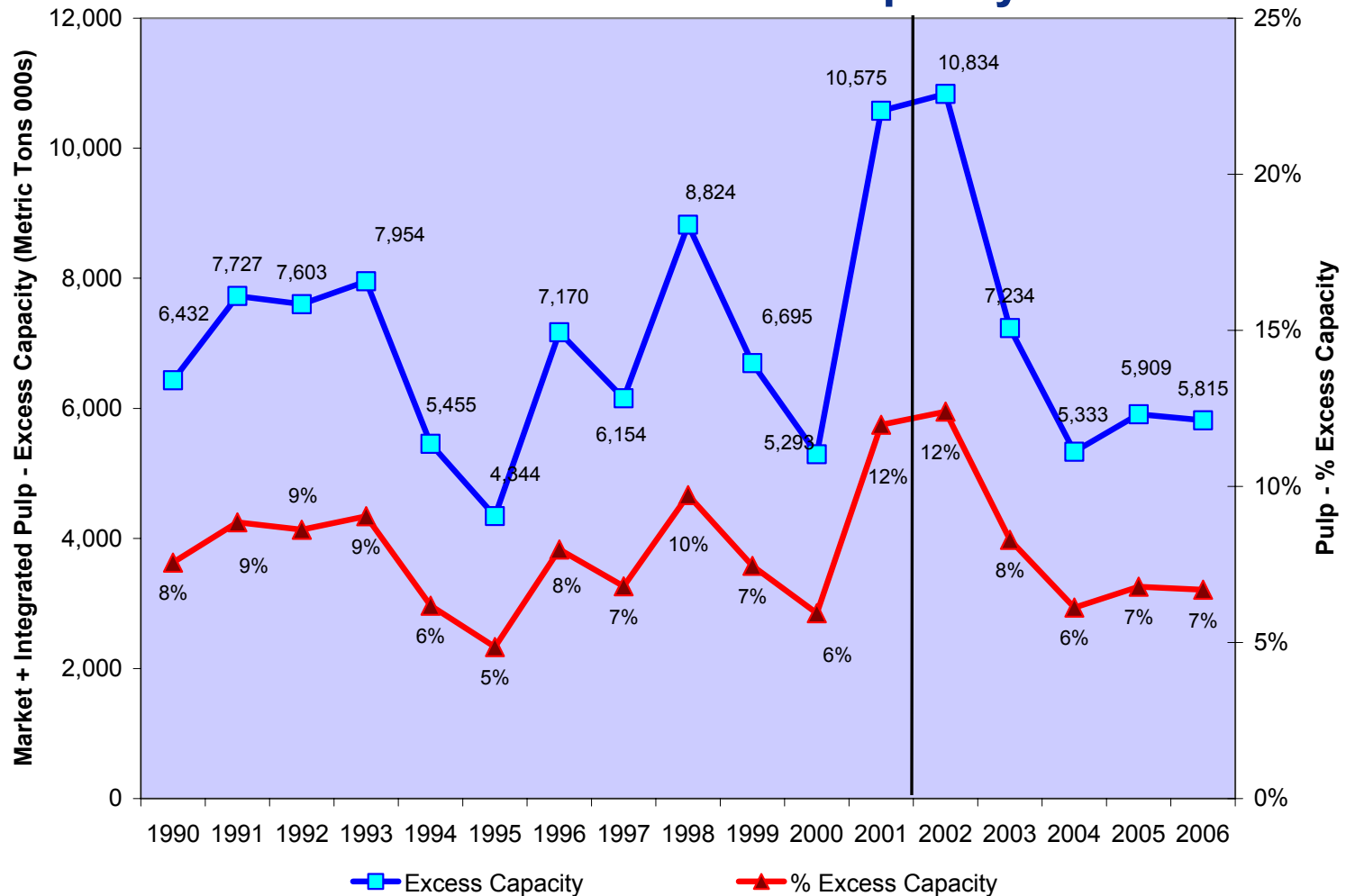
Pulp & Paper Outlook

NA Pulp Follows Other Grades



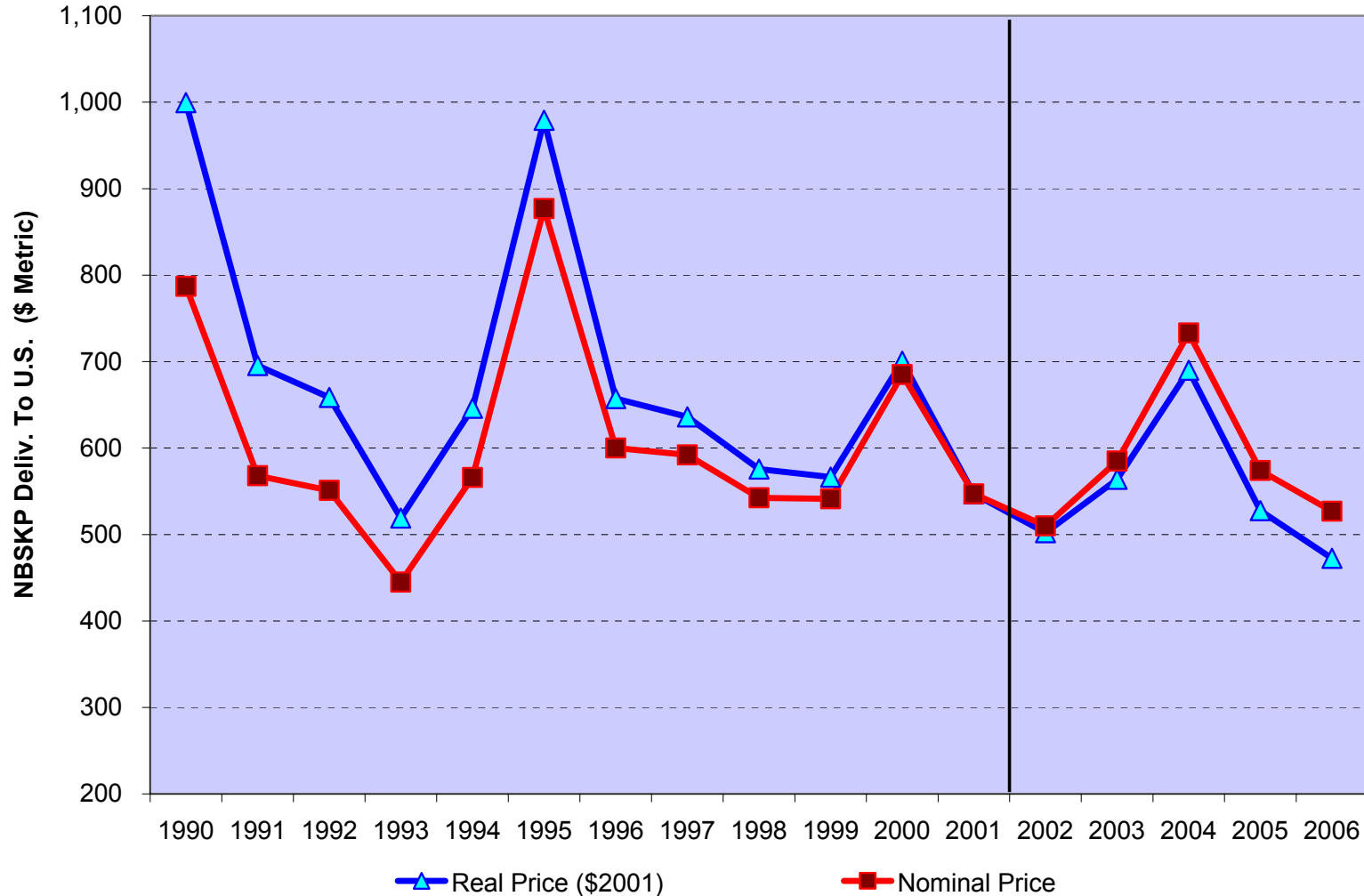
Pulp & Paper Outlook

Excess NA Pulp Capacity Will Be Eliminated By A Rebound In Demand & Closure of Capacity



Pulp & Paper Outlook

Prices Will Rise As Excess Capacity Is Made Productive



Pulp & Paper Outlook

Europe:

- The European pulp and paper industry is less mature than North America. Per capita consumption is significantly lower than in the U.S. and Canada across all grades.
- In addition, the European market has a built in growth from developing countries in Eastern Europe.
- Overall demand for pulp and paper products will exhibit higher growth rates in Europe than North America. This will translate to relatively more attractive investment opportunities for producers and suppliers to the industry.
- This does not mean that the industry is without challenges. It is quickly transitioning from a collection of national companies to large European and global competitors.

Pulp & Paper Outlook

Market Characterization (Continued):

- Like North America, competitiveness is being pursued through restructuring, consolidation and asset rationalization.
- Major European industry participants will become stronger over time as they focus on global opportunities and realize the associated economies of scale.
- European economies have been marginally better than the U.S. over the last year. European and U.S. grade pricing generally move together. Like the U.S., European real prices are generally declining.
- However, falling financial returns and the absorption of recent expansions will depress short term investment activity.
- Further, growing international capacity threatens export markets.

Pulp & Paper Outlook

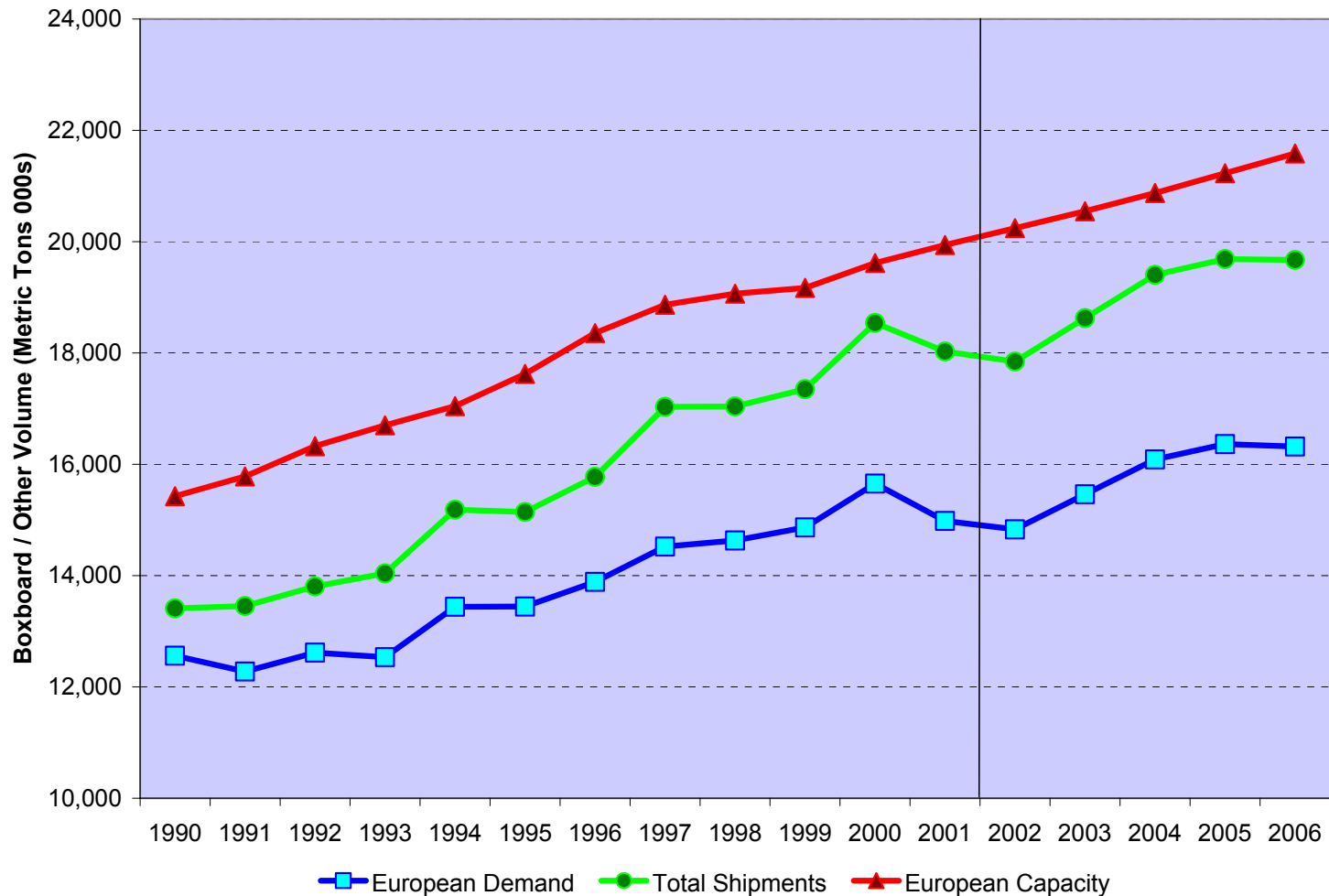
European Outlook

The net effect of these factors is continued expansion through 2006 at a slower rate than the last three years.

Grade Segment	Change In Capacity (Metric Tons 000s)	
	2000-2002	2003-2006
Boxboard	1,070	1,345
Containerboard	3,545	4,275
Newsprint	1,145	990
Printing & Writing	4,810	4,495
Tissue	694	1,010
Pulp	4,259	0
Total Change	15,523	12,115

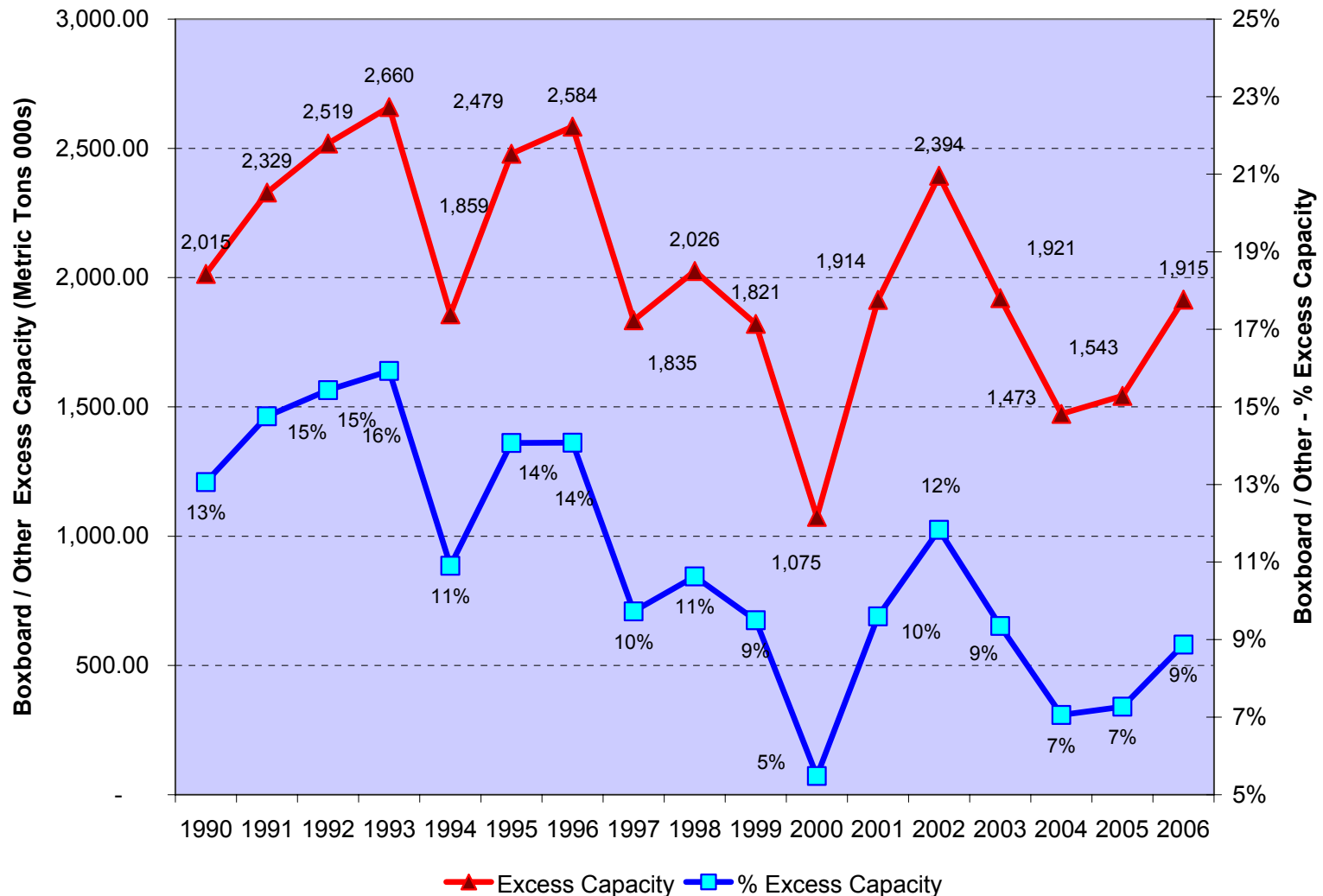
Pulp & Paper Outlook

Euro Boxboard Will Resume Growth After Declines In 2000 & 2001



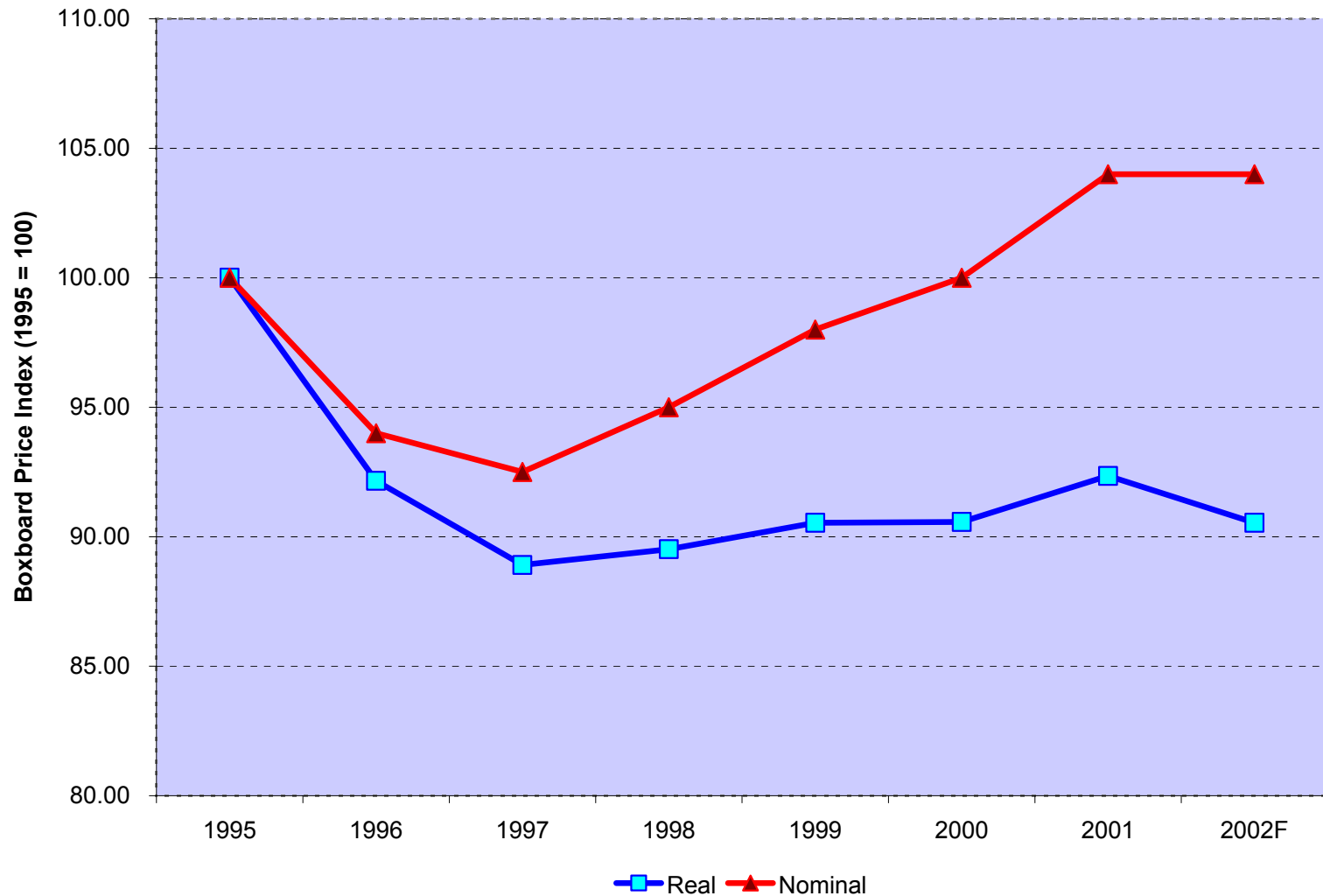
Pulp & Paper Outlook

Excess Euro Boxboard Capacity Is In Line With Historical Levels



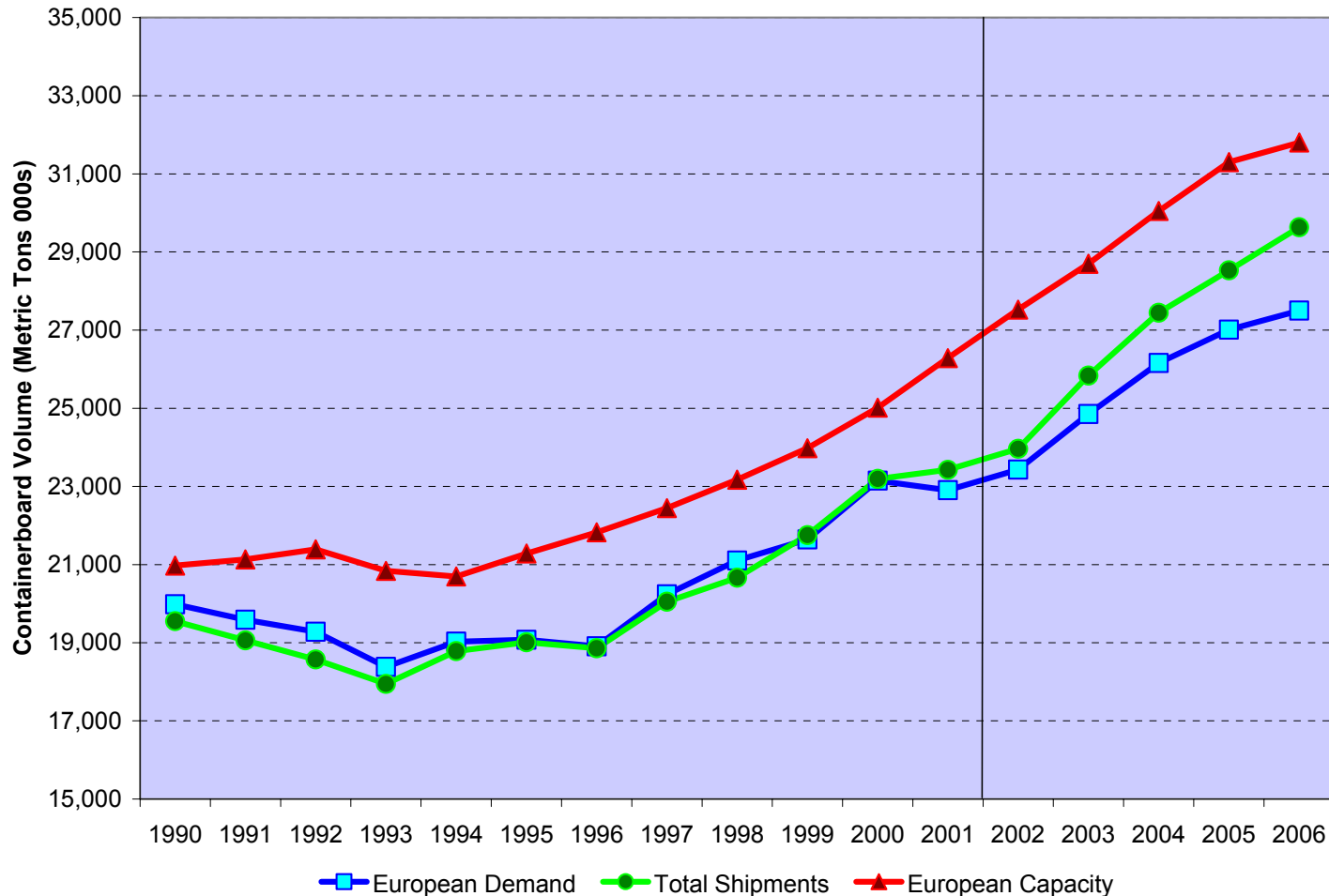
Pulp & Paper Outlook

Euro Real Boxboard Prices Are Flat



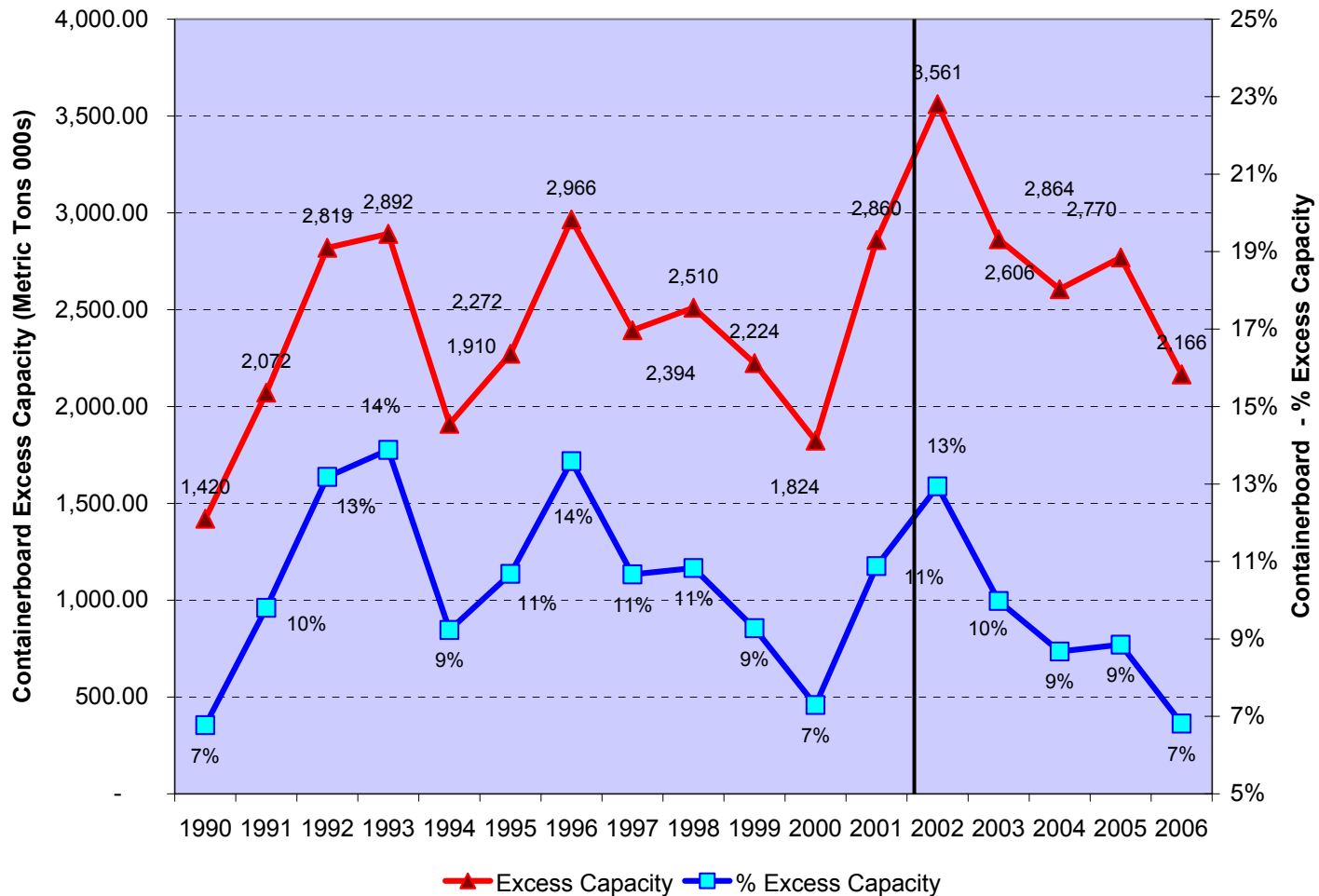
Pulp & Paper Outlook

Euro Containerboard Fundamentals Have Been Relatively Strong



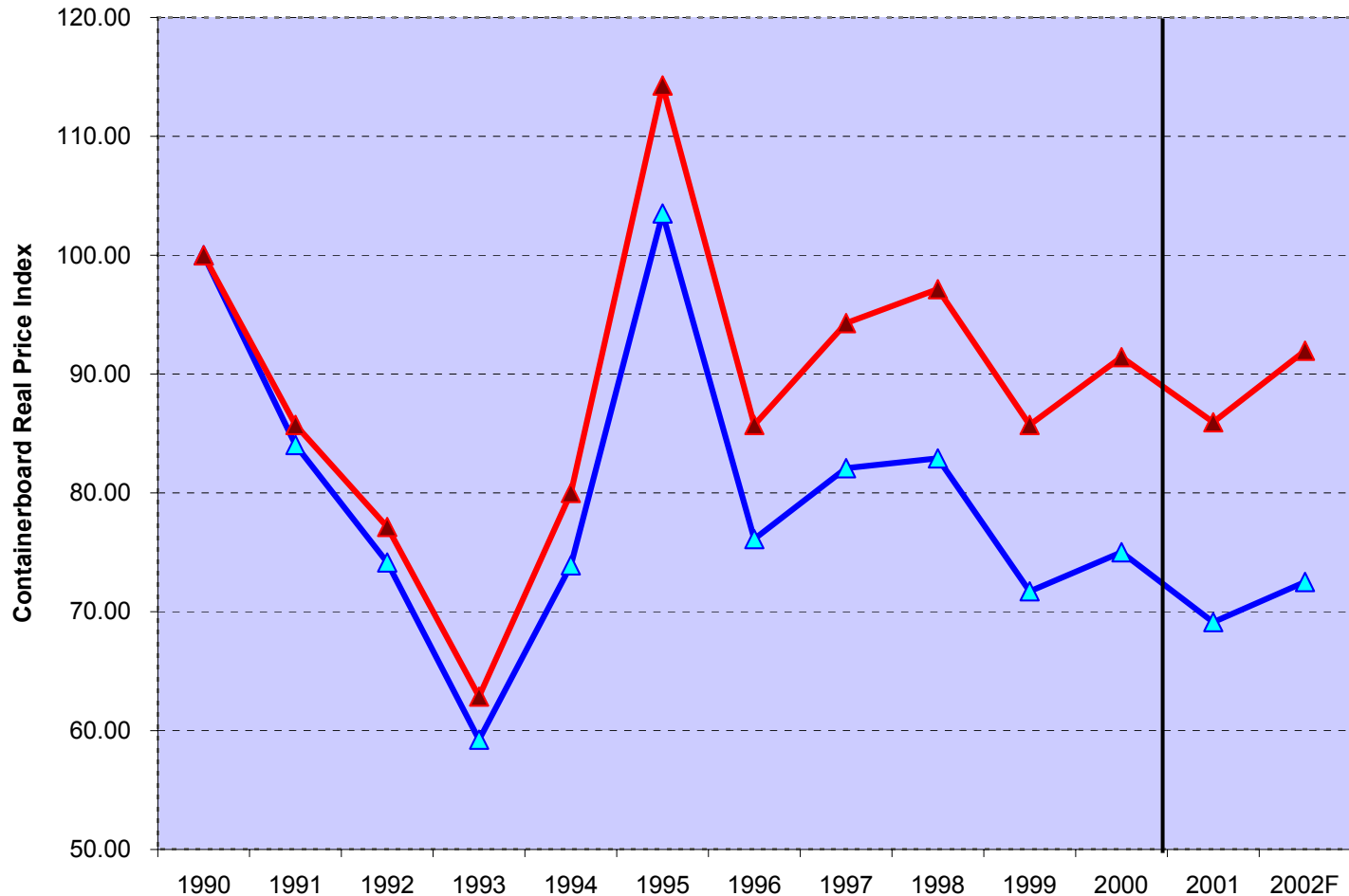
Pulp & Paper Outlook

Excess Euro Containerboard Capacity Appears Controlled



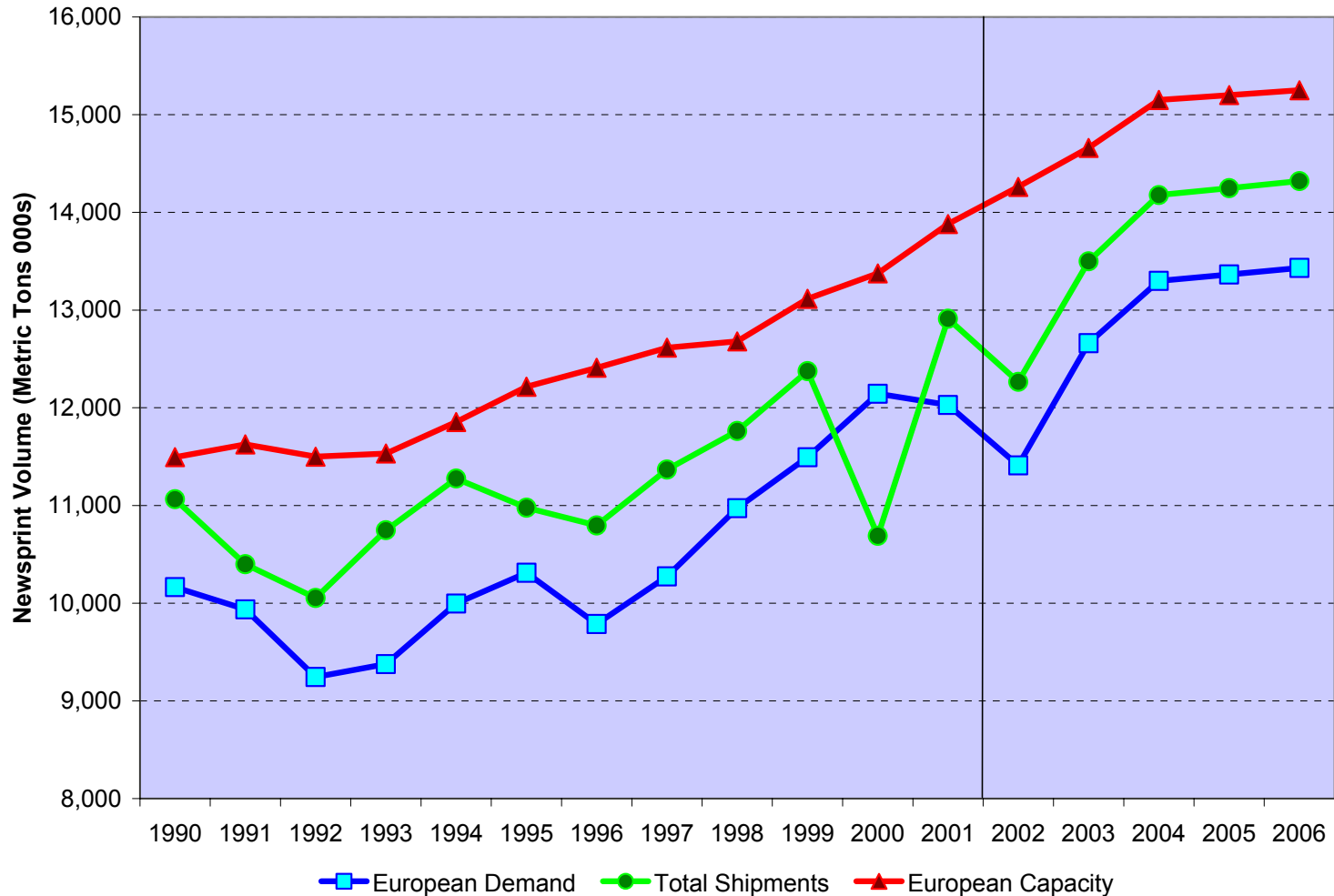
Pulp & Paper Outlook

Euro Containerboard Prices Are Trending Downward But Beginning a To Improve



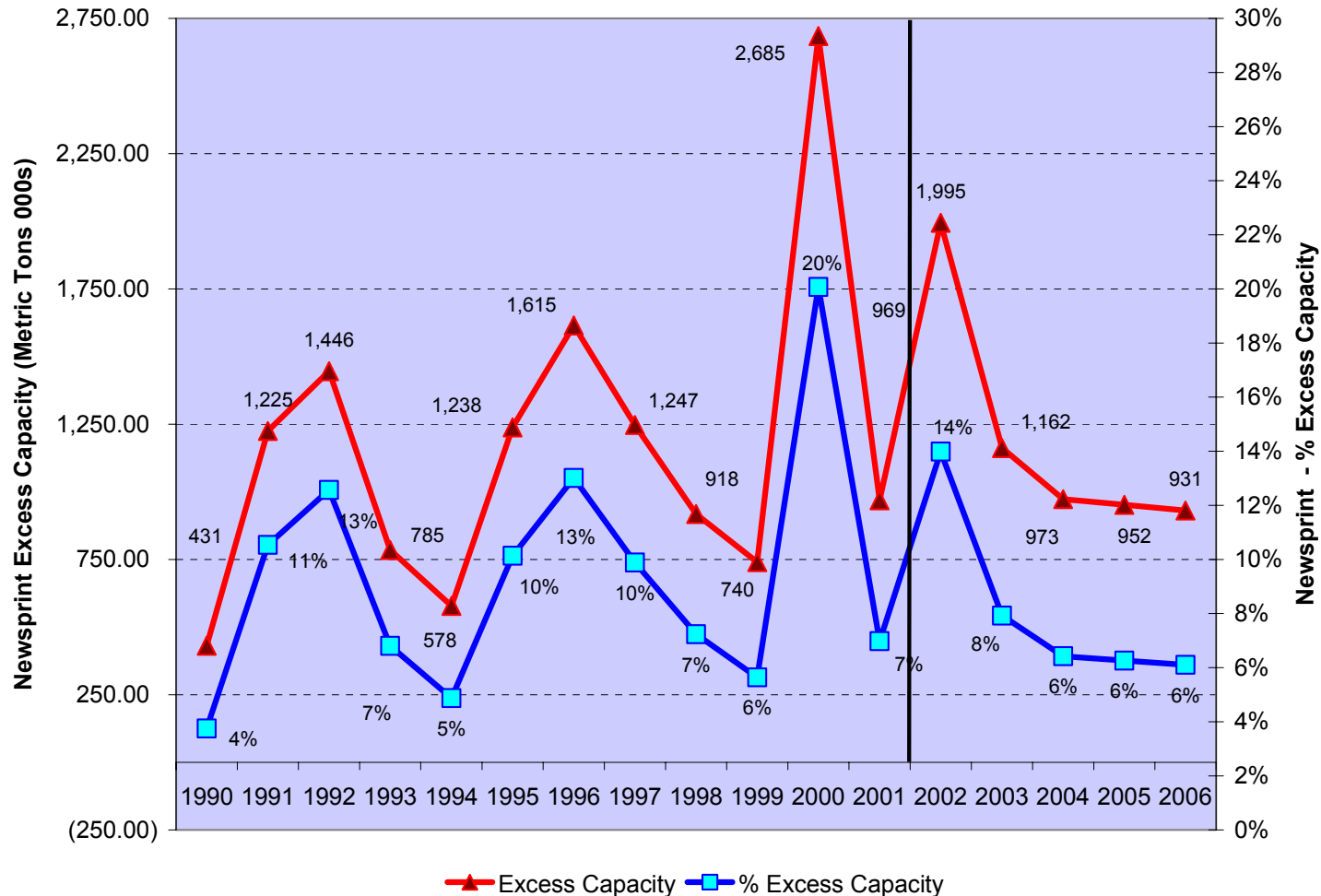
Pulp & Paper Outlook

Euro Newsprint Demand Will Recover In 2004 – But Long-term Declines Are Eventually Expected



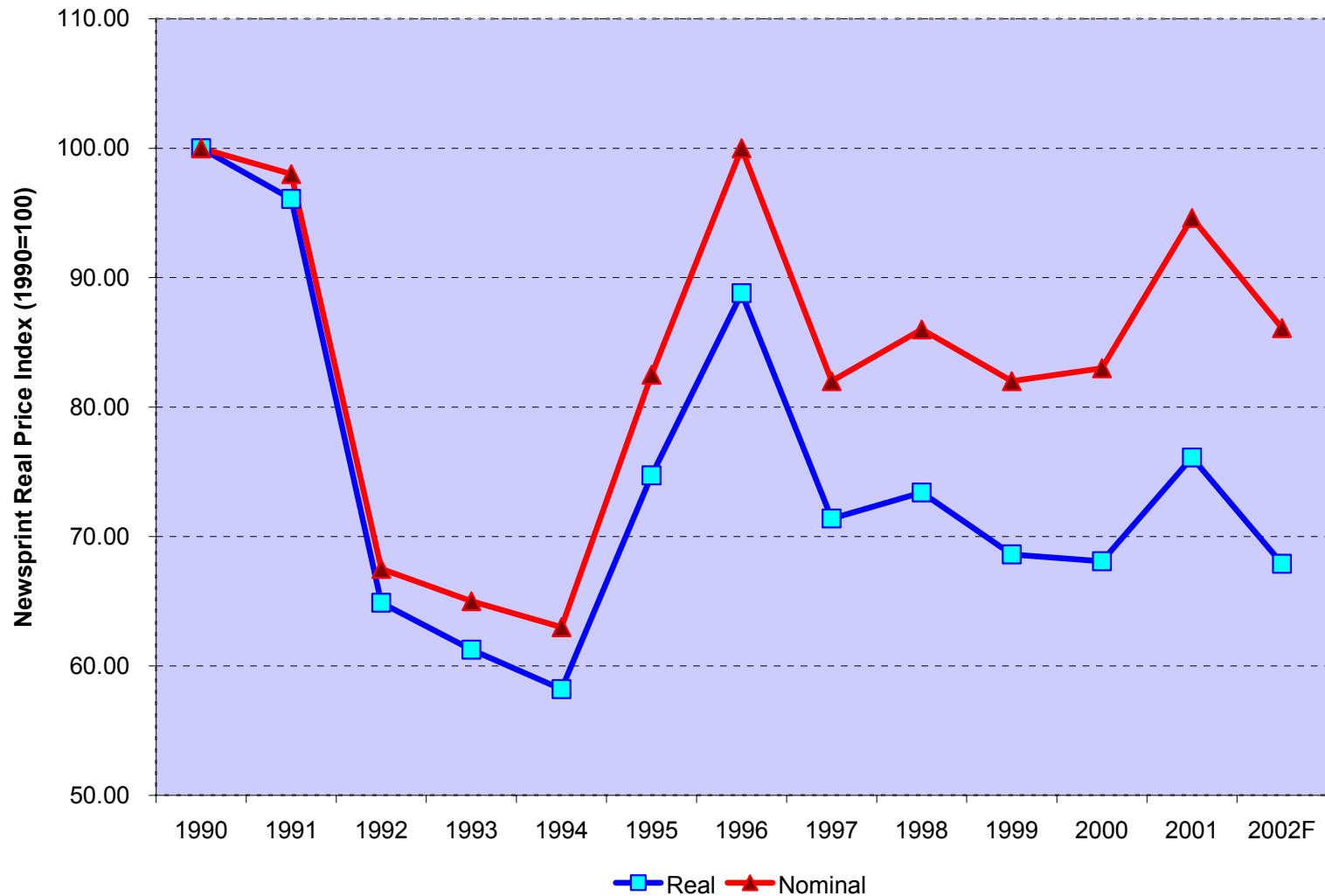
Pulp & Paper Outlook

Excess Euro Newsprint Capacity Will Reverse From All Time Highs As European Publishing Activity Increases



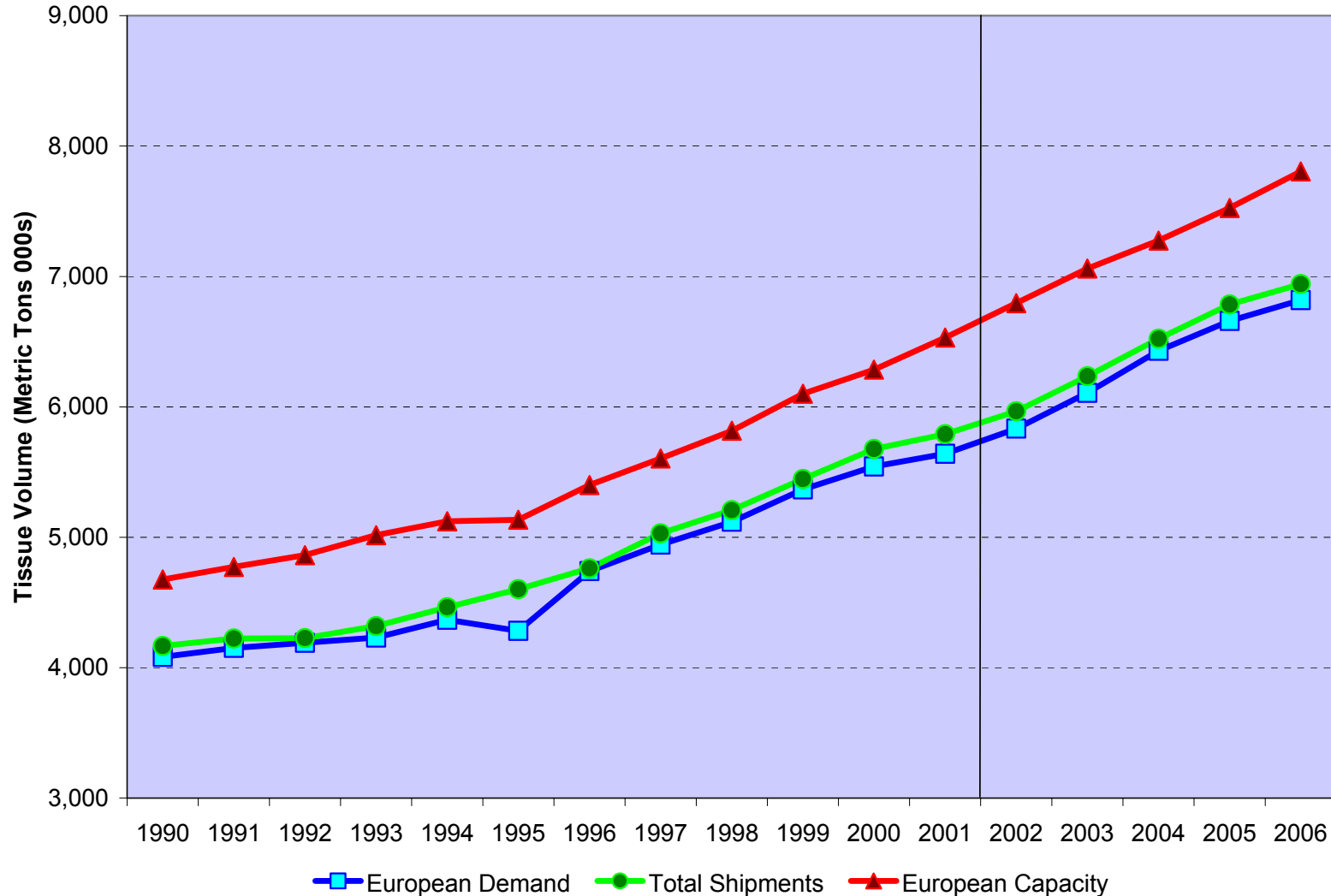
Pulp & Paper Outlook

Real Euro Newsprint Prices Are Falling



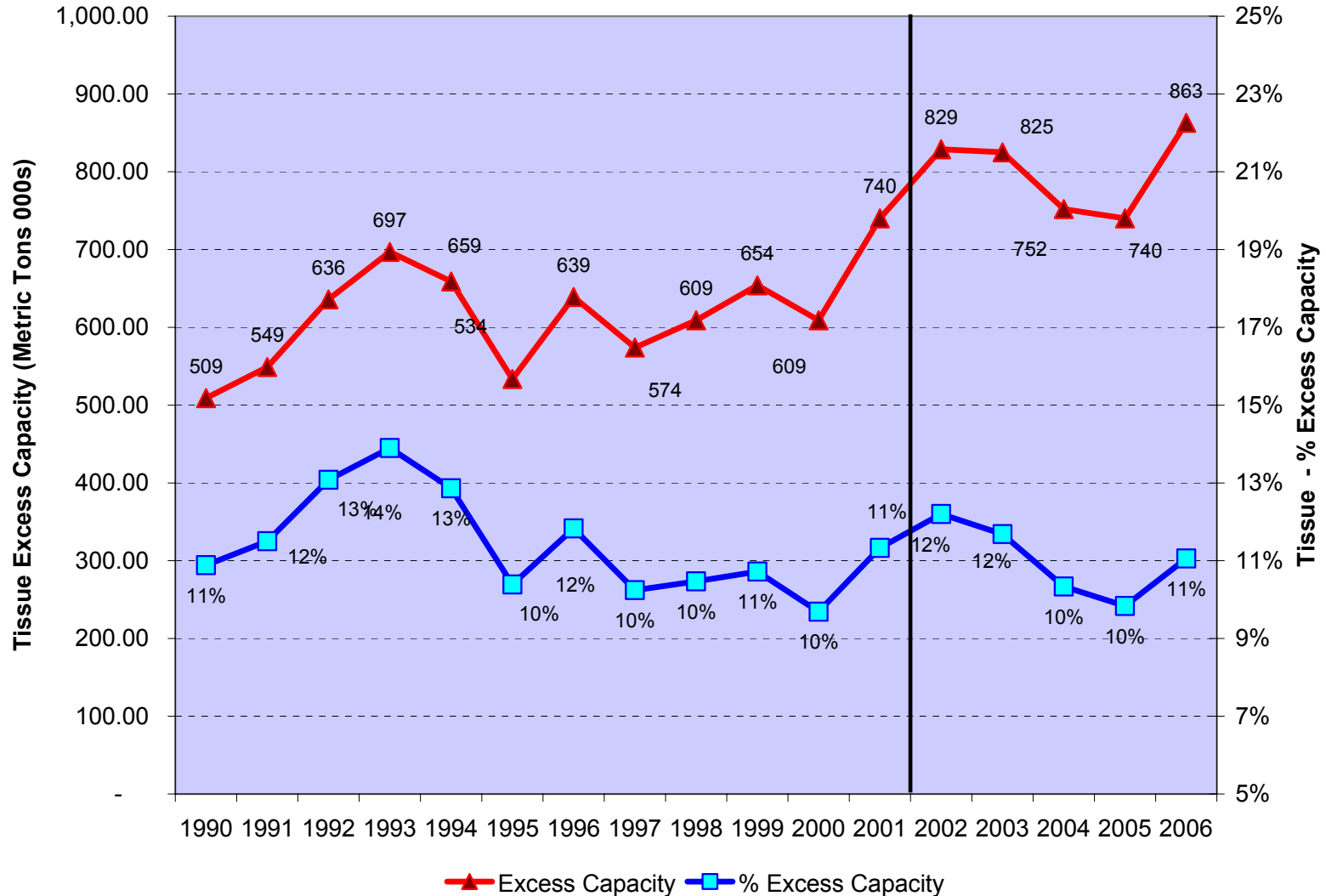
Pulp & Paper Outlook

The Euro Tissue Segment Will Continue Its Steady Growth



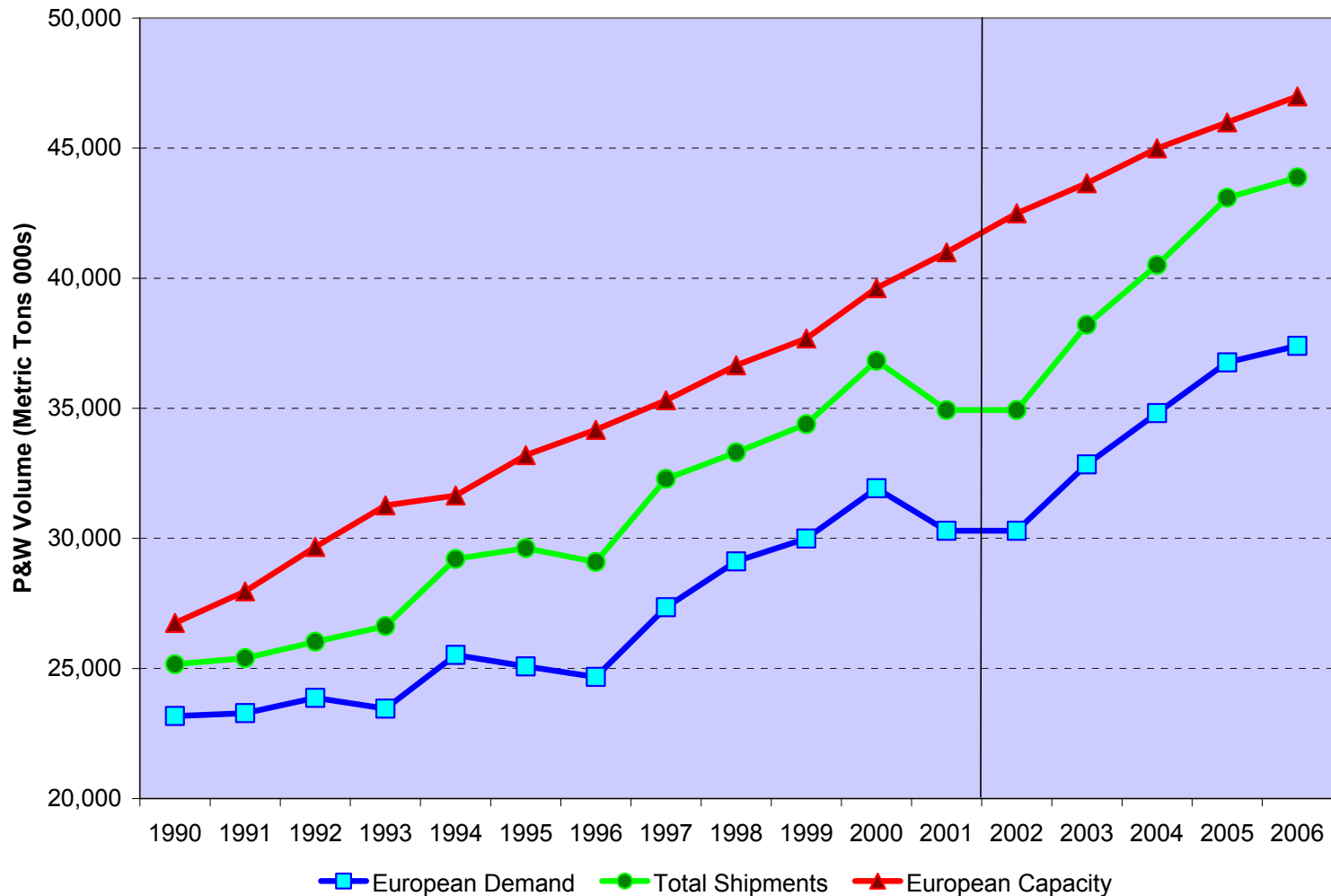
Pulp & Paper Outlook

Excess Euro Tissue Capacity Appears Controlled



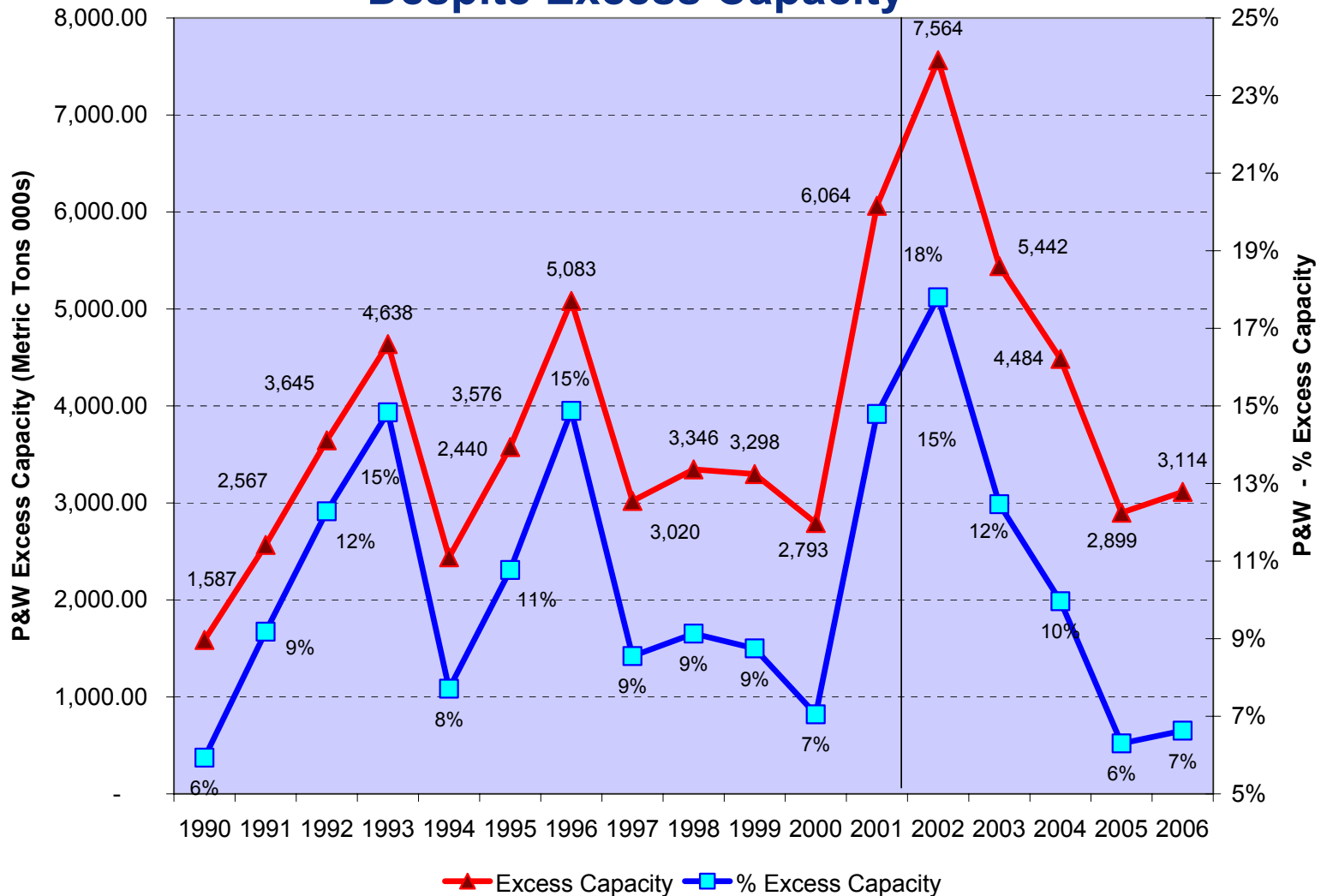
Pulp & Paper Outlook

The Euro P&W Segment Is Maturing



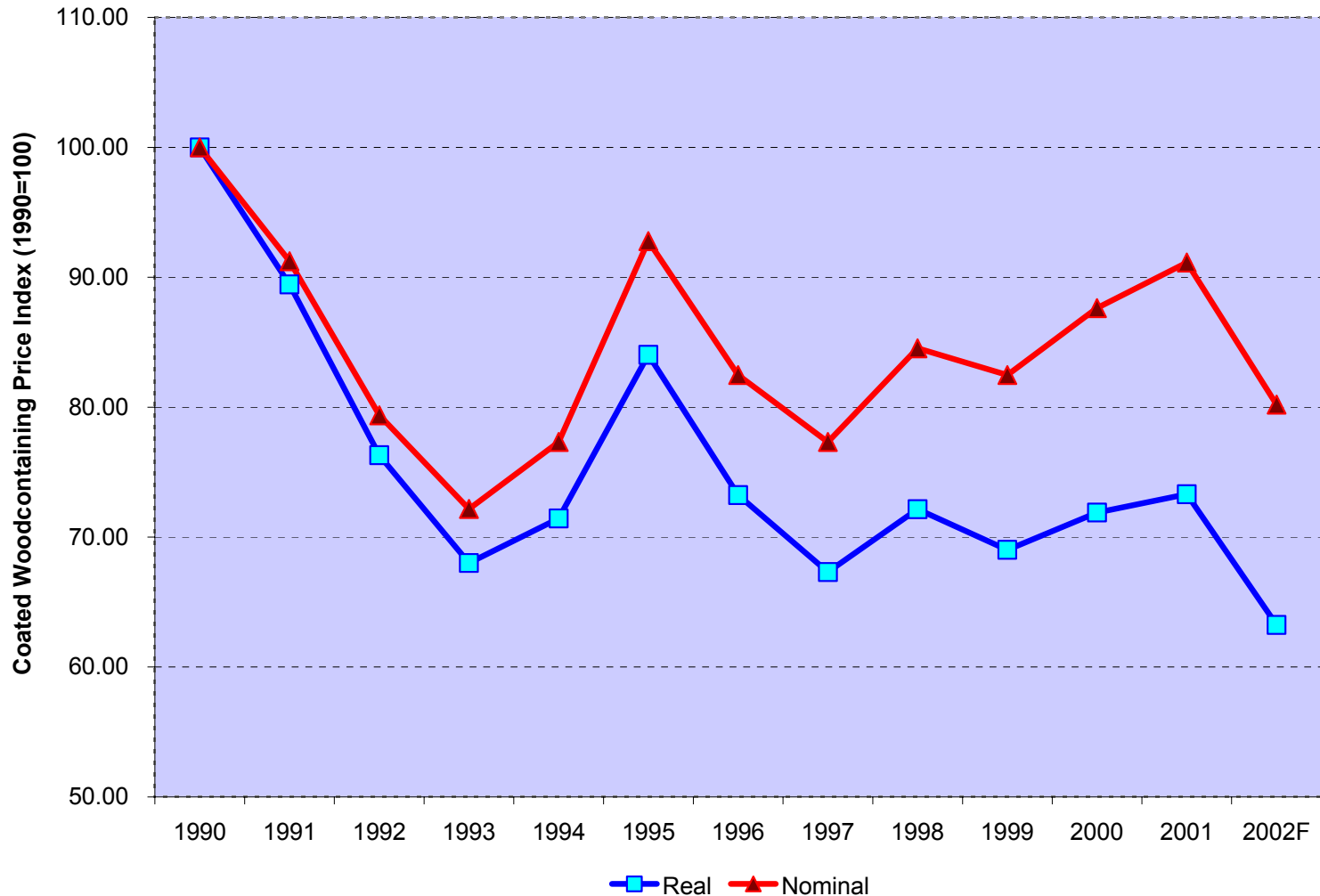
Pulp & Paper Outlook

Planned Euro P&W Expansions Continue Despite Excess Capacity



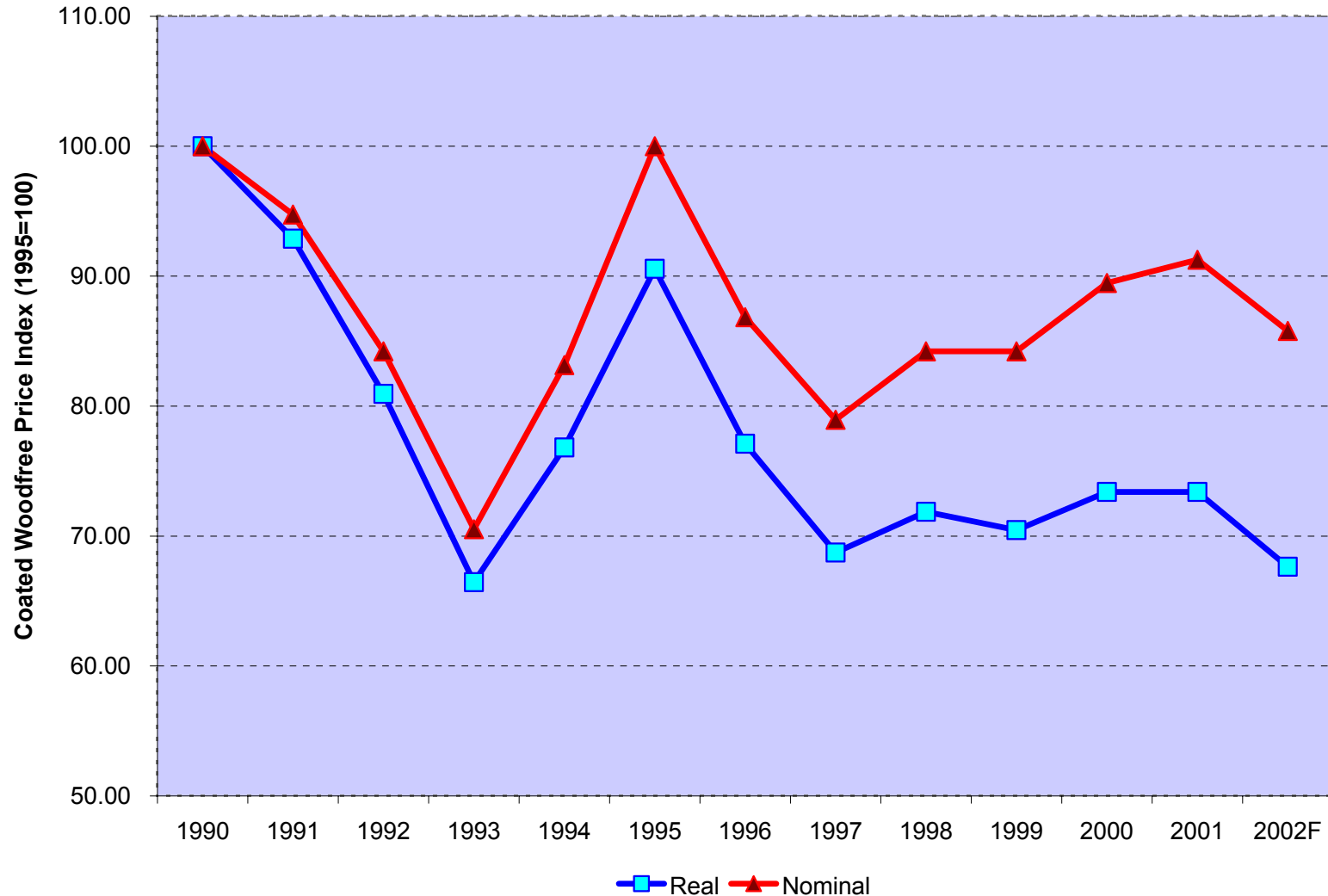
Pulp & Paper Outlook

Real Euro Woodcontaining Coated Prices Are Dropping To New Lows



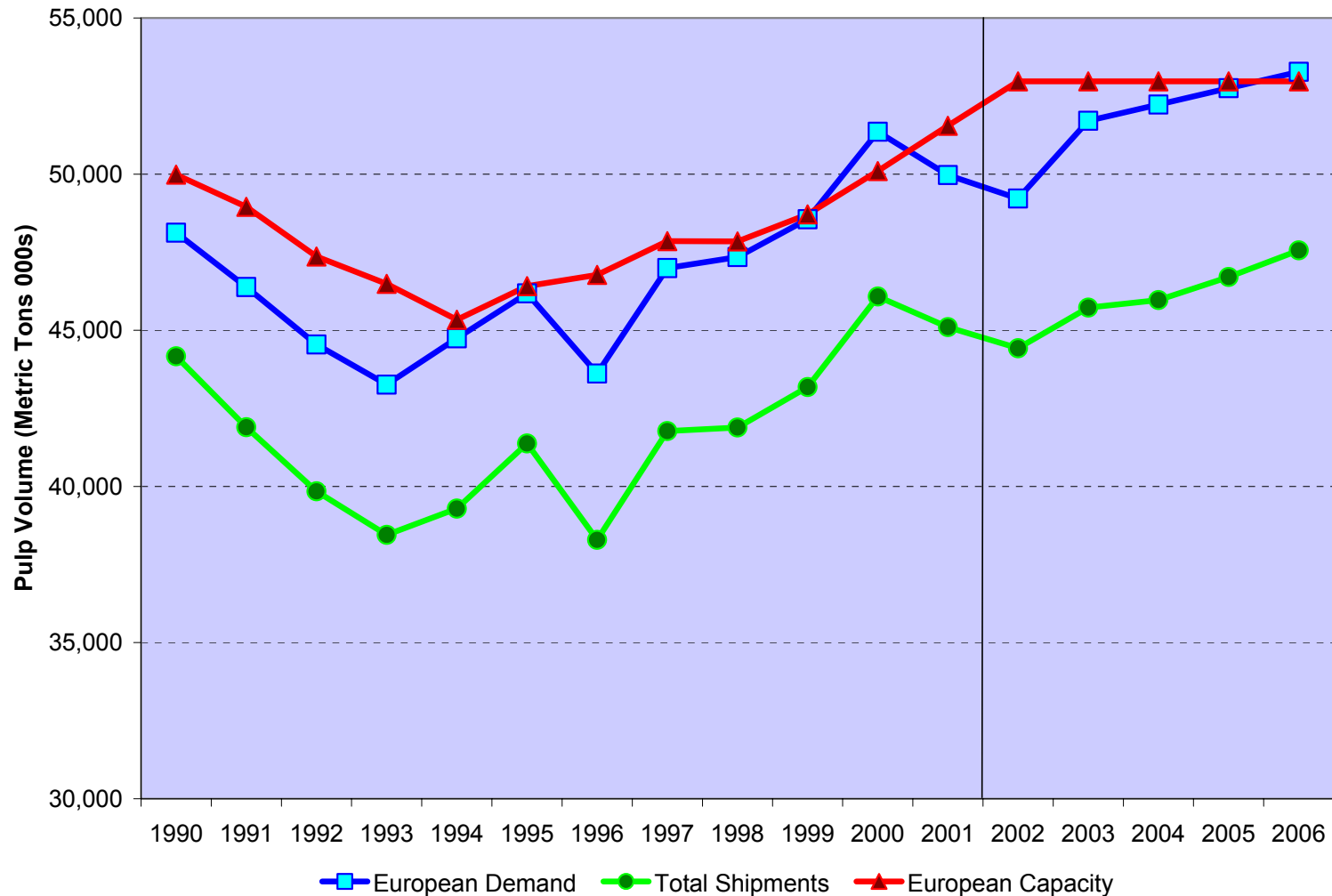
Pulp & Paper Outlook

Real Euro Woodfree Coated Prices Are Dropping



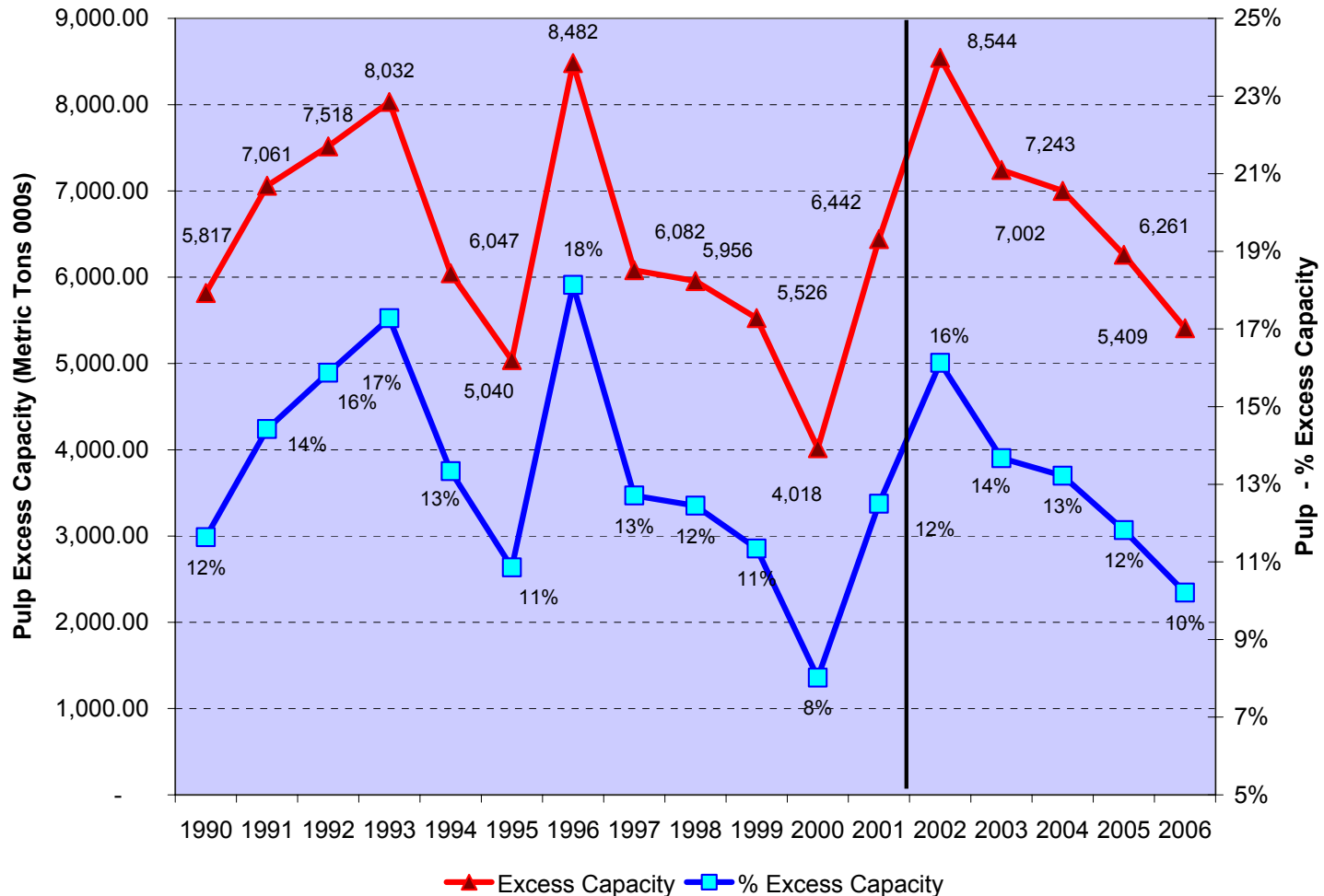
Pulp & Paper Outlook

Euro Pulp Follows Other Paper & Board Grades



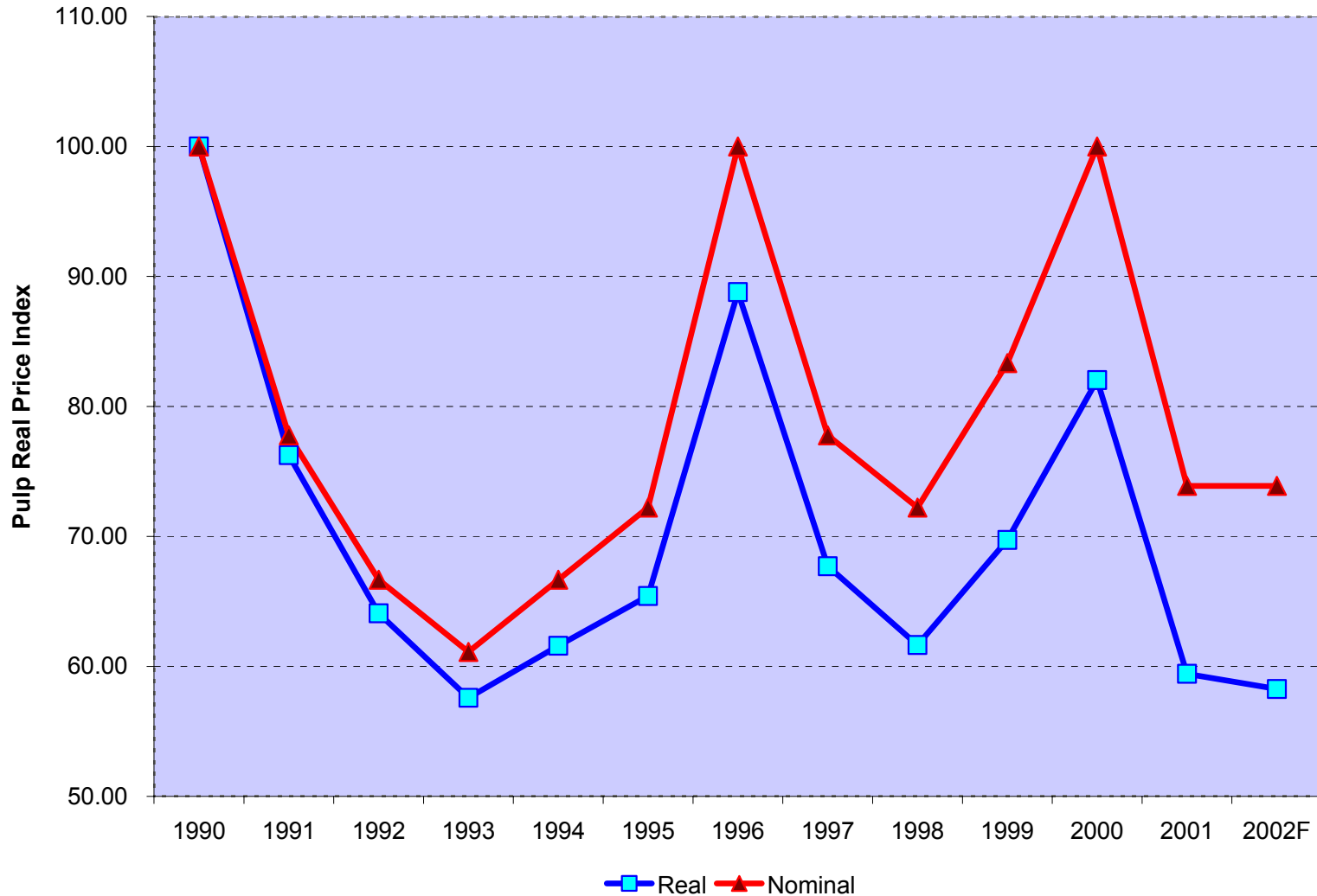
Pulp & Paper Outlook

Euro Pulp Capacity Will Come Back In Line With Demand In 2004-2005



Pulp & Paper Outlook

Real Euro Pulp Prices Appear To Have Hit Bottom



Capital Spending Outlook

Capital Spending Outlook

U.S. Capital Spending Outlook:

- U.S. capital expenditures will continue to be depressed by poor financial performance and the slowing of capacity growth
- Merger and acquisition activity has crowded out capital expenditures on property, plant and equipment (PPE) over the last 5 years. This trend should ease within the largest companies due to antitrust constraints.
- However, asset swaps and business-line spin-offs are likely to accelerate as well as consolidation among second-tier players.
- There is also a risk that unexpected international acquisitions activity will interrupt capital spending patterns.
- Overall, the net M&A impact should be better for capital spending than the last 5 years – but not enough to offset weak investment fundamentals.

Capital Spending Outlook

U.S. Capital Spending Outlook:

- The combination of economic, pulp and paper market and financial / investment realities drove U.S. capital expenditures down from \$8.1 billion in 2000 to \$6.9 billion in 2001.
- 2002 capital expenditures will fall again to \$5.9 billion and cycle between \$6.0 billion and \$8.5 billion through 2006.
- These historical trends and projections are summarized in the following table and graphs.

Capital Spending Outlook

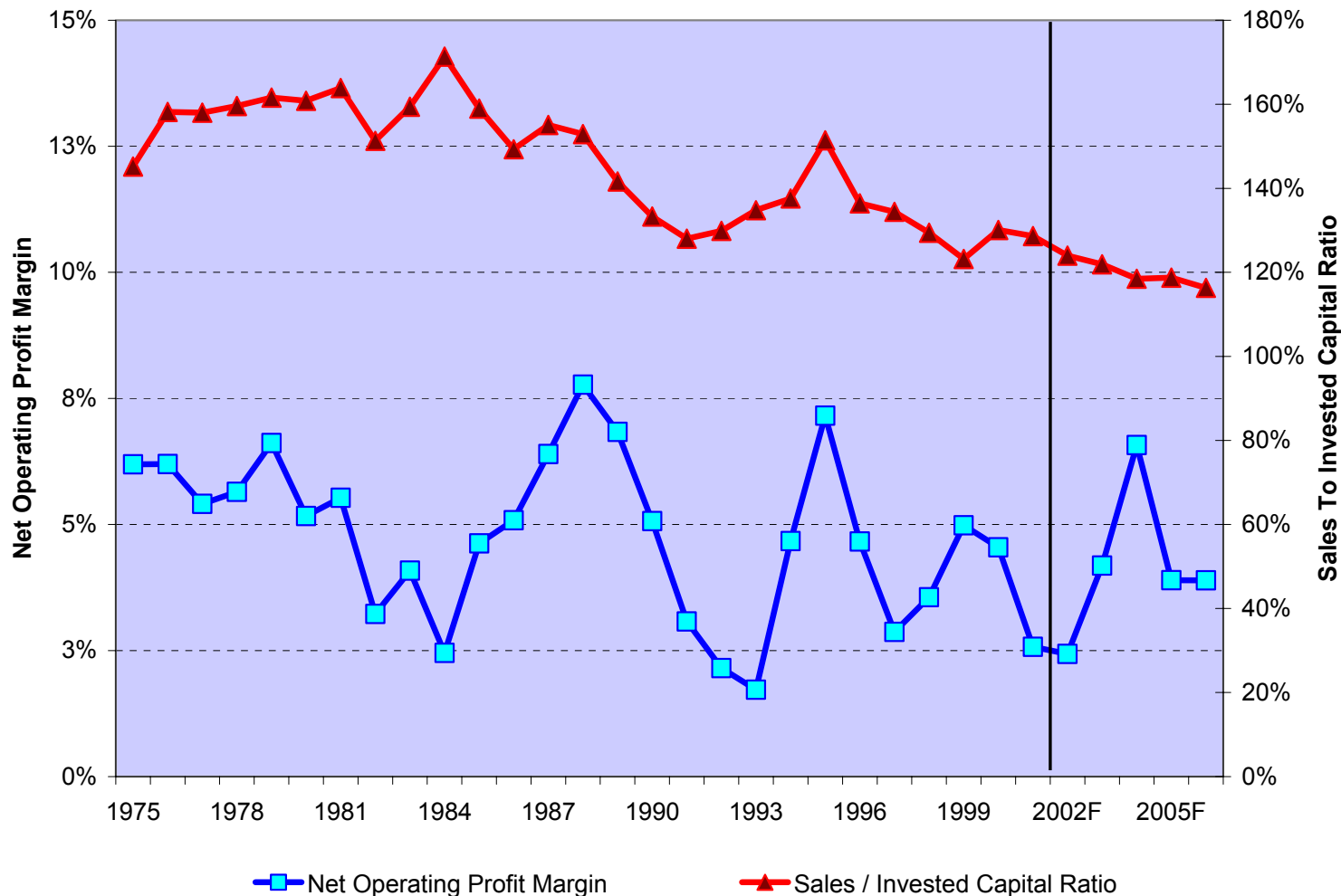
U.S. Capital Spending Outlook:

Capital Expenditures On Pulp & Paper Property, Plant & Equipment (Nominal \$ Millions)

	1999	2000	2001P	2002F	2003F	2004F	2005F	2006F
Expected Expenditures	7,051	8,144	6,906	5,870	6,000	7,400	8,510	7,300
Expected - High				6,164	6,900	8,510	9,787	8,395
Expected - Low				5,577	5,100	6,290	7,234	6,205
Primary Pulp & Paper	4,470	5,163	4,378	3,793	3,819	4,715	5,431	4,666
Converting	2,581	2,981	2,528	2,077	2,181	2,685	3,079	2,634

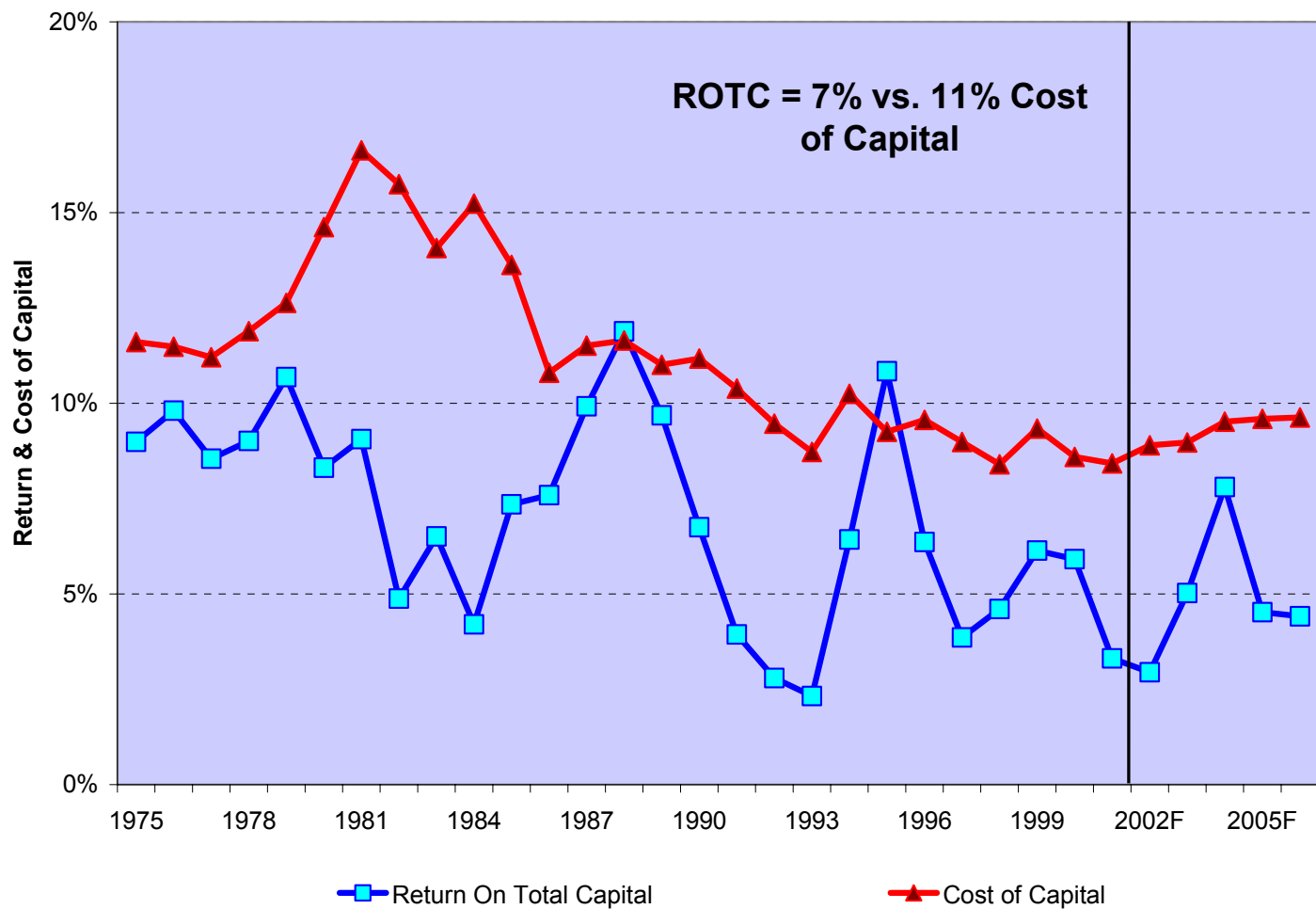
Capital Spending Outlook

U.S. Pulp & Paper Profitability and Capital Turnover Will Continue Their Downward Trend



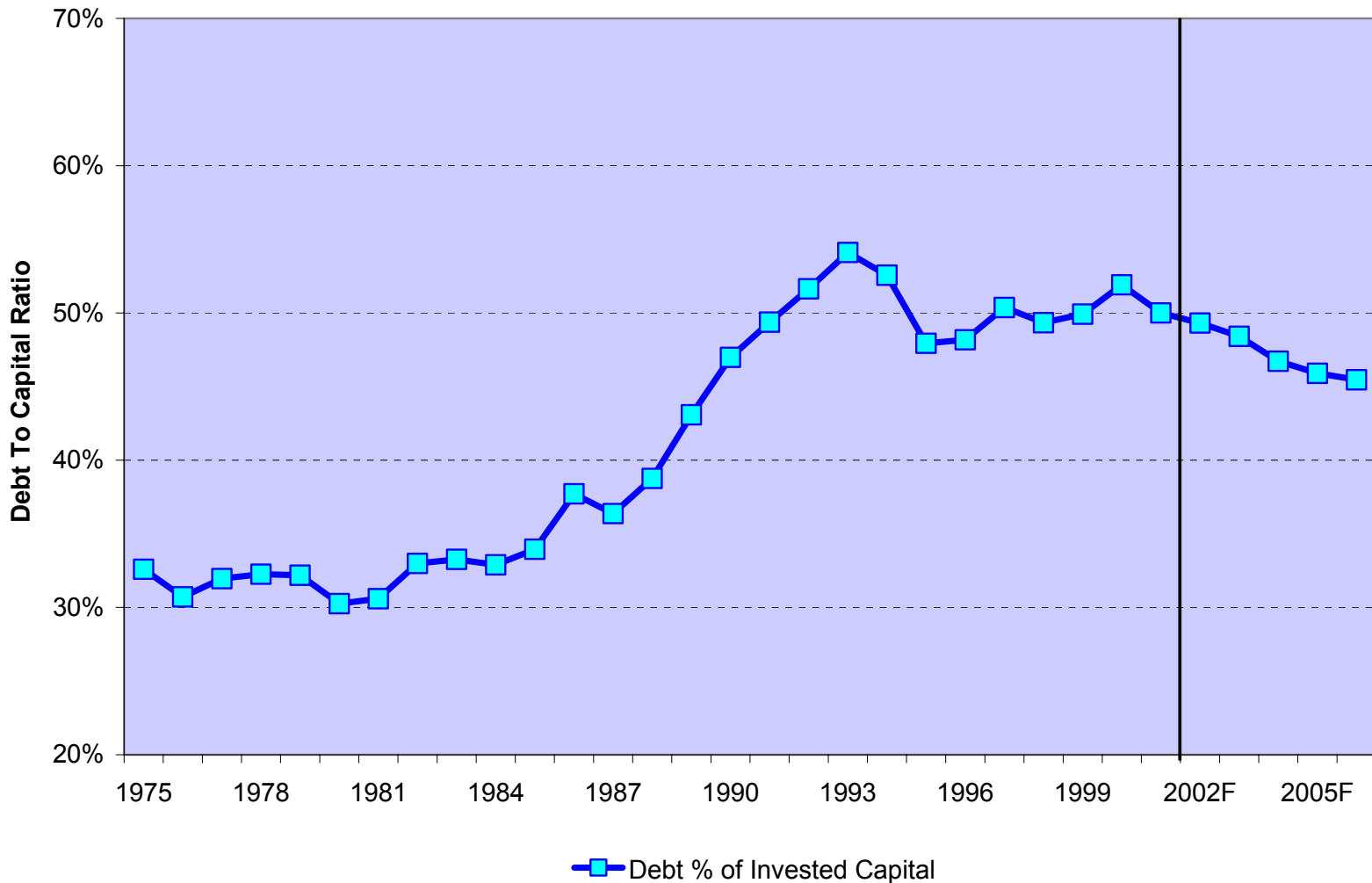
Capital Spending Outlook

Rational Investors Will Not Allocate Capital To The Poorly Performing U.S. Pulp & Paper Industry



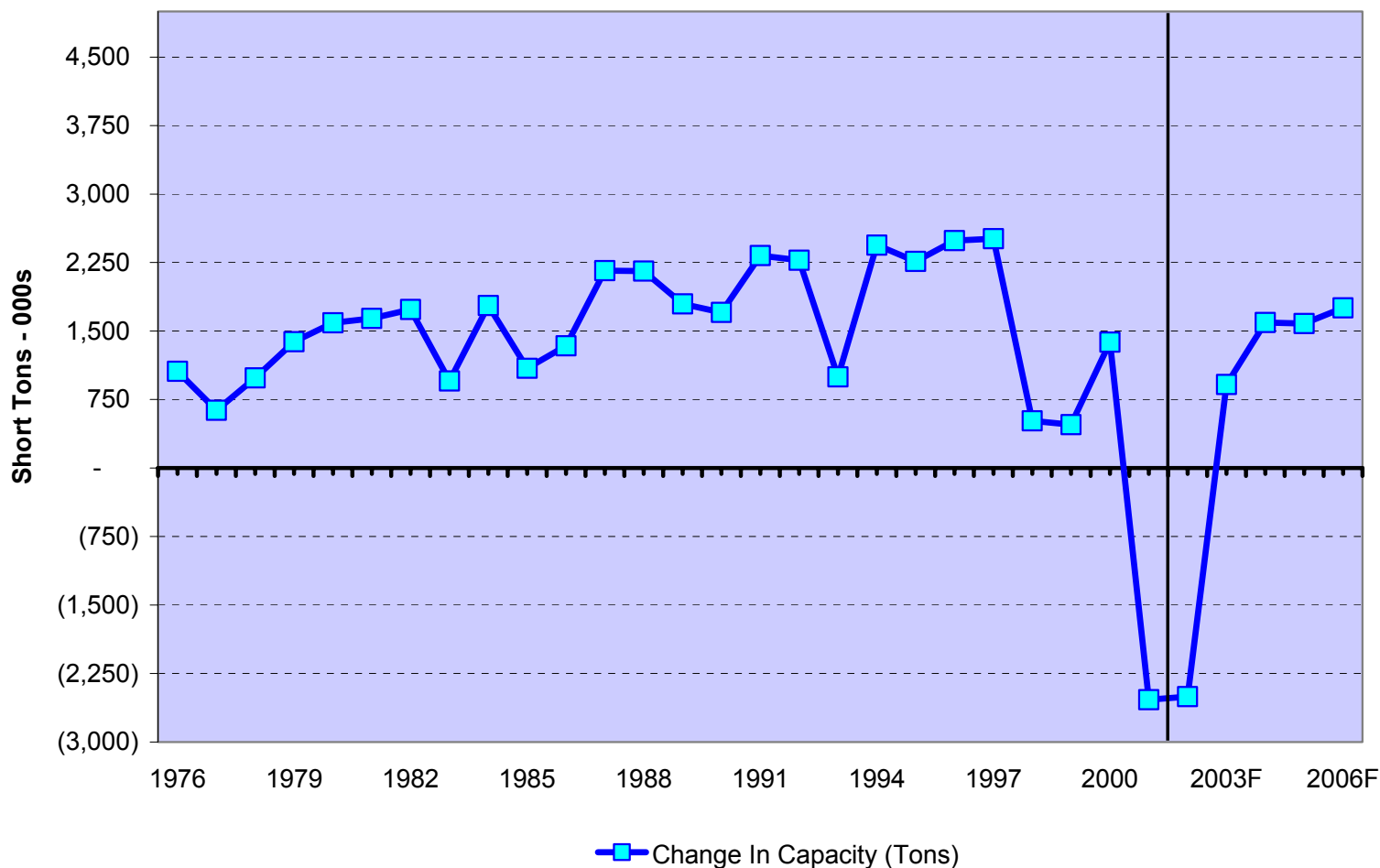
Capital Spending Outlook

U.S. Companies Are Making Debt Reduction A Priority



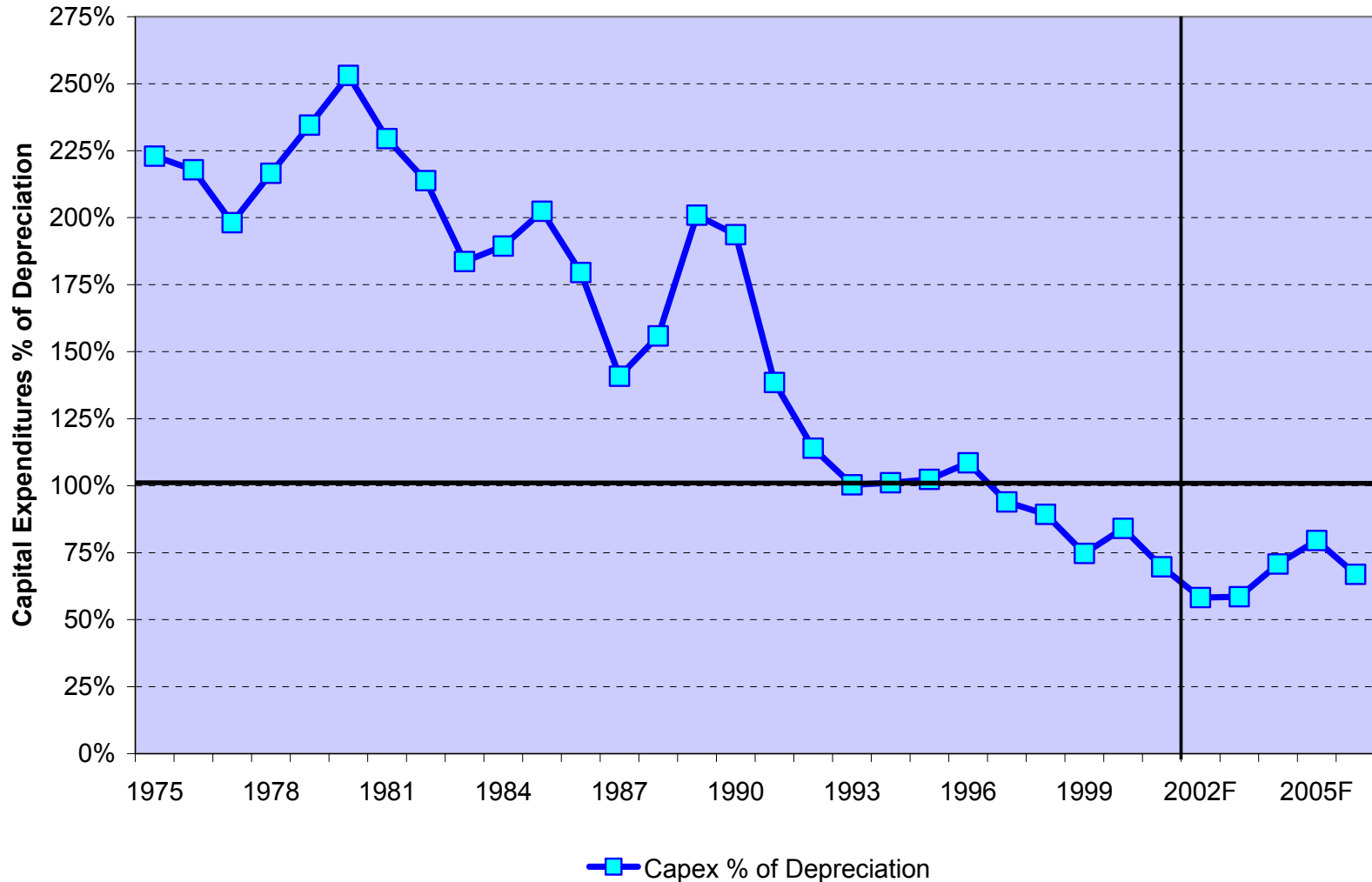
Capital Spending Outlook

**Total U.S. Paper & Board Capacity Will Resume Growth
– But At ½ Its Historical Rate**



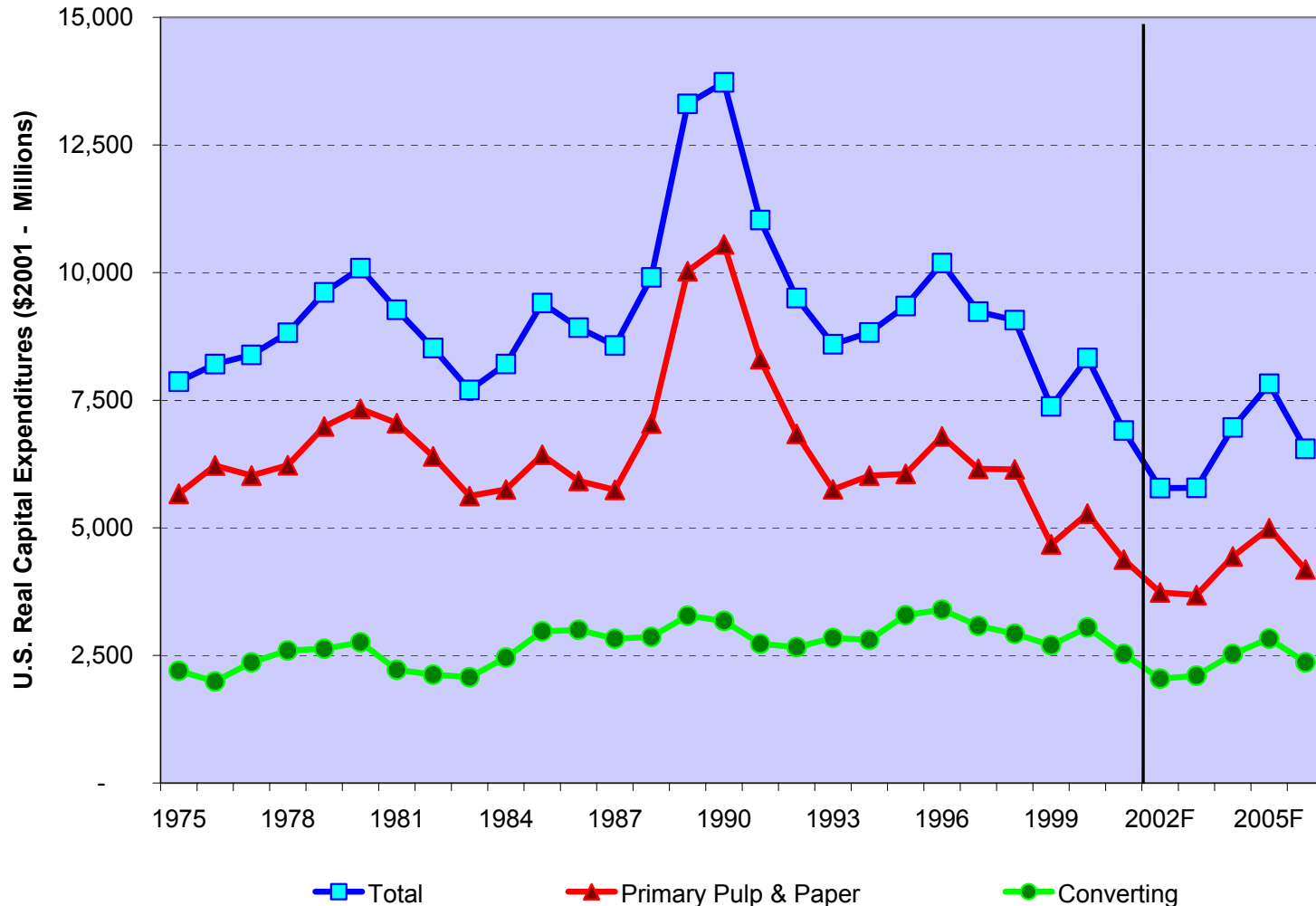
Capital Spending Outlook

U.S. Capital Expenditures Will Remain Below Depreciation Levels



Capital Spending Outlook

Real U.S. Pulp & Paper Capital Expenditures Will Continue To Languish Until The Cyclical Recovery Circa 2003 / 2004



Capital Spending Outlook

European Capital Spending Outlook:

- The fundamentals for capital spending on pulp and paper PPE are stronger in Europe than in the U.S.
- The combination of the weak global economy, increased Asian and Latin American competition, short-term over-capacity and M&A activity will drive European pulp and paper capital expenditures down from \$3.9 billion Euros in 2001 to \$3.2 billion Euros in 2002.
- Europe will begin a cyclical recovery in 2003 and capital expenditures will average 4.0 billion Euros per year between through 2004 and 2006.
- Continued capacity expansion will overcome spending reduction pressures from marginal performance to increase / maintain overall capital spending levels.
- However, there is a significant risk that planned capacity expansions will be delayed – driving down capital expenditures.

Capital Spending Outlook

European Capital Spending Outlook:

- The European pulp and paper market is similar to the U.S. market in the 70s and 80s - growth is expected to decline and significant market share be taken by Asian based production.
- European producers are somewhat better positioned to defend against the Asian expansion due to close relationships with Scandinavian based technology suppliers and greater geographic diversification than their North American counterparts.
- This geographic diversification includes a greater deal of European than U.S. equity ownership in Asian capacity.
- The net capital spending outlook is summarized on the following tables and graphs.

Capital Spending Outlook

European Capital Spending Outlook:

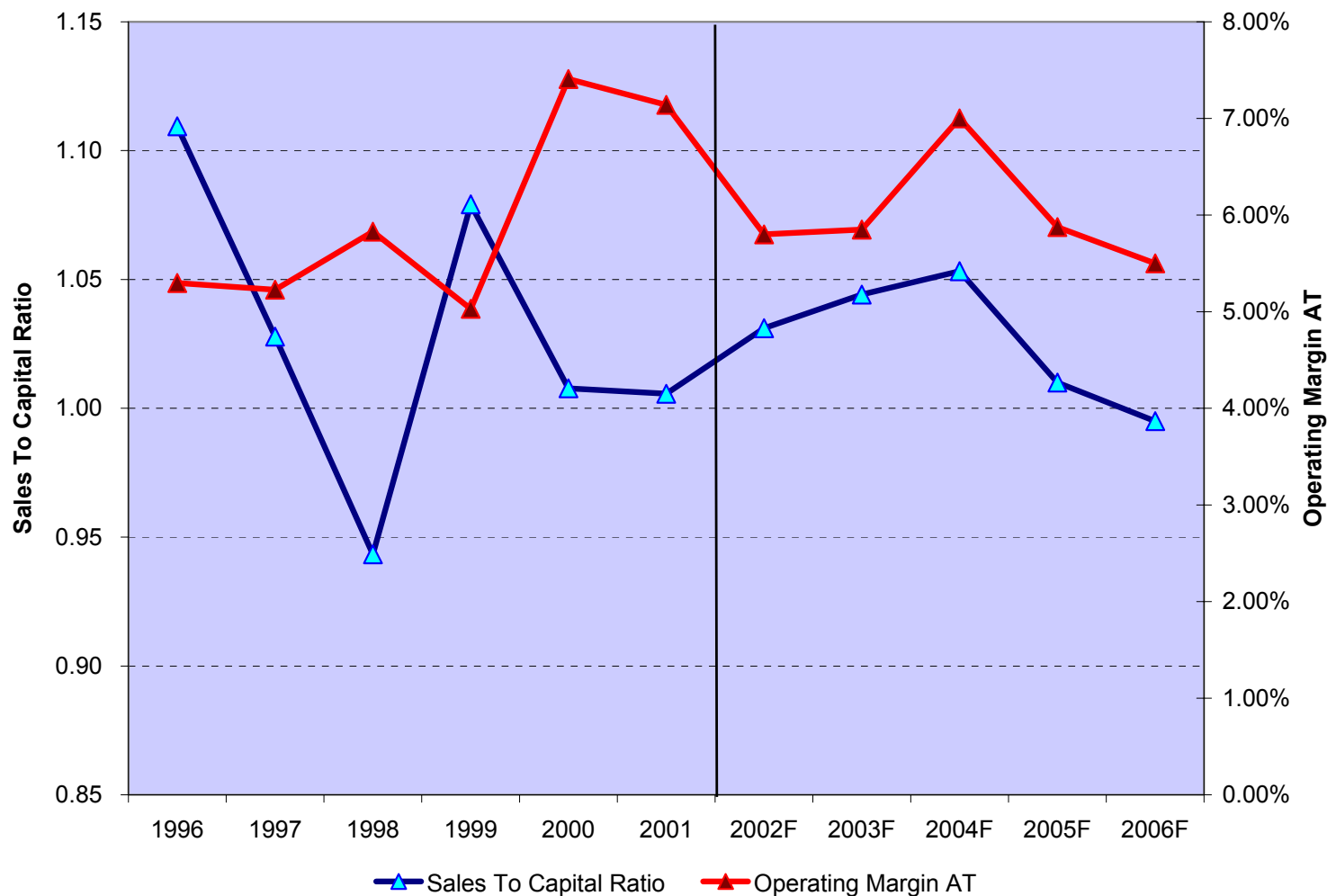
Capital Expenditures On Pulp & Paper Property, Plant & Equipment (Nominal Euros - Millions)

	1999	2000	2001	2002F	2003F	2004F	2005F	2006F
Expected Expenditures	4,280	4,053	3,940	3,231	3,100	4,116	4,039	3,902
Expected - High				3,392	3,410	4,527	4,443	4,292
Expected - Low				3,069	2,790	3,704	3,635	3,512

Note: Capital expenditures of CEPI members only.

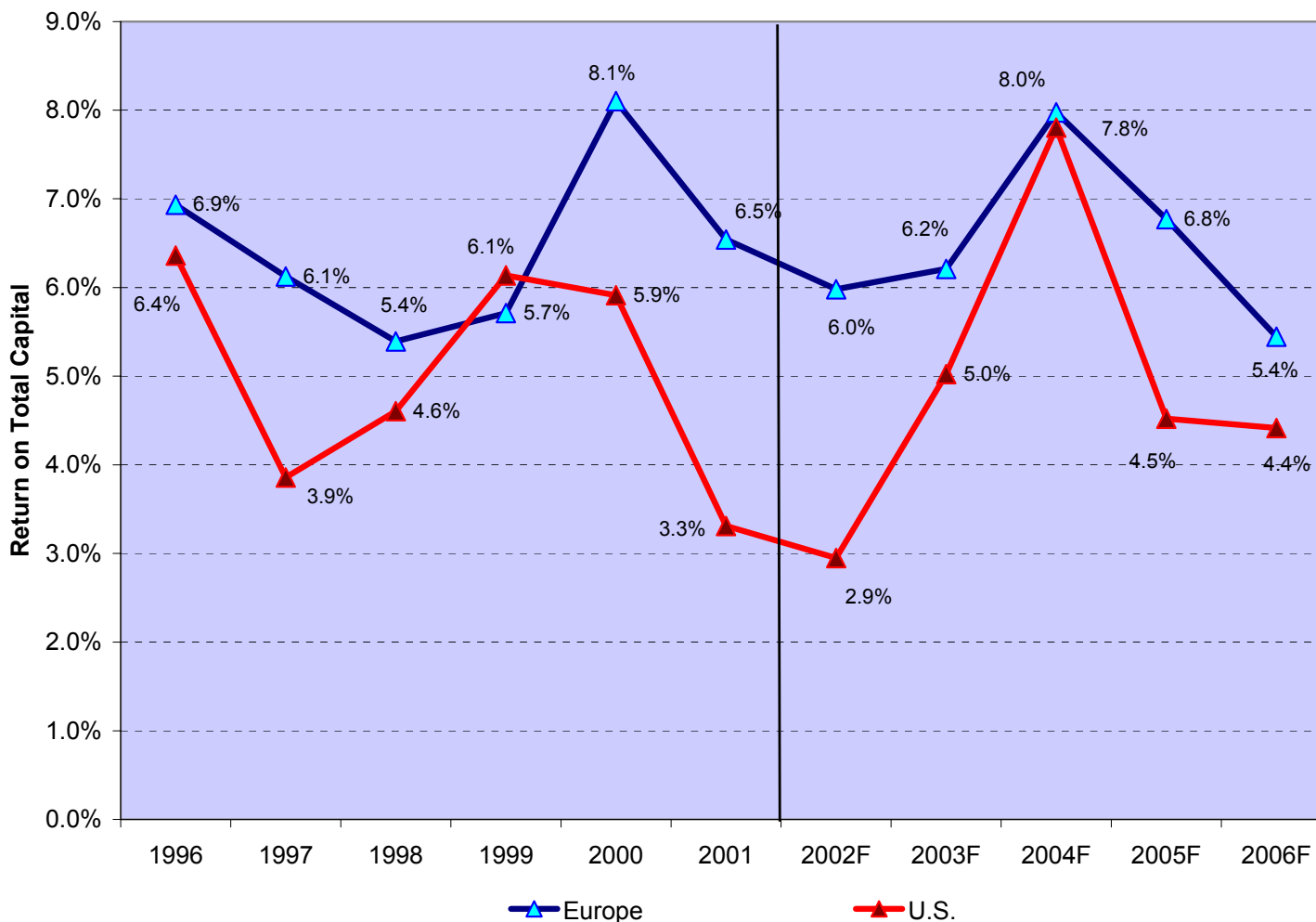
Capital Spending Outlook

Euro Pulp & Paper Profitability and Capital Turnover Will Begin A Cyclical Upturn In 2003



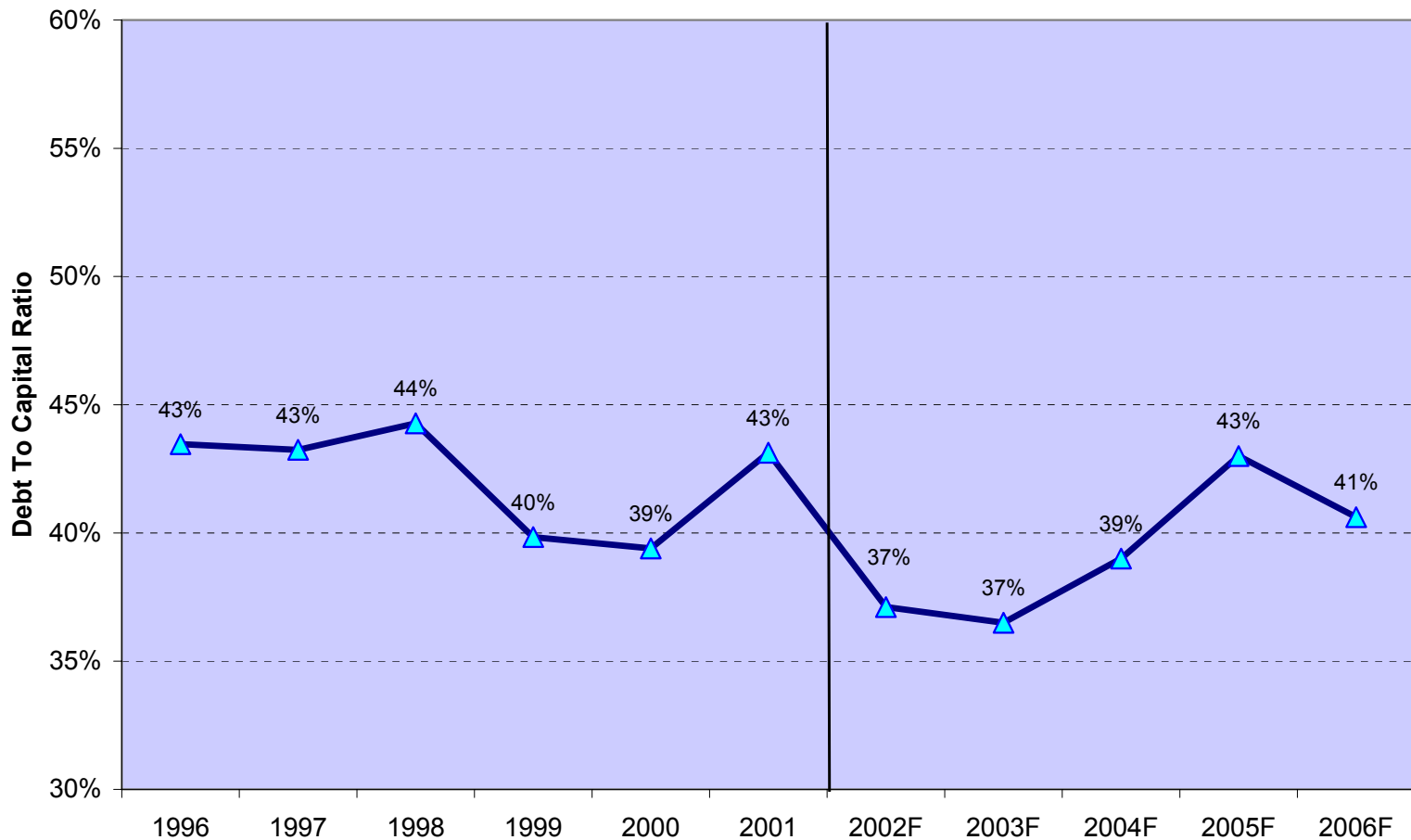
Capital Spending Outlook

European Pulp & Paper Company Returns Are 1.5-2.0 Points Better Than The U.S. – But Below The Cost of Capital



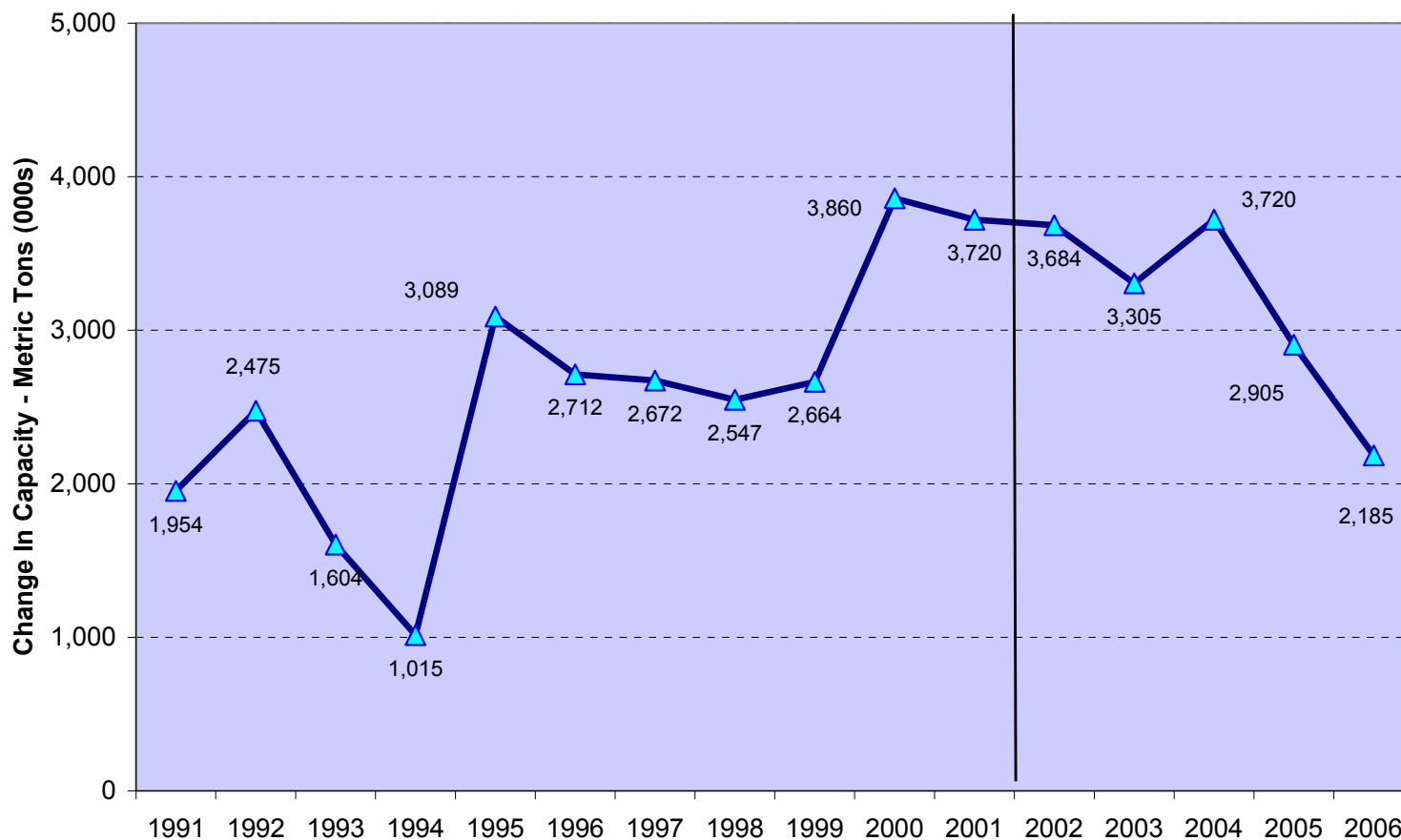
Capital Spending Outlook

The European Debt Burden Is Low And Will Support Future Capital Spending



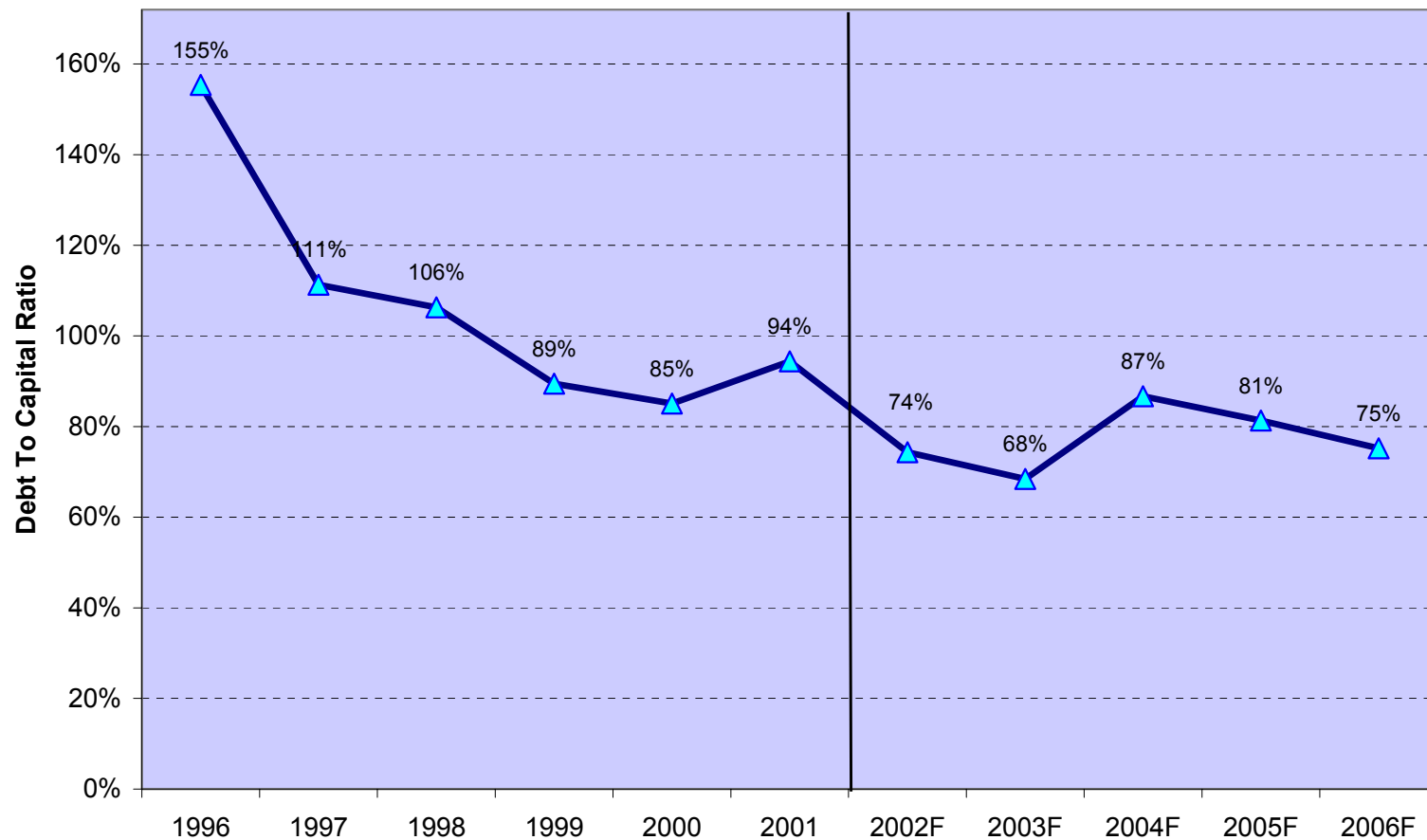
Capital Spending Outlook

**European Pulp & Paper Capacity Will Continue To Increase
– But At A Slower Rate Than 2000-2002**



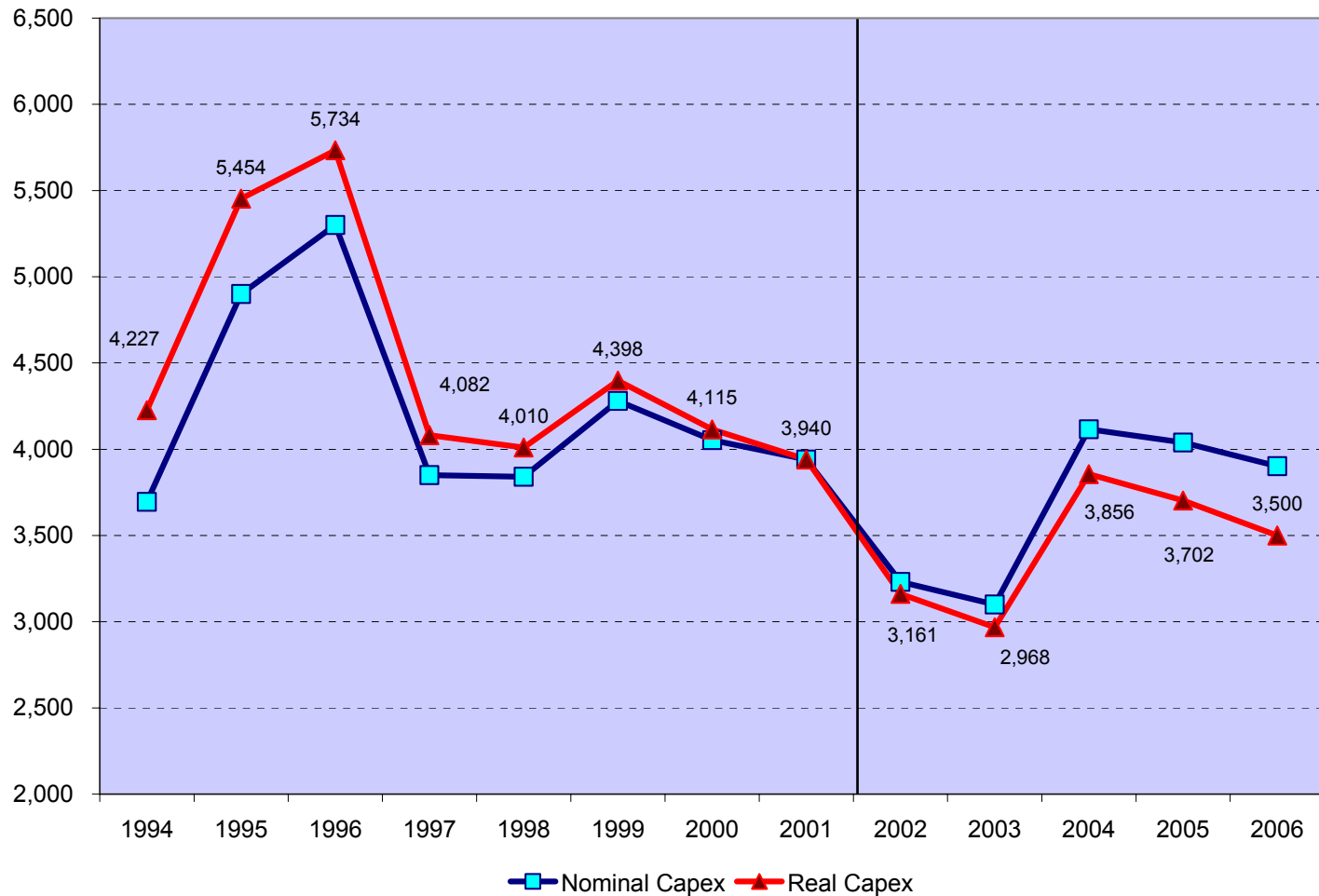
Capital Spending Outlook

European Capital Expenditures Will Continue To Fall As A Percentage of Depreciation – But Remain Higher Than The U.S.



Capital Spending Outlook

Real Euro Pulp & Paper Capital Expenditures Are Trending Downward – But A Slower Rate Than The U.S.



CAPEX Propensity - Summary

Propensity For Capex:

Large Acquisitions Have Made Total Investment Difficult To Predict
(Nominal US\$ Millions)

Company	1996	1997	1998	1999	2000	2001	2002F
GP	1,768	1,219	1,198	2,795	7,173	969	720
IP	2,921	1,542	1,820	1,193	7,029	1,199	720
KC	1,070	1,027	1,012	1,081	1,283	1,299	1,118
MeadWestvaco	1,636	1,086	889	1,051	1,833	583	460
SSCC	545	319	309	156	994	189	143
Temple-Inland	313	255	296	335	261	706	735
SAPPI	375	291	224	326	329	309	647
SCA	814	825	873	1,766	607	1,725	843
Stora-Enso	2,085	2,085	1,995	993	3,391	1,086	698
Total	11,526	8,648	8,615	9,696	22,899	8,066	6,084
% Change		-25%	0%	13%	136%	-65%	-25%

Note: Historic financial statements were combined for merged companies prior to the acquisition (I.e. MeadWestvaco = Mead + Westvaco)

CAPEX Propensity - Summary

Propensity For Capex:

Total Capital Expenditures On PPE Have Fallen Consistently
(Nominal US\$ Millions)

Company	1996	1997	1998	1999	2000	2001	2002F
GP	1,055	715	632	721	909	739	720
IP	1,394	1,448	1,322	1,139	1,256	1,049	920
KC	884	944	670	786	1,170	1,100	930
MeadWestvaco	991	1,084	835	472	447	511	460
SSCC	545	319	309	156	363	189	143
Temple-Inland	275	233	175	178	223	182	130
SAPPI	138	135	224	234	221	293	199
SCA	588	403	529	547	357	468	396
Stora-Enso	1,477	1,477	1,394	902	724	759	638
Total	7,348	6,758	6,091	5,135	5,671	5,290	4,535
% Change		-8%	-10%	-16%	10%	-7%	-14%

Note: Historic financial statements were combined for merged companies prior to the acquisition (I.e. MeadWestvaco = Mead + Westvaco)

CAPEX Propensity - Summary

Propensity For Capex:

Capital Expenditures On Pulp, Paper, Packaging & Tissue Have Not Fallen As Quickly As Total PPE Capex
(Nominal US\$ Millions)

Company	1996	1997	1998	1999	2000	2001	2002F
GP	434	438	389	354	582	564	549
IP	987	958	859	727	843	705	618
KC	691	609	377	525	757	680	600
MeadWestvaco	433	494	570	509	538	546	423
SSCC	337	281	266	106	310	128	97
Temple-Inland	144	151	97	80	115	107	76
SAPPI	129	125	188	207	183	250	180
SCA	326	239	399	417	296	350	296
Stora-Enso	1,242	1,242	1,122	785	611	645	559
Total	4,722	4,536	4,266	3,710	4,235	3,975	3,398
		-4%	-6%	-13%	14%	-6%	-14%

Note: Historic financial statements were combined for merged companies prior to the acquisition (I.e. MeadWestvaco = Mead + Westvaco)

CAPEX Propensity - Summary

Propensity For Capex:

Capital Expenditures On Pulp, Paper, Packaging & Tissue Regained
Share of Total Investment In 2001 and 2002
(% of Total Investment)

Company	1996	1997	1998	1999	2000	2001	2002F
GP	25%	36%	32%	13%	8%	58%	76%
IP	34%	62%	47%	61%	12%	59%	86%
KC	65%	59%	37%	49%	59%	52%	54%
MeadWestvaco	26%	45%	64%	48%	29%	94%	92%
SSCC	62%	88%	86%	68%	31%	68%	67%
Temple-Inland	46%	59%	33%	24%	44%	15%	10%
SAPPI	34%	43%	84%	63%	56%	81%	28%
SCA	40%	29%	46%	24%	49%	20%	35%
Stora-Enso	60%	60%	56%	79%	18%	59%	80%
Total	41%	52%	50%	38%	18%	49%	56%

Note: Historic financial statements were combined for merged companies prior to the acquisition (I.e. MeadWestvaco = Mead + Westvaco)

CAPEX Propensity - Summary

Propensity For Capex:

Capital Expenditures On PPE Have Fallen
Below Asset Maintenance Levels
(Capex % of Depreciation)

Company	1996	1997	1998	1999	2000	2001	2002F
GP	84%	54%	50%	60%	100%	55%	64%
IP	106%	83%	80%	68%	66%	56%	60%
KC	158%	192%	131%	134%	198%	169%	136%
MeadWestvaco	204%	196%	165%	80%	69%	80%	76%
SSCC	124%	74%	72%	37%	84%	40%	29%
Temple-Inland	111%	90%	66%	88%	111%	98%	70%
SAPPI	78%	61%	72%	70%	69%	98%	66%
SCA	113%	90%	117%	121%	86%	101%	82%
Stora-Enso	NA	143%	90%	82%	68%	68%	53%
Average	122%	109%	94%	82%	94%	85%	71%

Note: Historic financial statements were combined for merged companies prior to the acquisition (i.e. MeadWestvaco = Mead + Westvaco)

CAPEX Propensity - Summary

Attractive Investment Opportunities:

Firms will spend more if they have attractive investment opportunities. The attractiveness of each company's investment opportunities was rated on several dimensions as follows:

- ROTC – Companies with strong ROTC's have proven their capability to identify and execute value creating projects. Therefore, they are more likely to attract and invest capital than poor performing companies.
- Product Mix – Companies that compete in pulp and paper segments with stronger outlooks (i.e. tissue, selected P&W) are likely to invest more than poorly performing segments (i.e. boxboard, containerboard, newsprint, pulp)
- Geographic Mix – Companies that compete in higher growth geographic markets (i.e. Europe, Asia and Latin America) are more likely to invest than U.S. and Canadian focused players.

CAPEX Propensity - Summary

Capital Availability:

Firms with more capital tend to invest more. We used two key measures of capital availability:

- Debt-To-Capital Ratio: The higher the percentage of debt, the more likely the company will divert cash to pay down debt instead of make capital expenditures and the lower the remaining borrowing capacity.
- Cash Flow Available For Reinvestment: The more cash generated by operations, the more capital typically invested in the business.

Given these measures, Kimberly-Clark and SCA are the only target clients in the position to significantly increase capital expenditures.

IP and MeadWestvaco are likely to increase spending when pulp and paper prices / volume improve.

The remainder have a combination of high debt and falling cash flow that make increased expenditures in the near term unlikely.

CAPEX Propensity - Summary

Capital Availability:

Client	Current Debt To Capital Ratio	1996-2002F Compound Annual Average Growth Rate In Operating Cash Flow	Capacity To Increase Spending	Comment
GP	56.0%	-6%	Low	Reducing debt from Fort James acquisition
IP	39.1%	-11%	Medium	Low debt, falling cash flow
KC	29.6%	4%	High	Low debt, growing cash flow
MeadWestvaco	27.1%	-11%	Medium	Low debt, falling cash flow
SSCC	53.1%	-4%	Low	Hight debt, falling cash flow
Temple-Inland	81.3%	2%	Low	Paying off debt from Gaylord acquisiiton
SAPPI	68.3%	4%	Low	Likely to pay down debt
SCA	42.7%	6%	High	At target debt level, growing cash flow
Stora-Enso	53.2%	-2%	Low	Moderate debt level, falling cash flow

CAPEX Propensity - Summary

Conclusions:

- It is reasonable to believe that future capital spending between 2003 and 2006 will be the most stable and have the most potential to increase at KC and SCA. However, KC expenditures are likely to be more heavily focused outside of the U.S.
- SAPPI and Stora Enso will have better than average investment opportunities but some financial constraints on future spending. SAPPI's spending may be undercut by particularly weak conditions in coated paper markets
- MeadWestvaco has additional spending capacity with a limited number of attractive investment opportunities.
- IP and GP's spending will mirror overall market performance with a one year lag. GP has some good opportunities in its tissue business but has a relatively unattractive overall business portfolio.

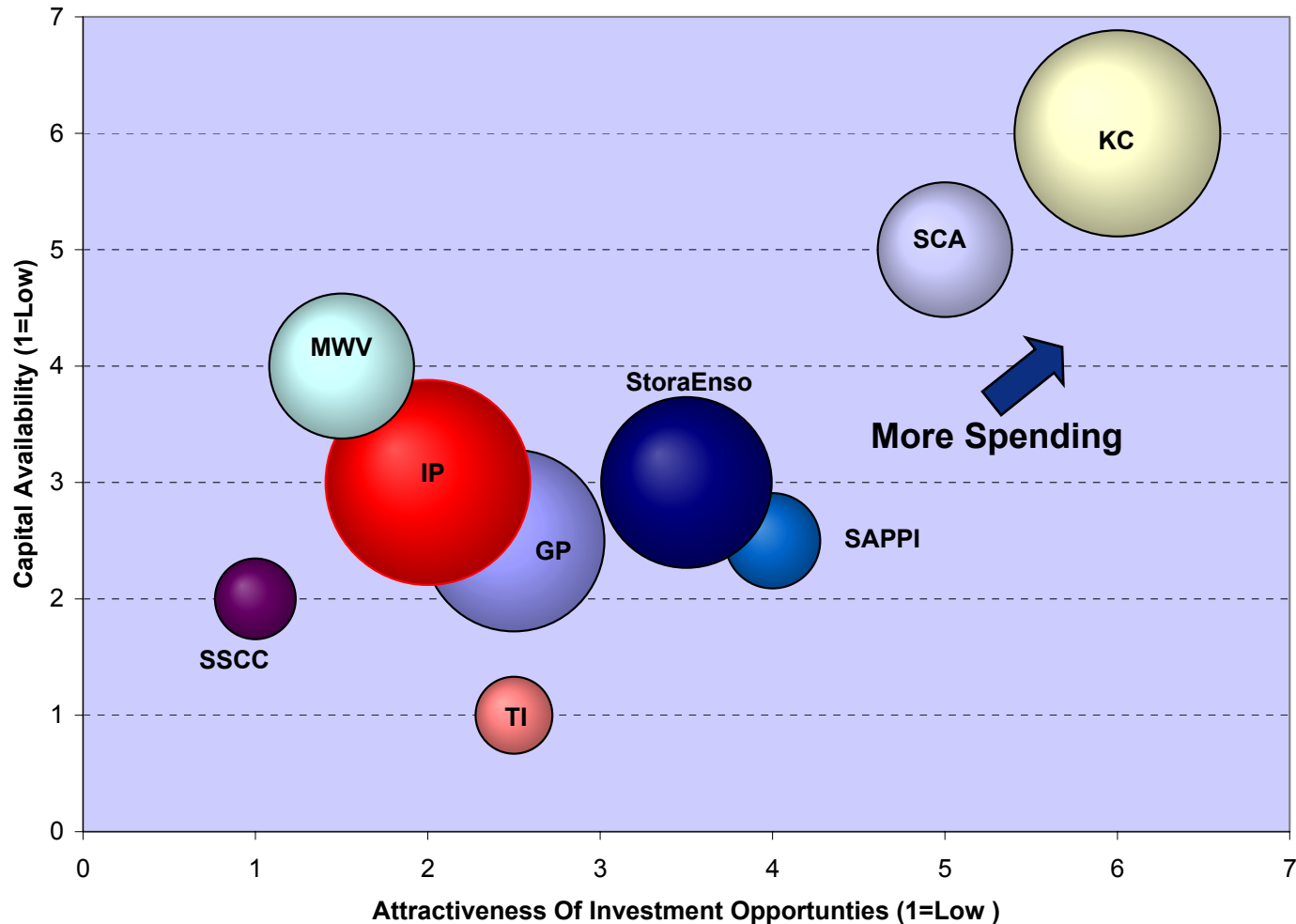
CAPEX Propensity - Summary

Conclusions:

- Smurfit-Stone Container Corporation and Temple Inland are expected to have the weakest overall spending levels.
- These conclusions are summarized on the following bubble chart. Detailed graphs by individual company follow.

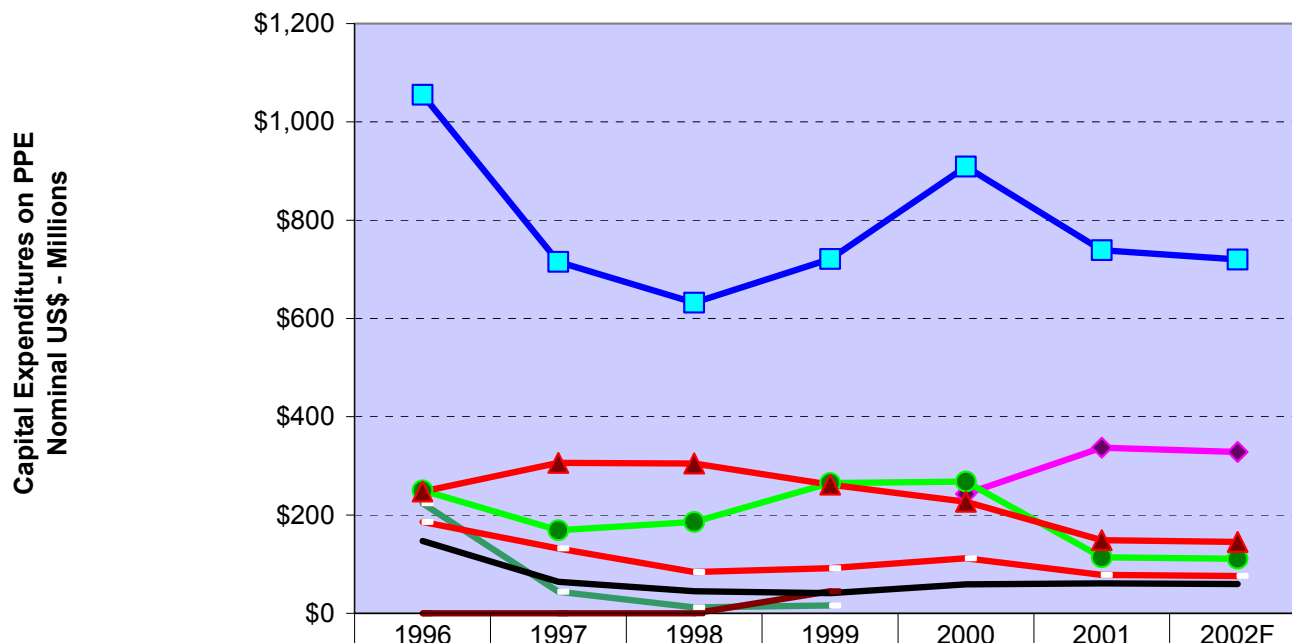
CAPEX Propensity - Summary

Pulp & Paper Capital Spending Landscape
(relative circle size = relative size of 2002 PPE Capex)



CAPEX Propensity - Summary

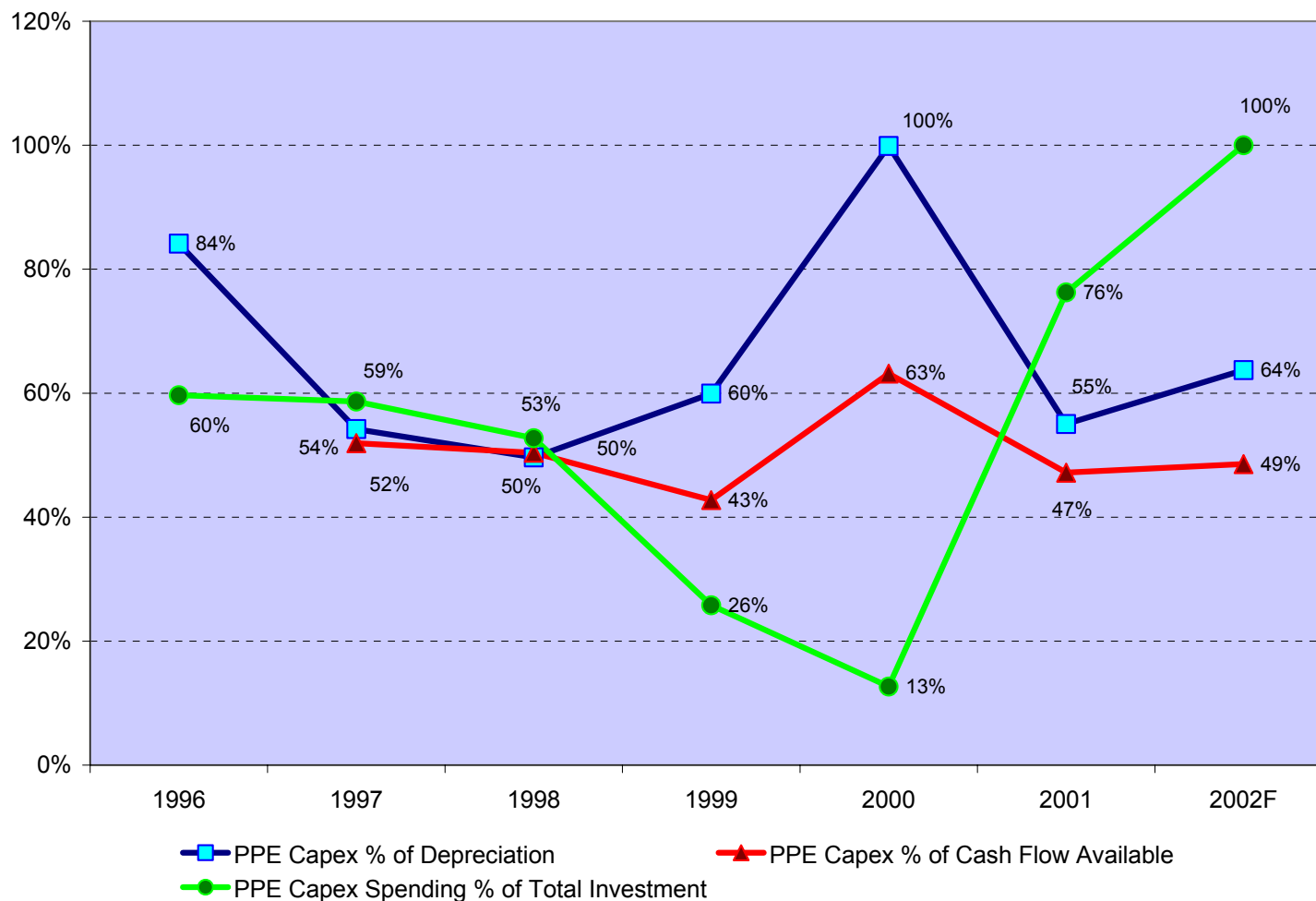
Georgia-Pacific's Capital Expenditures Have Fallen To The \$600-\$900 Million Range



◆ Consumer Products					243	337	328
● Building Products	250	169	186	265	268	114	111
■ Building Products Distribution	224	44	12	16			
□ Containerboard & Packaging	186	132	84	92	112	78	76
▲ Pulp & Paper	248	306	305	262	227	149	145
● Paper Distribution	-	-	-	45			
● All Other	147	64	45	41	59	61	59
■ Combined	1,055	715	632	721	909	739	720

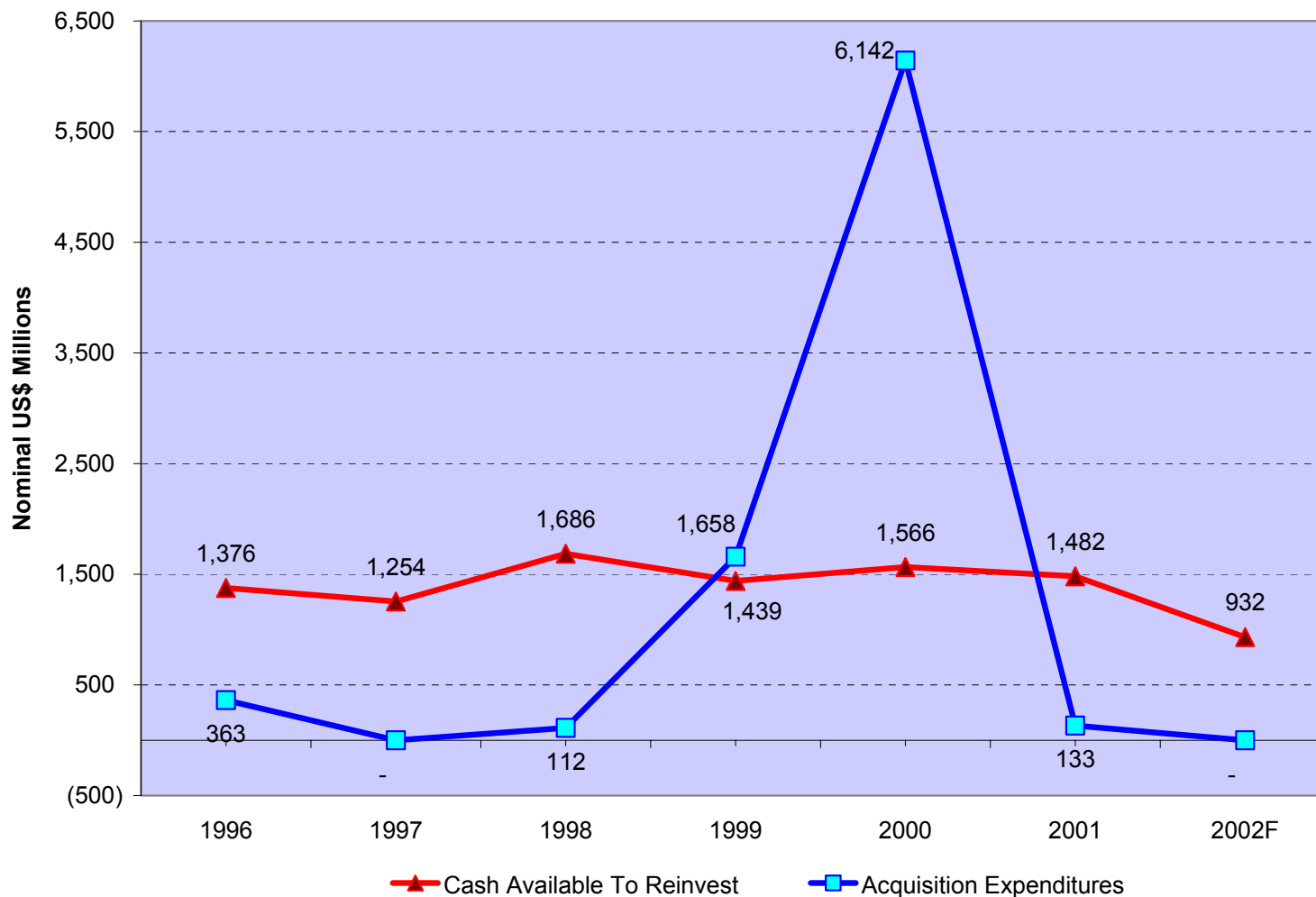
CAPEX Propensity - Summary

Georgia-Pacific Is Reinvesting 50% of Cash Available, or 64% of Depreciation, Back Into Its Business



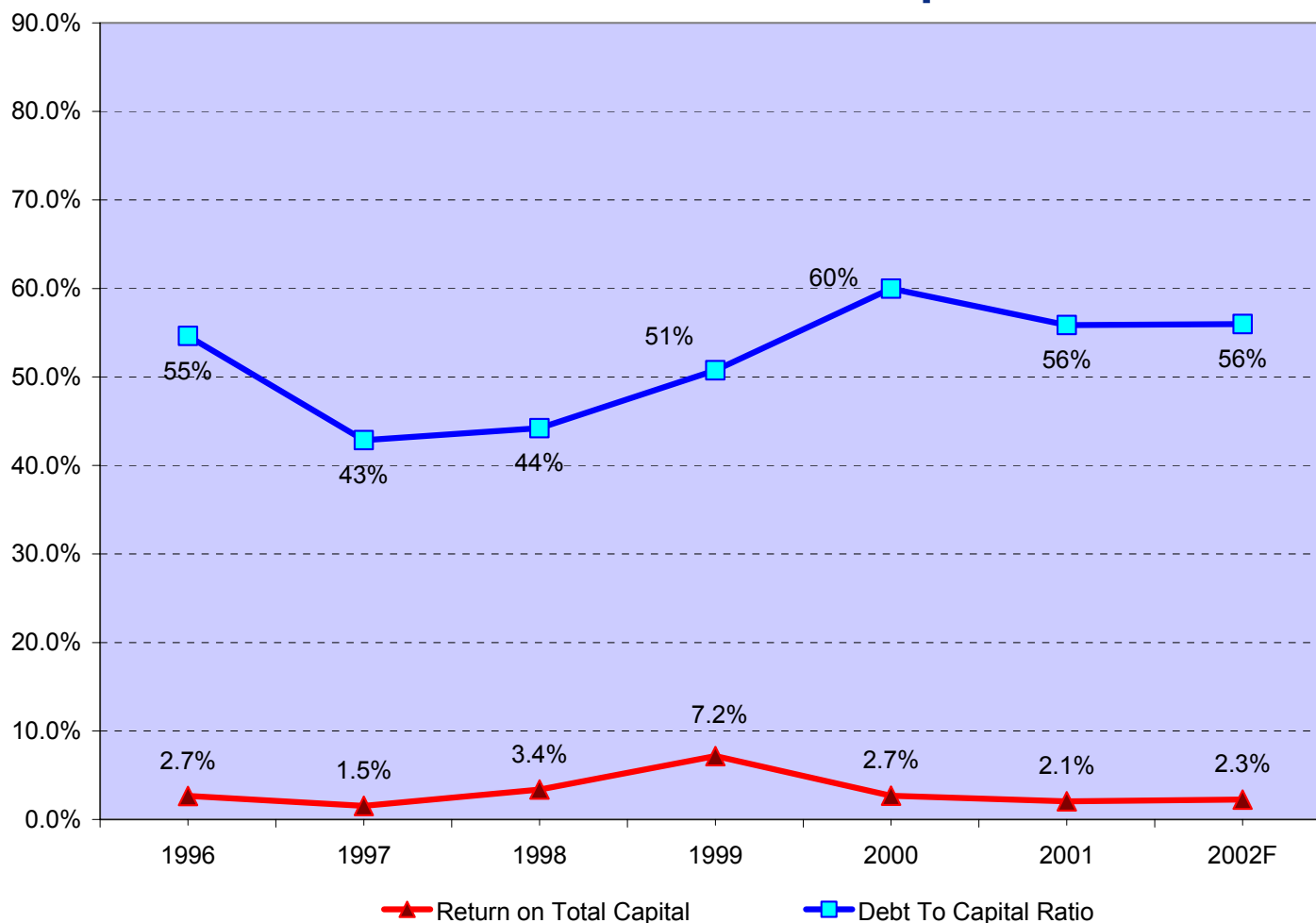
CAPEX Propensity - Summary

Georgia-Pacific's Cash Available For Reinvestment Has Fallen



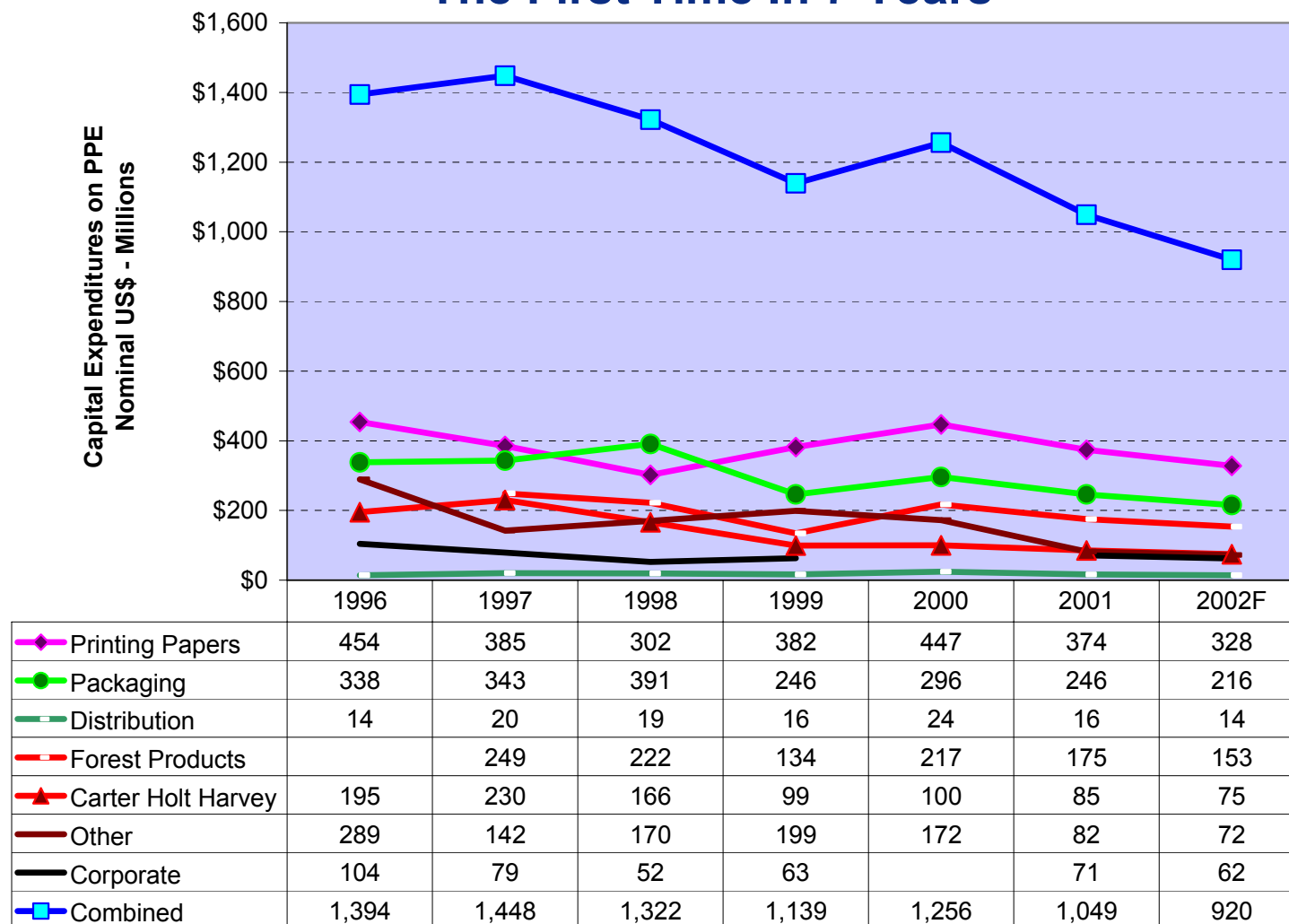
CAPEX Propensity - Summary

Georgia-Pacific's Poor Returns and Above Target Debt Load Will Dissuade Increases In Capex



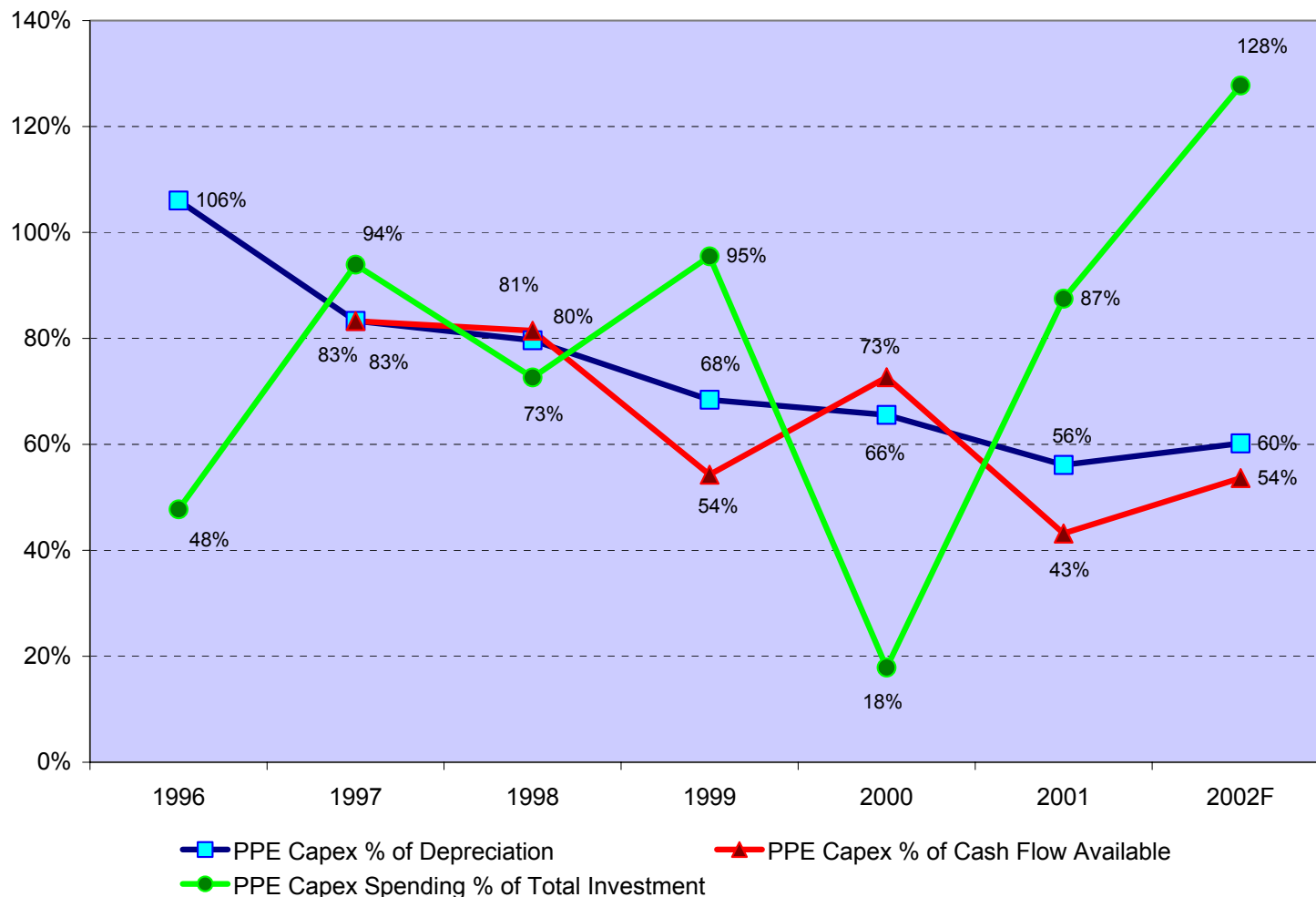
CAPEX Propensity - Summary

IP's Capital Expenditures Are Expected To Fall Below \$1 Billion For The First Time In 7 Years



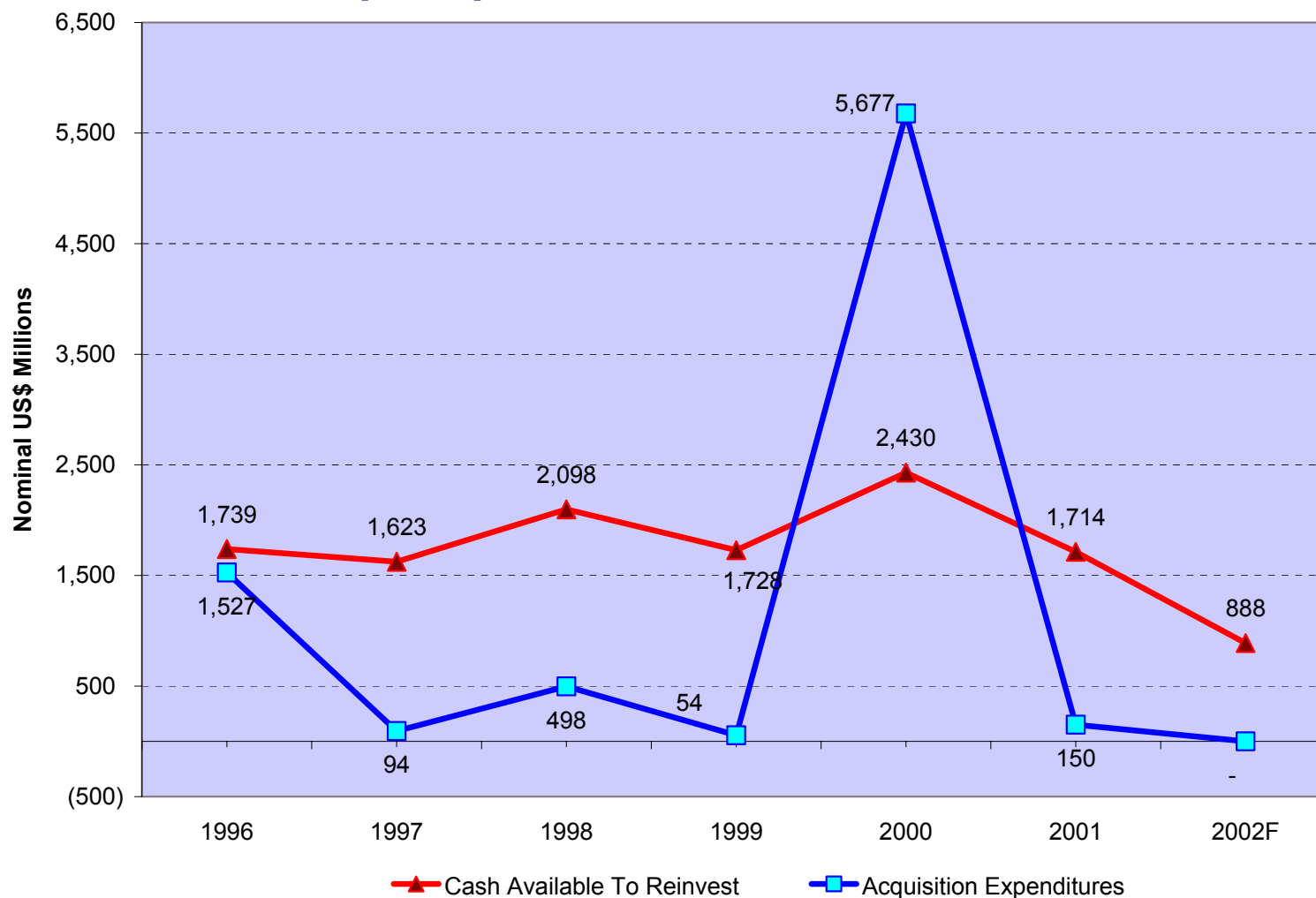
CAPEX Propensity - Summary

IP Is Reinvesting 54% of Cash Available, or 60% of Depreciation, Back Into Its Business



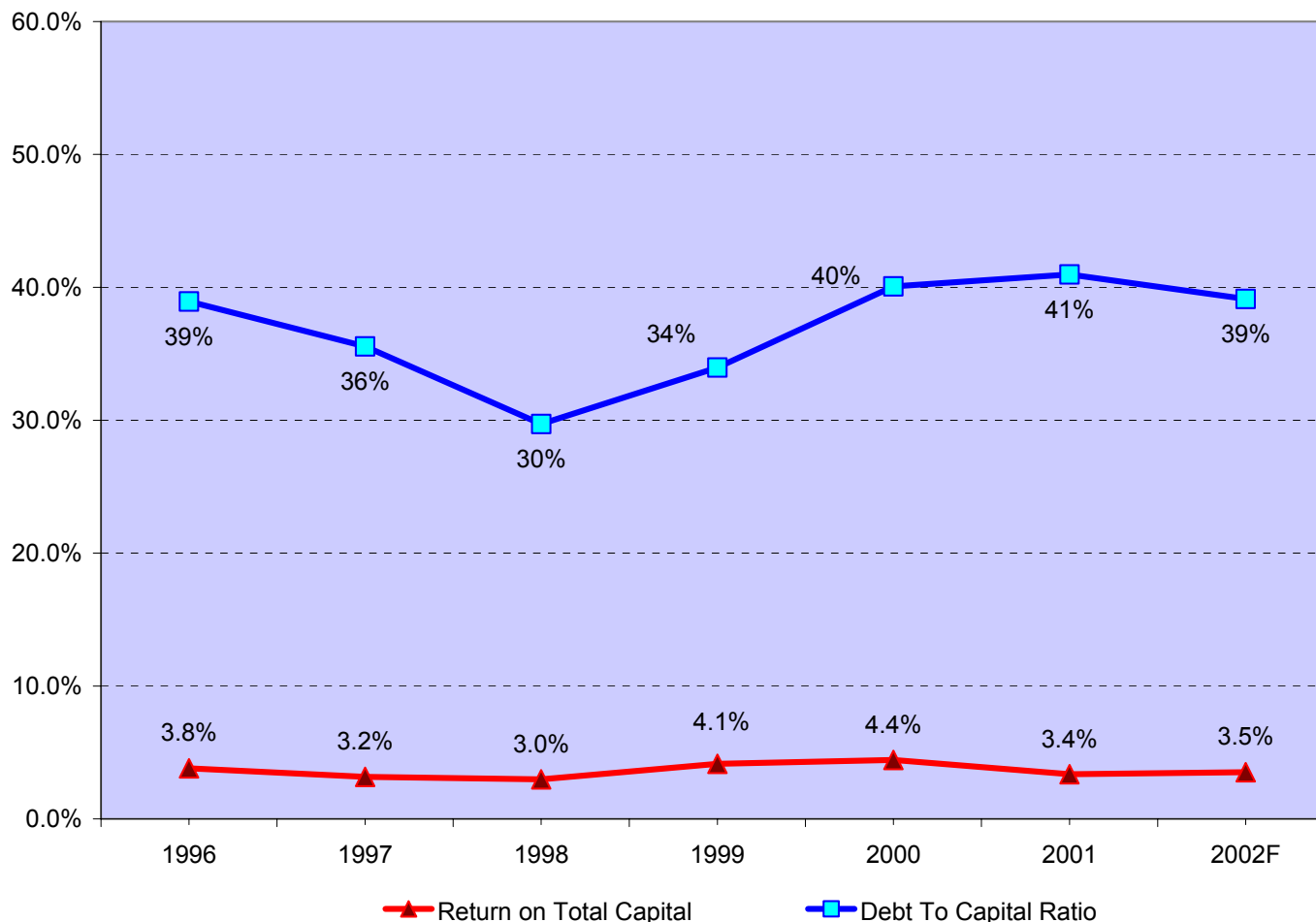
CAPEX Propensity - Summary

IP's Cash Available For Reinvestment Has Fallen With The Overall Pulp, Paper and Forest Products Markets



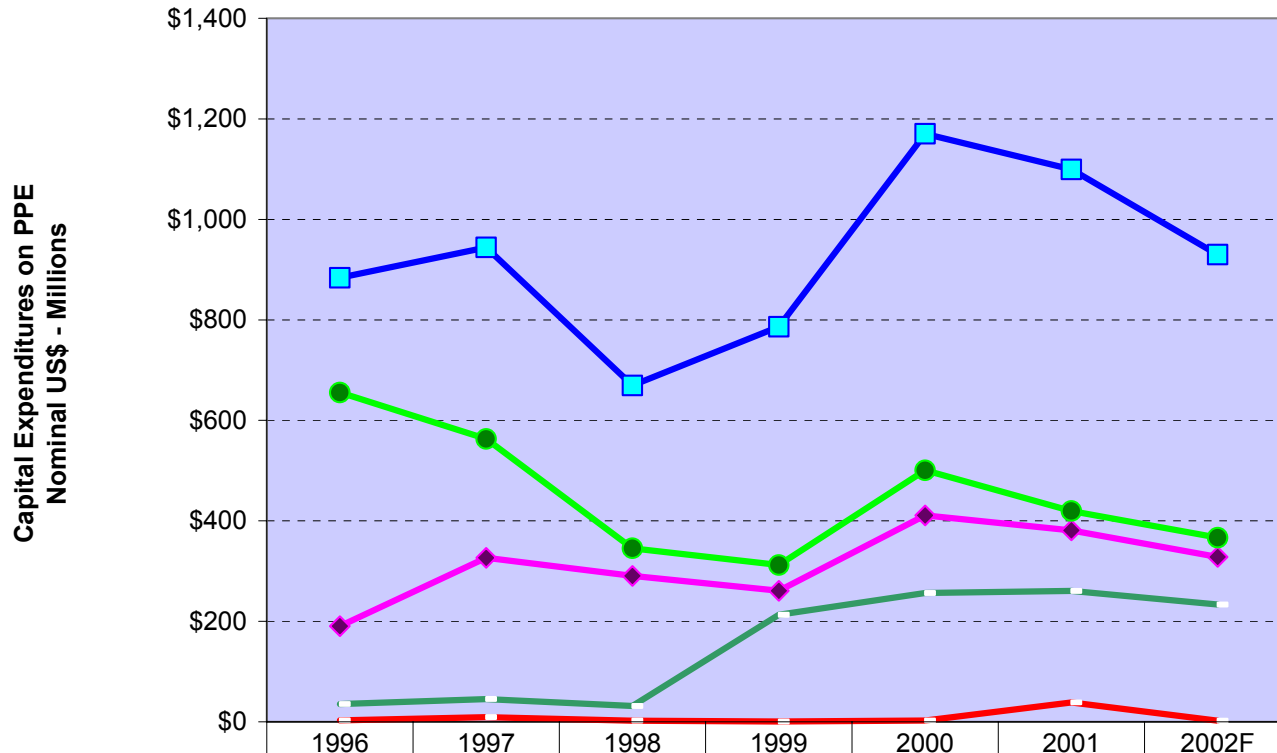
CAPEX Propensity - Summary

IP's Debt Burden Is Relatively Low - But Poor Returns Will Dissuade Investment



CAPEX Propensity - Summary

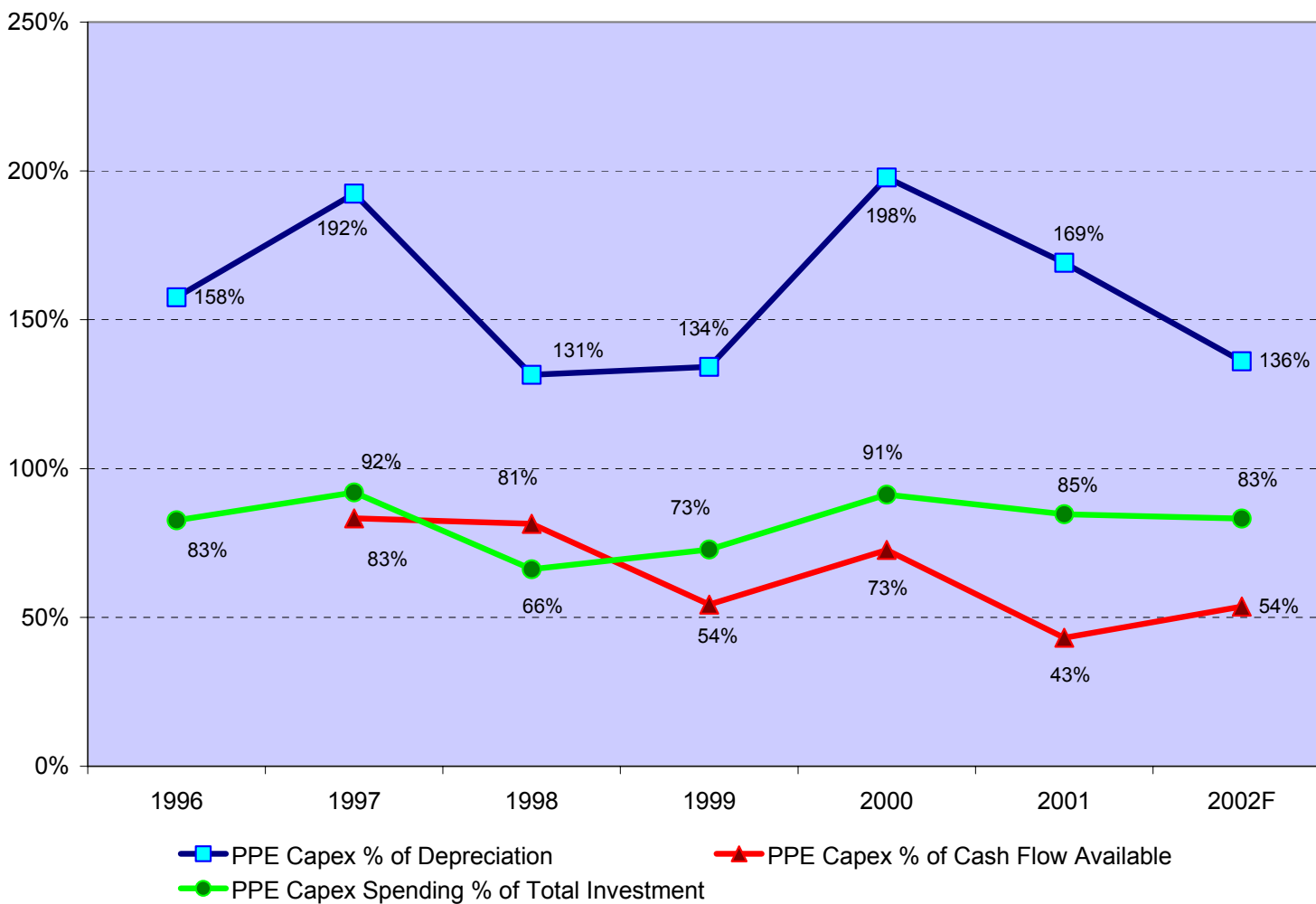
KC's Capital Expenditures Are Down For The Second Straight Year



◆ Personal Care	190	326	290	261	411	381	328
● Consumer Tissue	655	563	345	312	501	420	366
— Business To Business	35	45	32	213	256	260	233
— Other	3	9	2	1	3	39	2
■ Combined	884	944	670	786	1,170	1,100	930

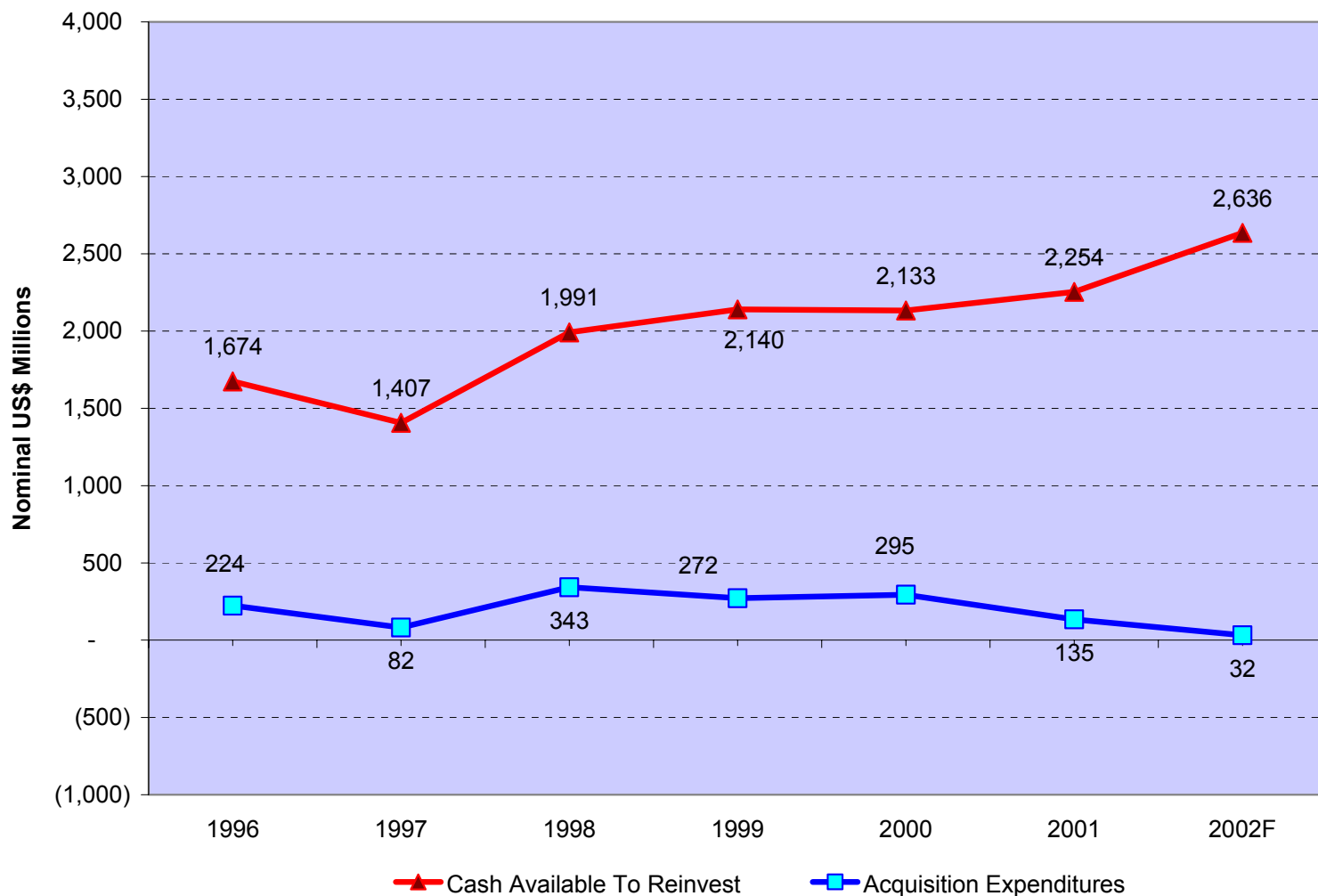
CAPEX Propensity - Summary

KC Continues To Invest Well Above Depreciation Levels



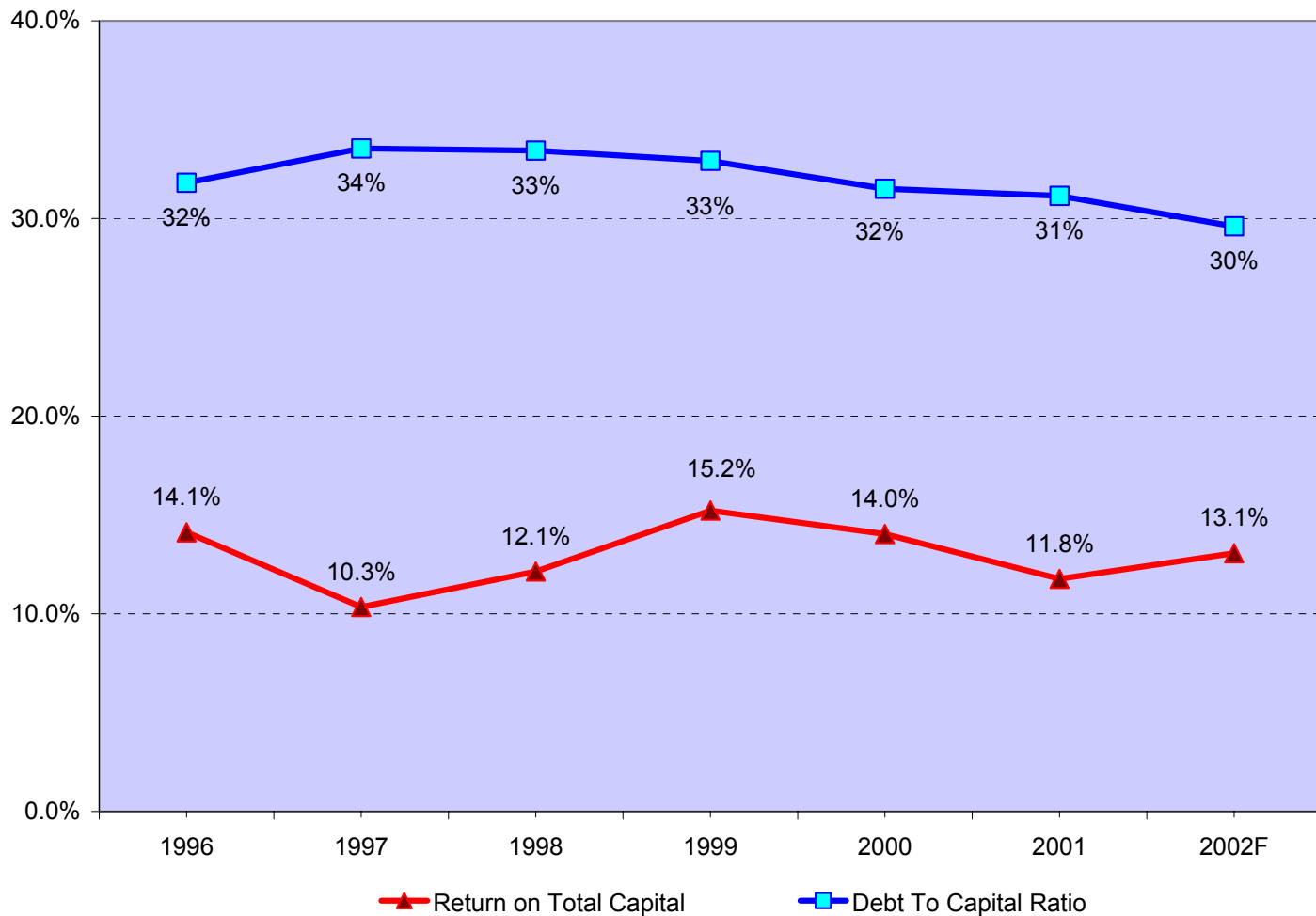
CAPEX Propensity - Summary

KC Has Substantial & Growing Cash Flows Available For Reinvestment – Acquisition Activity Has Not Been A Major Factor



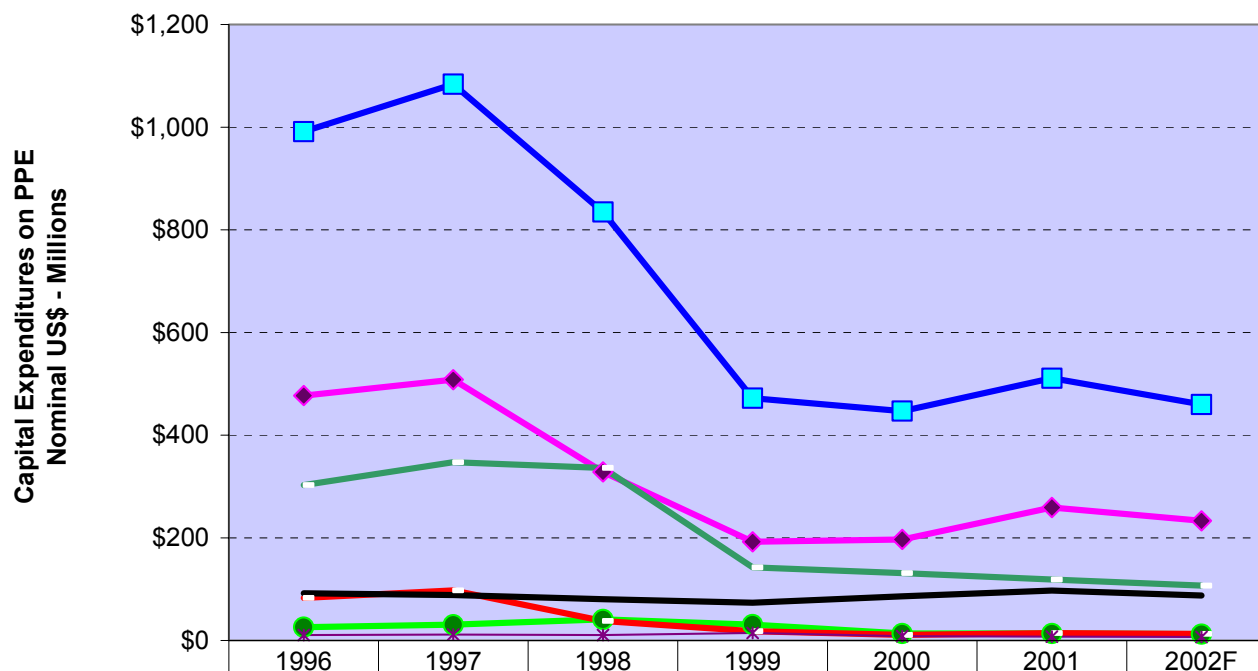
CAPEX Propensity - Summary

KC's Returns & Risk From Leverage Are The Best In The Industry



CAPEX Propensity - Summary

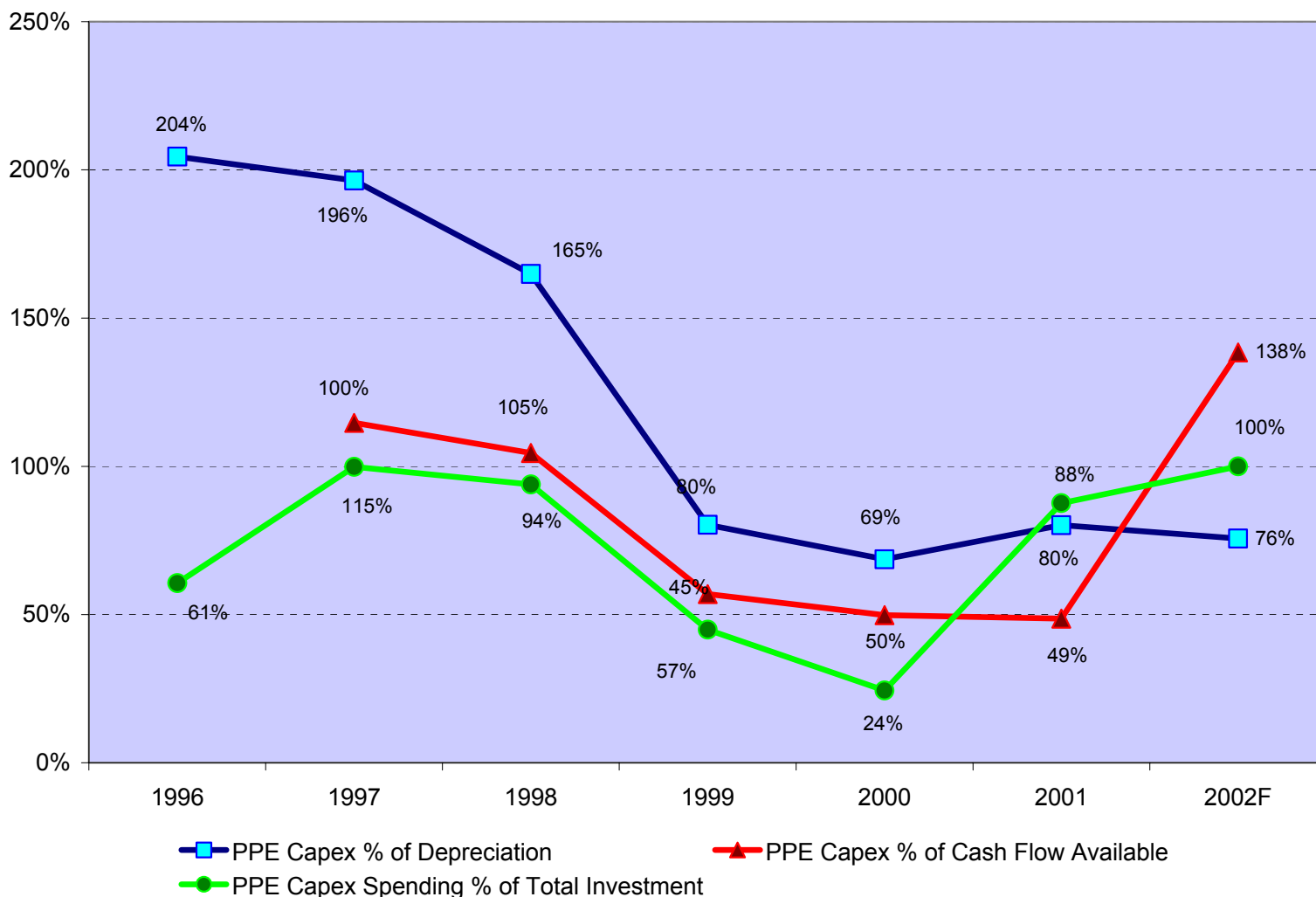
MWV's Capex on PPE Is Down Significantly From The Late 1990's – Packaging Draws The Most Capital



	1996	1997	1998	1999	2000	2001	2002F
◆ Packaging	477	508	329	192	197	259	233
● Rigesa	26	31	41	31	14	14	12
■ Paper	303	347	336	142	131	119	107
— Chemical	83	98	38	18	11	14	13
— Other	92	89	80	74	86	97	88
* Consumer & Office	11	12	11	15	8	8	7
■ Combined	991	1,084	835	472	447	511	460

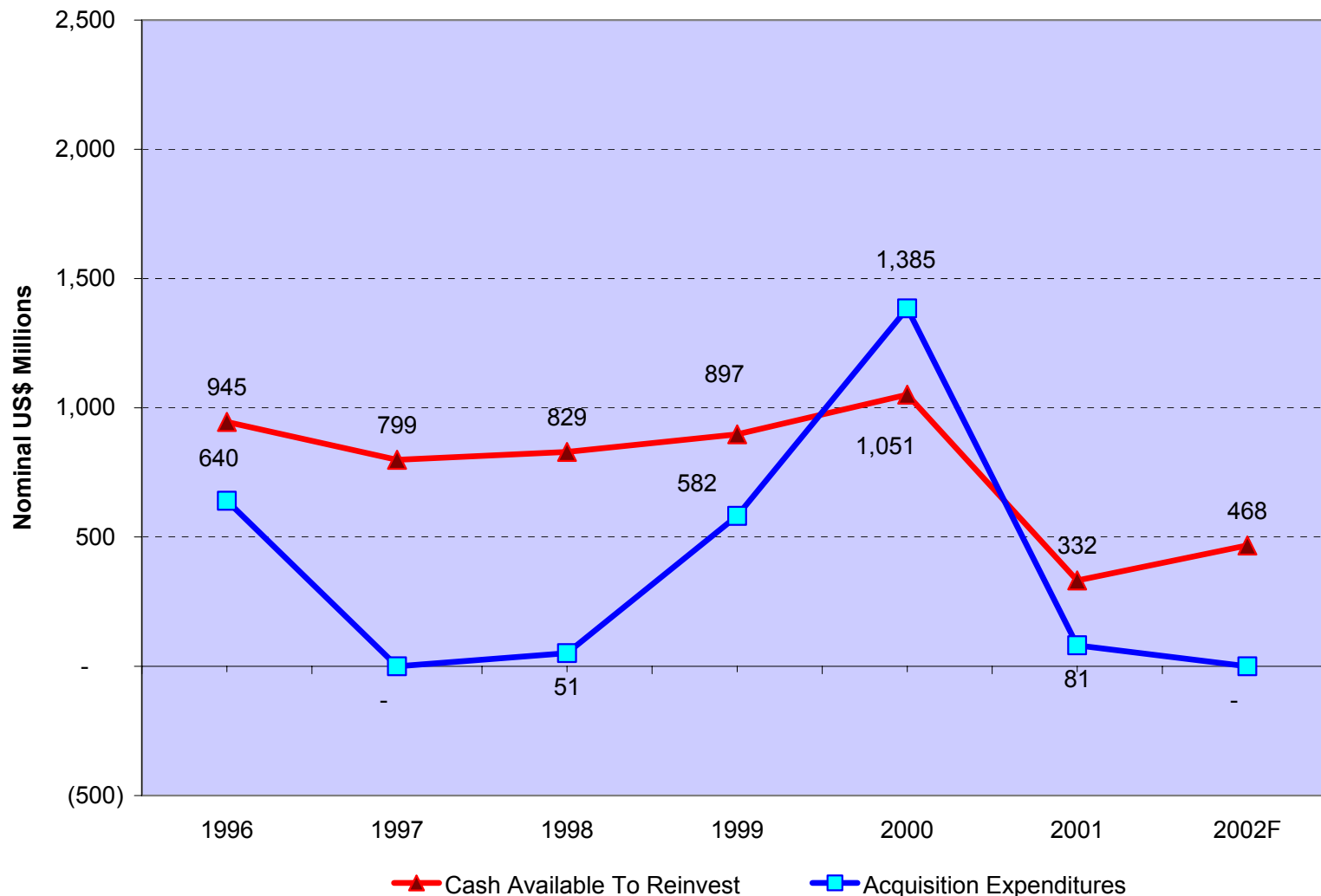
CAPEX Propensity - Summary

MWV Is Investing At 76% of Depreciation Levels



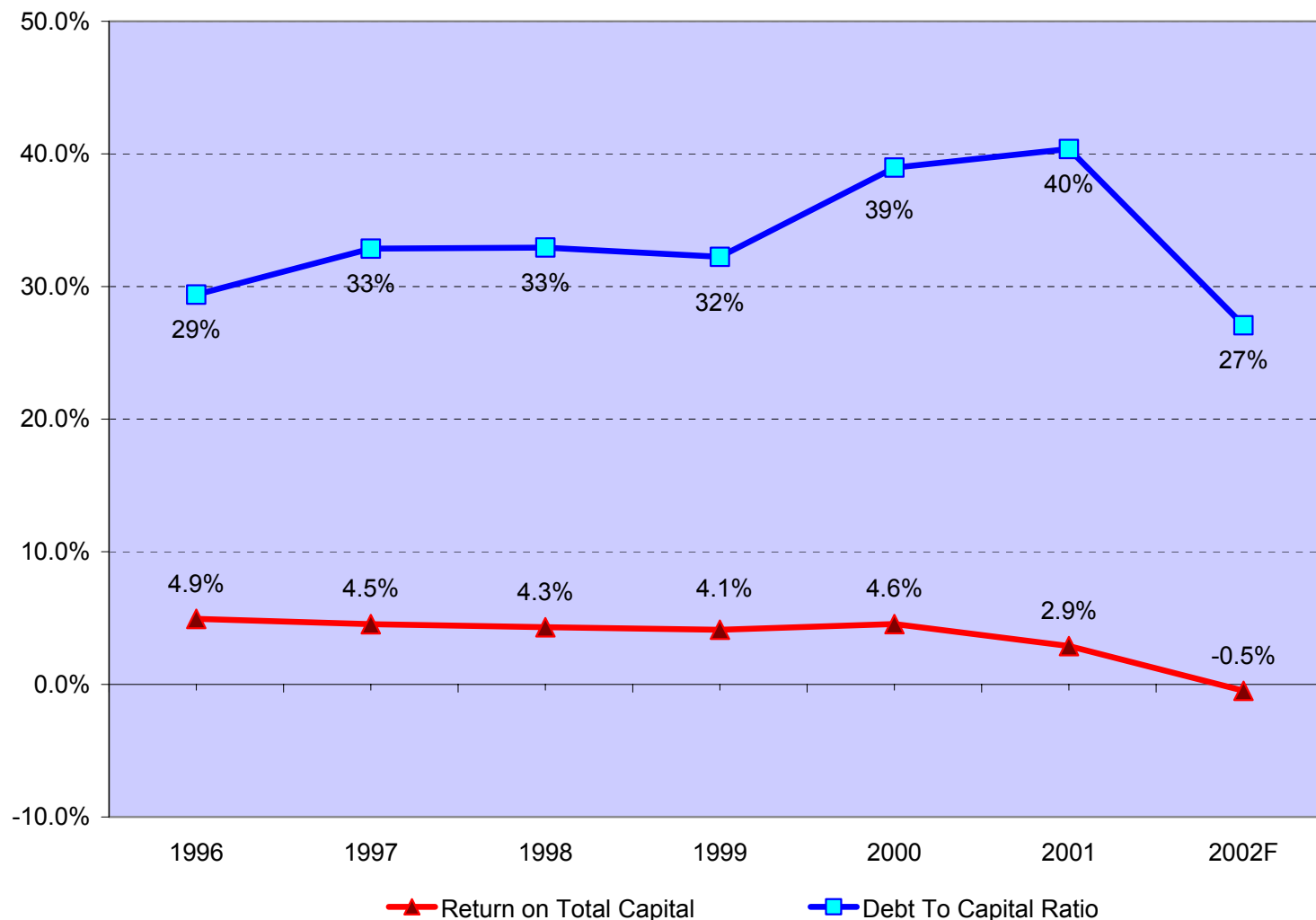
CAPEX Propensity - Summary

MWV's Post Merger Operating Cash Flow Is Down More Than 50%



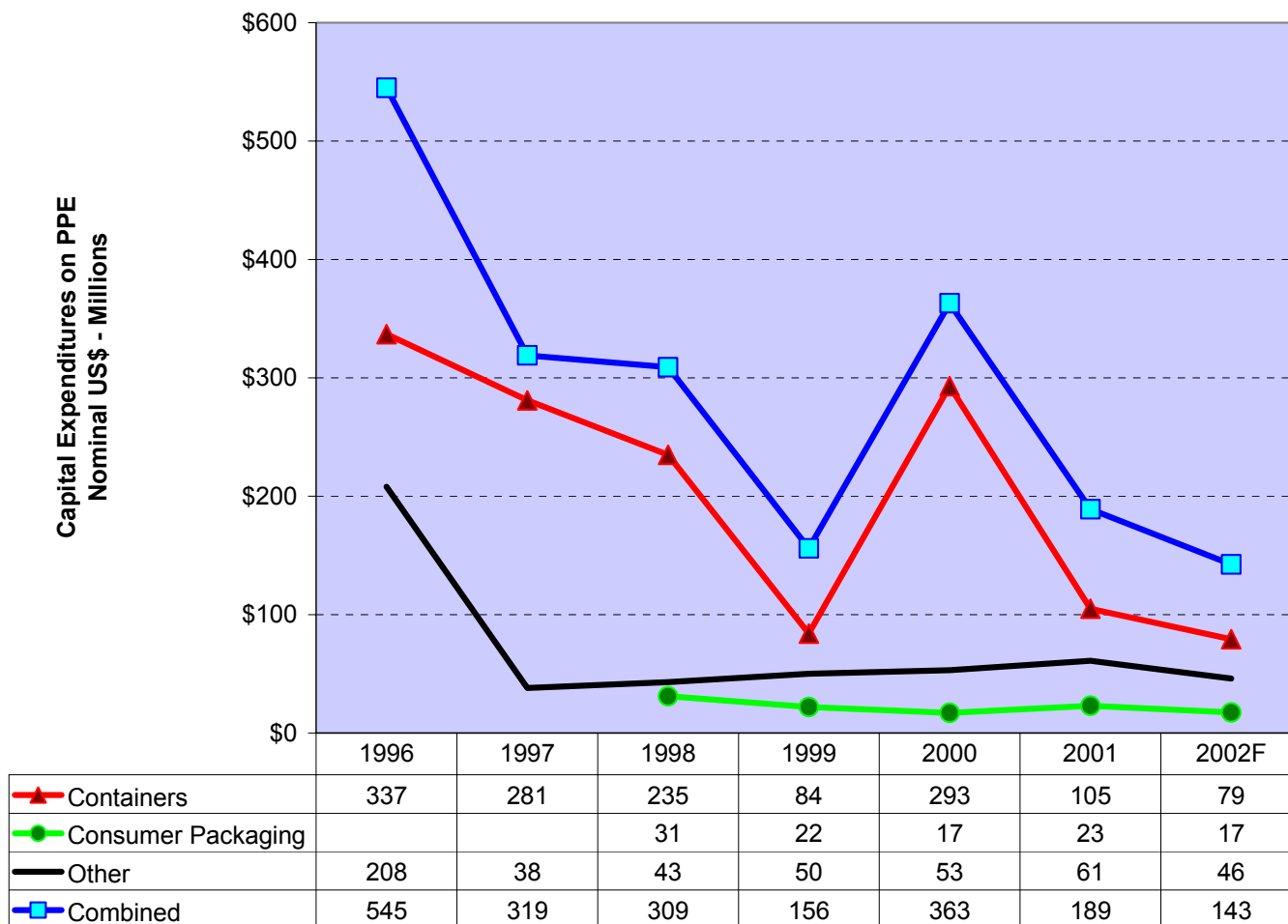
CAPEX Propensity - Summary

MWV's Returns Have Been Poor – Debt Repayment Has Been The Focus



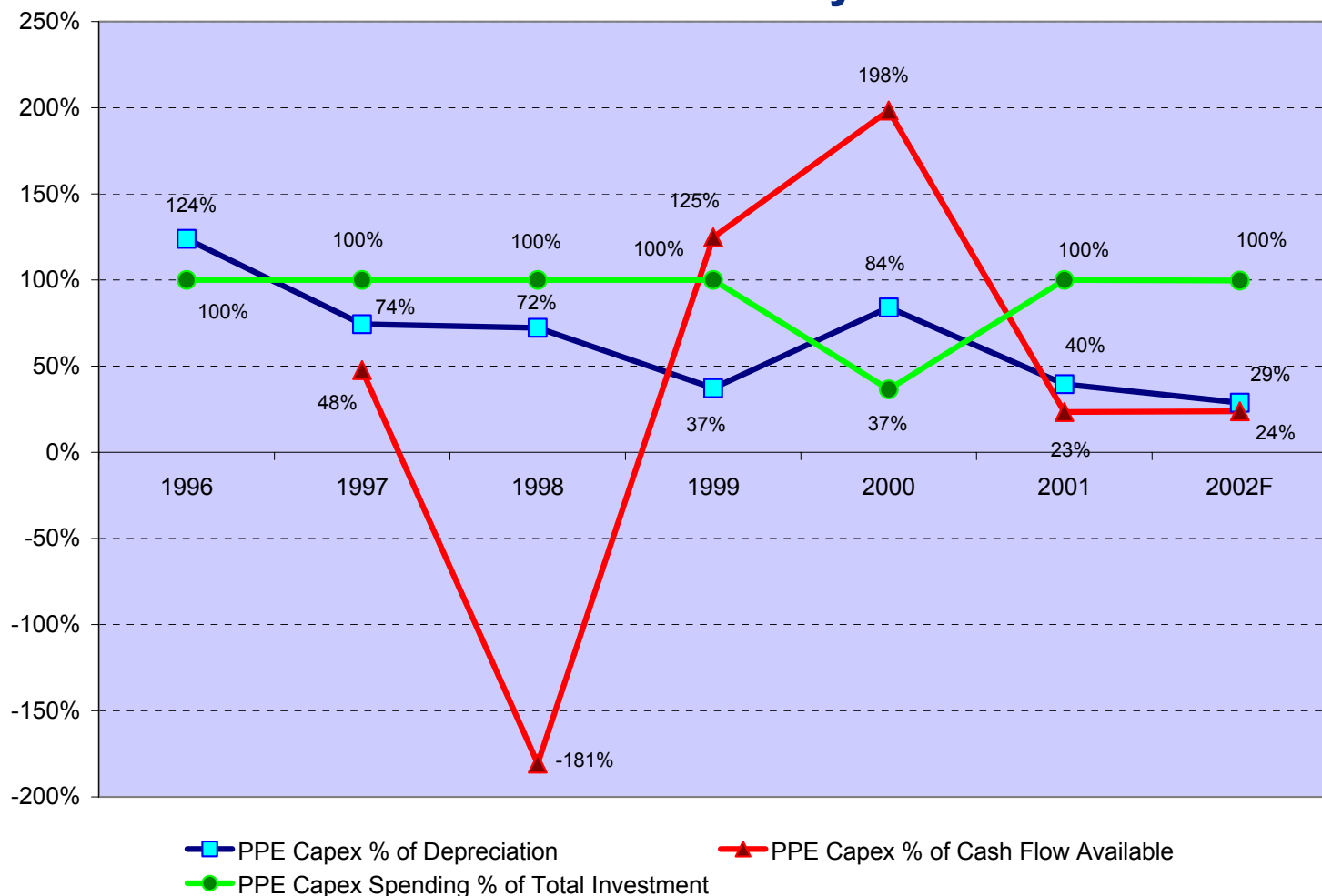
CAPEX Propensity - Summary

SSCC's Capex on PPE Is At A 7-Year Low



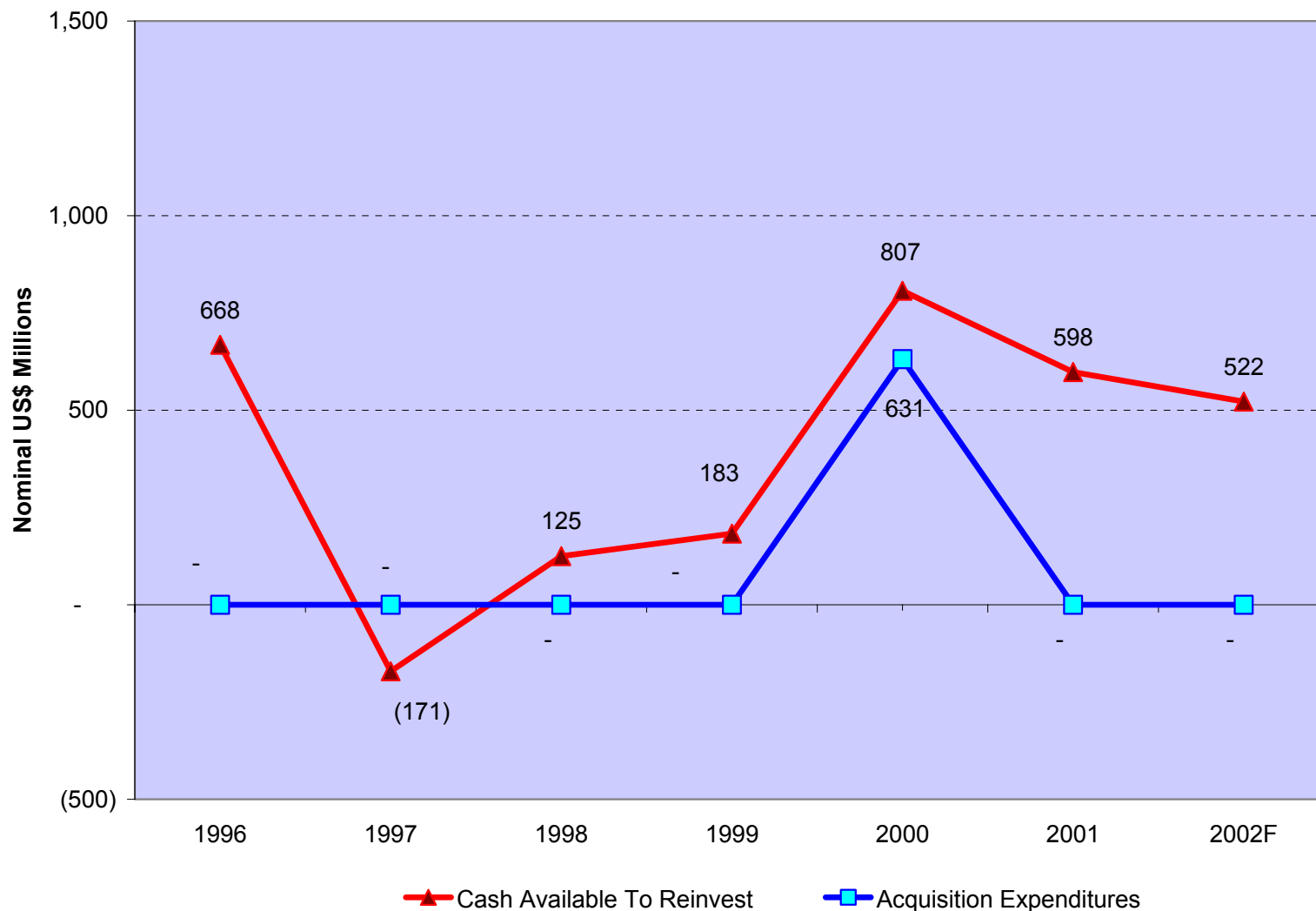
CAPEX Propensity - Summary

SSCC Has The Lowest Level Of Investment As A % of Depreciation In The Industry



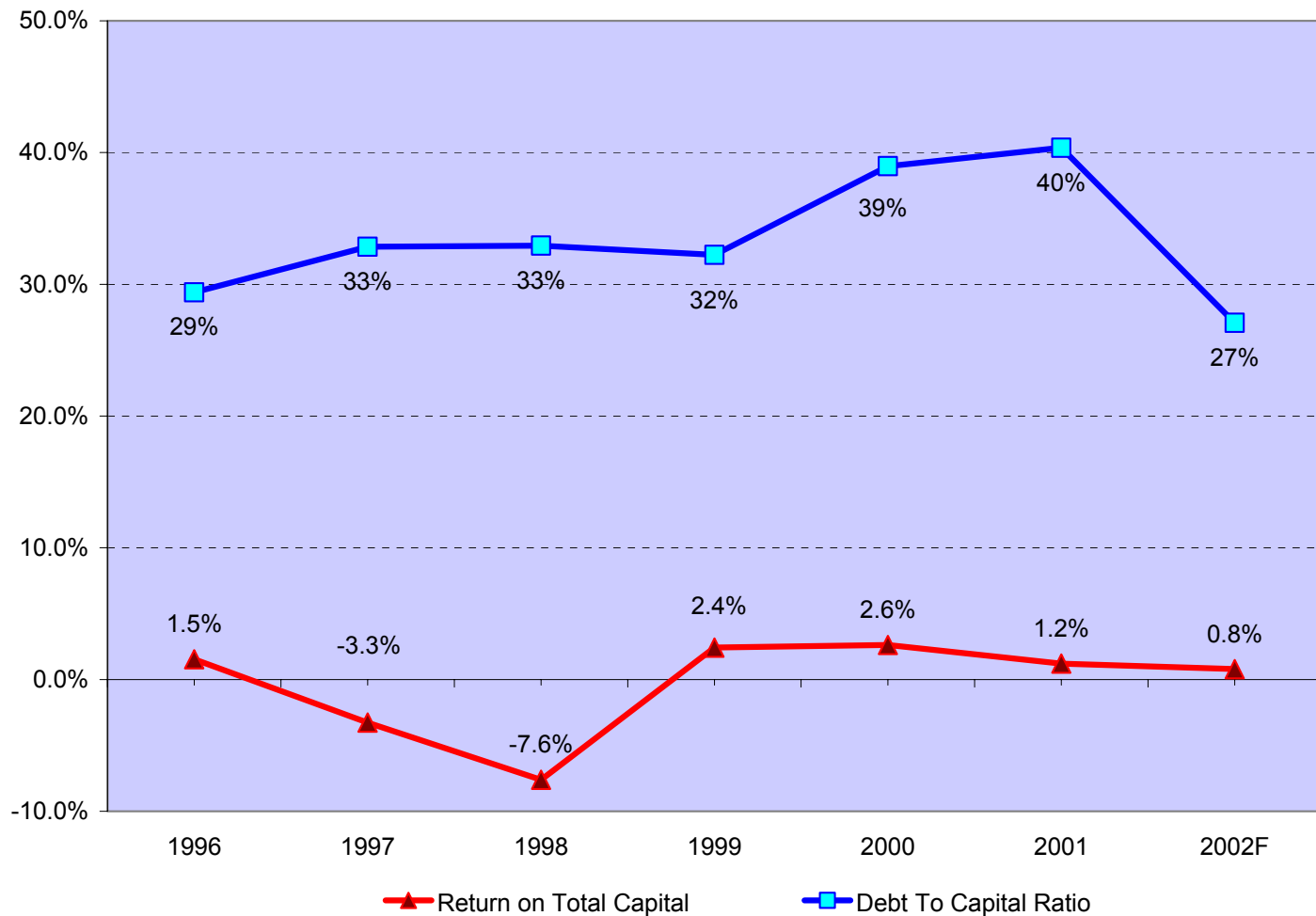
CAPEX Propensity - Summary

SSCC's Operating Cash Flow Is Down But Still Substantial



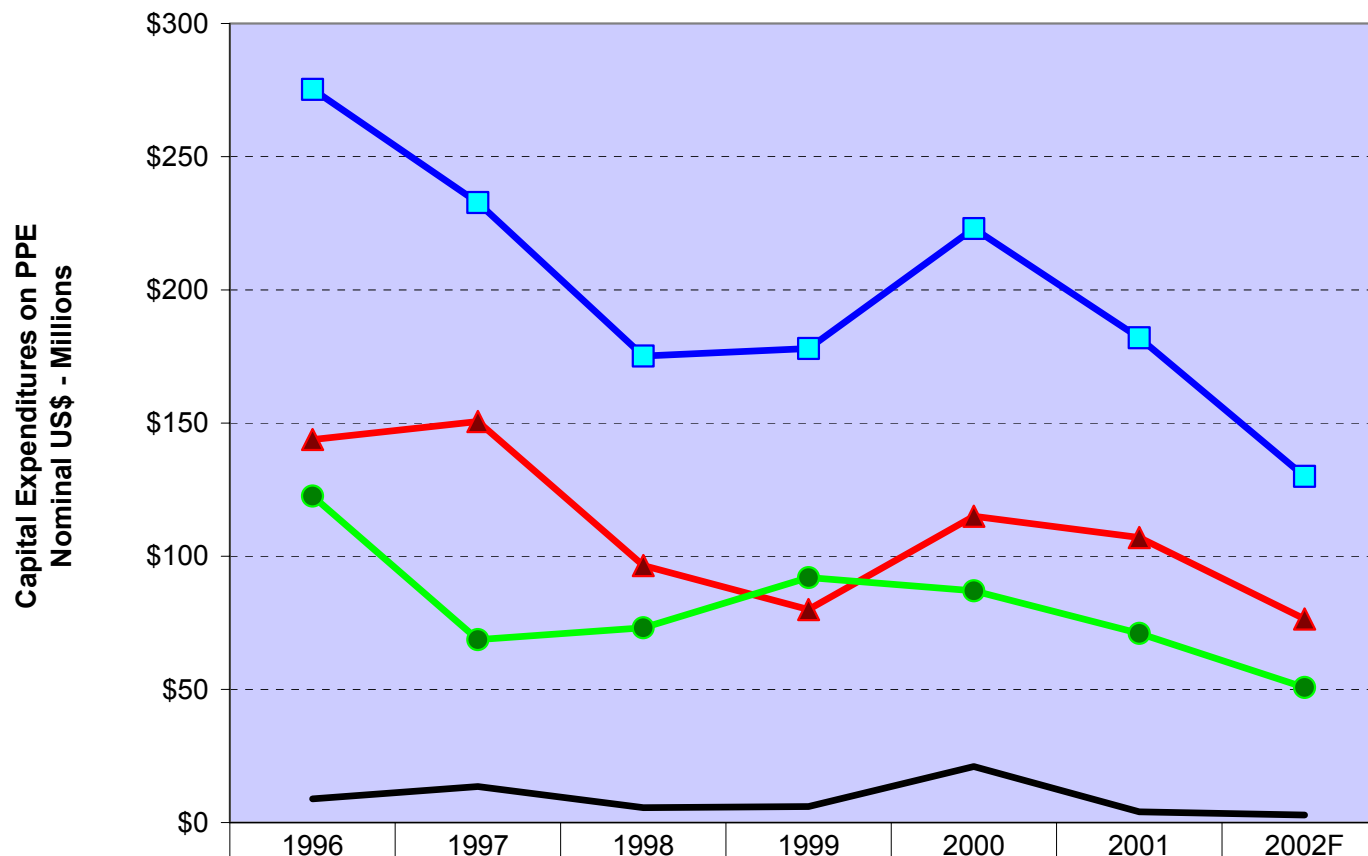
CAPEX Propensity - Summary

Returns Have Been Dismal – Paying Down Debt Has Been A Better Use of Cash Than Capex



CAPEX Propensity - Summary

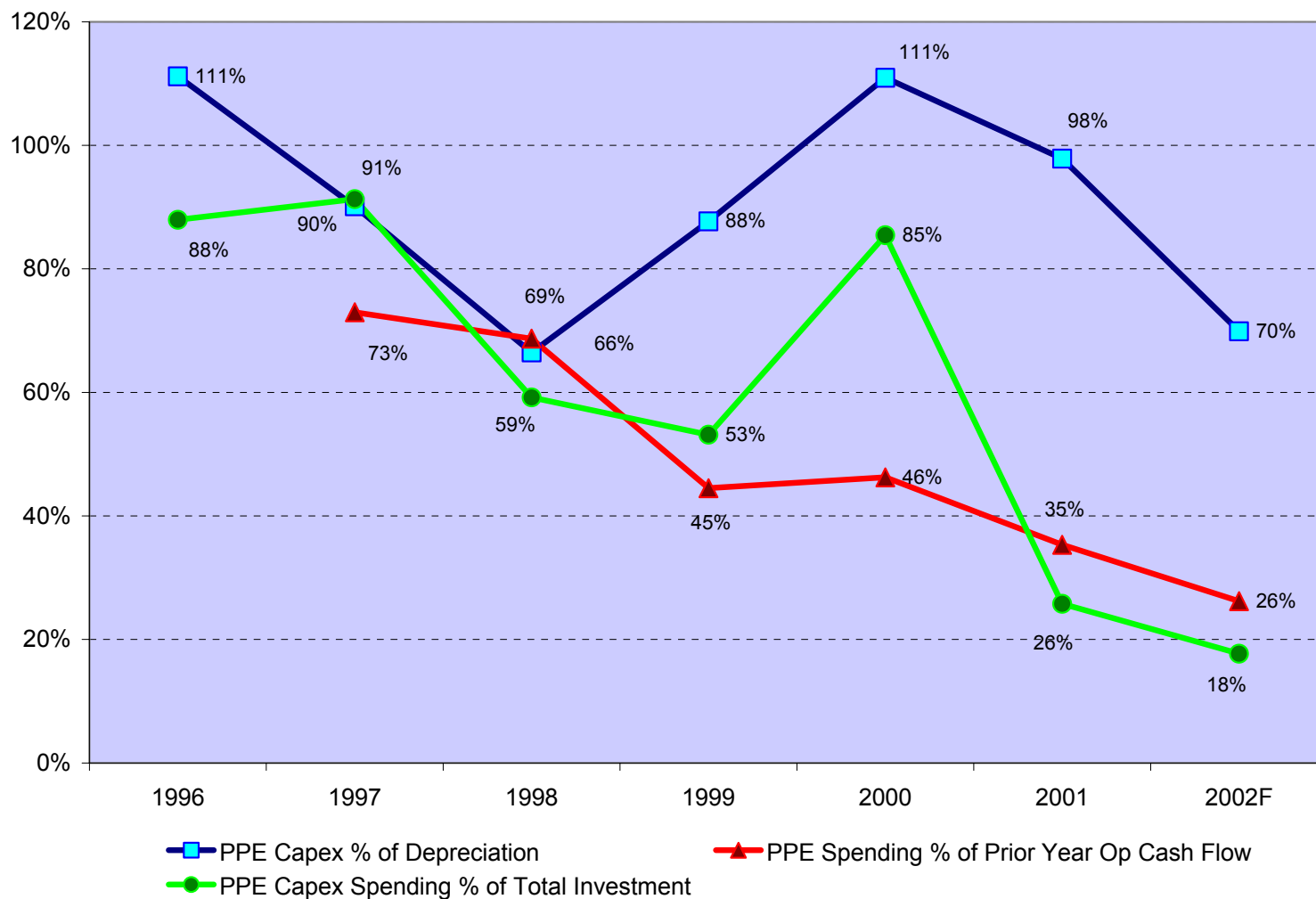
TI's Capex on PPE Is At A 7-Year Low



▲ Paper	144	151	97	80	115	107	76
● Building Products	123	69	73	92	87	71	51
— Corporate / Other	9	14	6	6	21	4	3
■ Combined	275	233	175	178	223	182	130

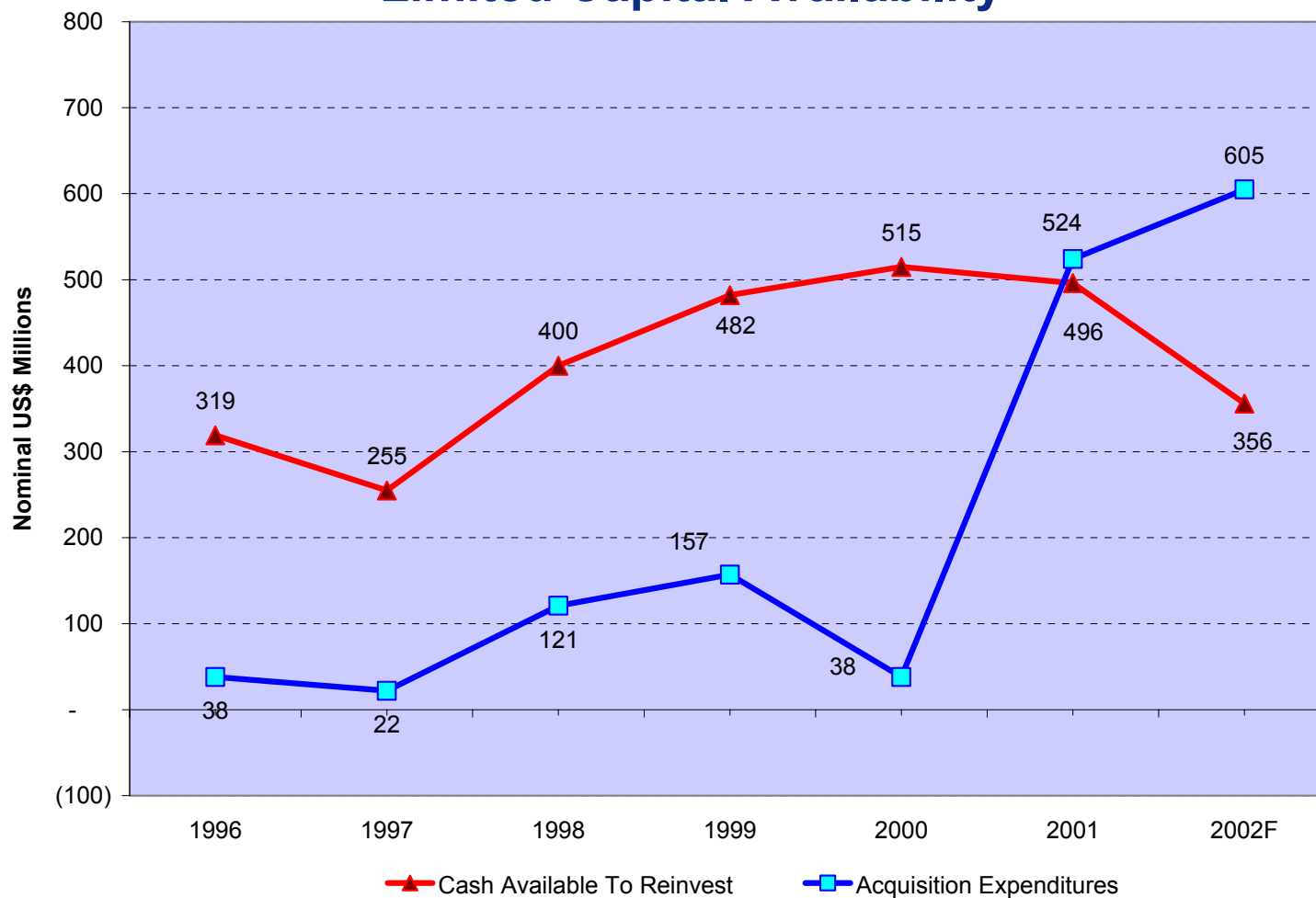
CAPEX Propensity - Summary

TI Has A Relatively High Spend Rate As A % of Depreciation



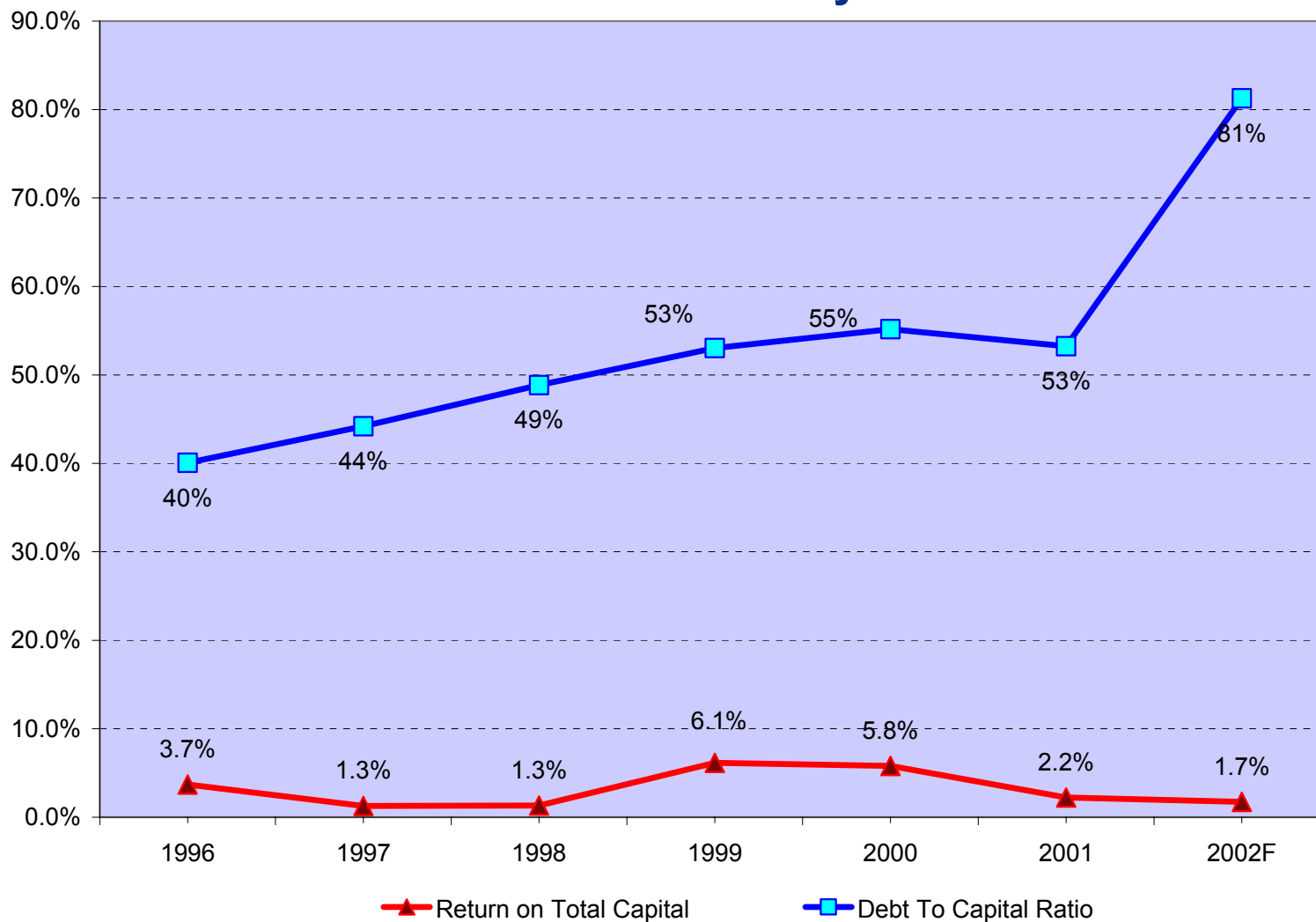
CAPEX Propensity - Summary

Weak Containerboard Fundamentals and Acquisition Activity Have Limited Capital Availability



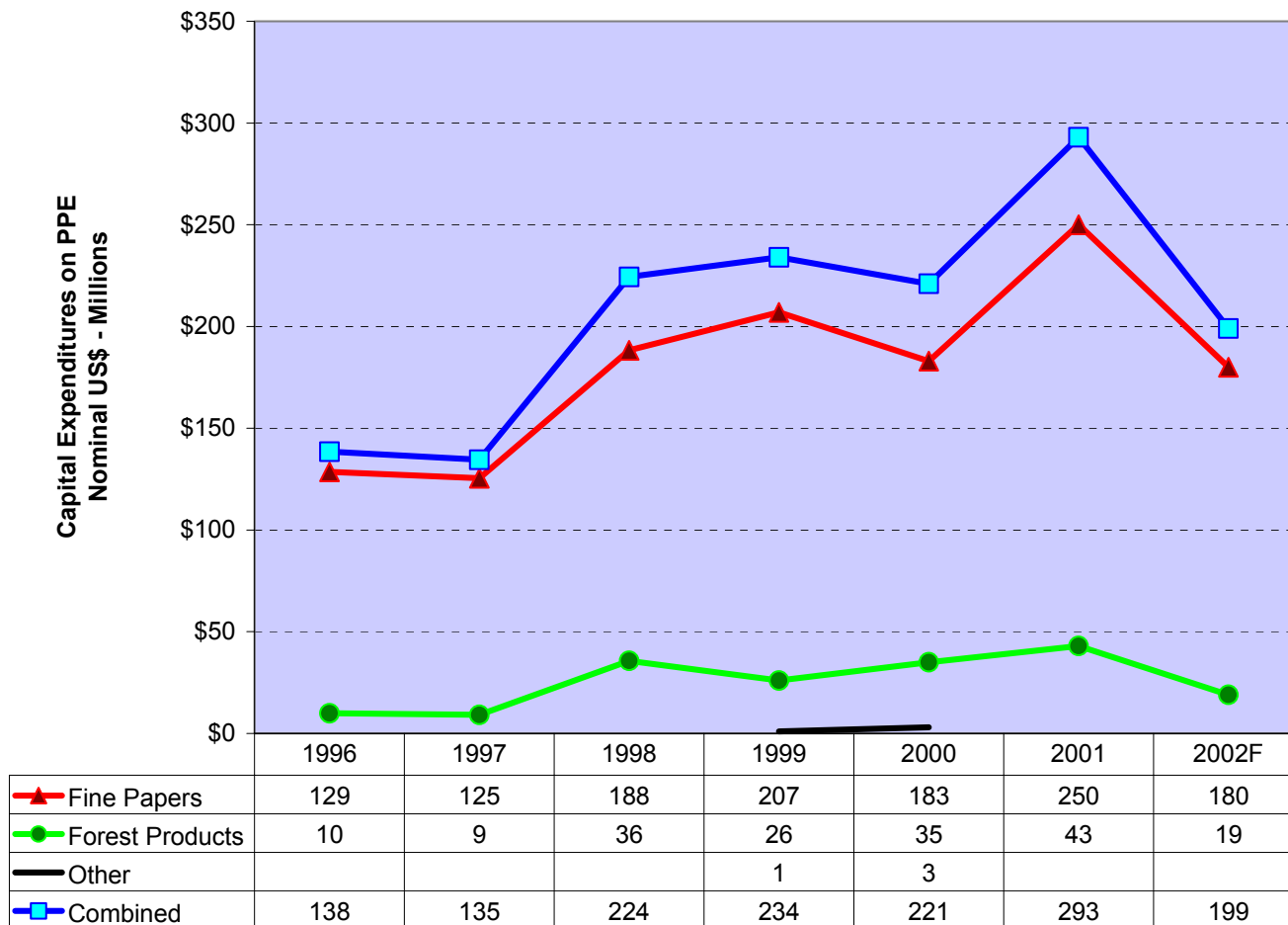
CAPEX Propensity - Summary

Returns Have Been Poor – Divestitures and Debt Reduction Will Be A Priority In 2002 / 2003



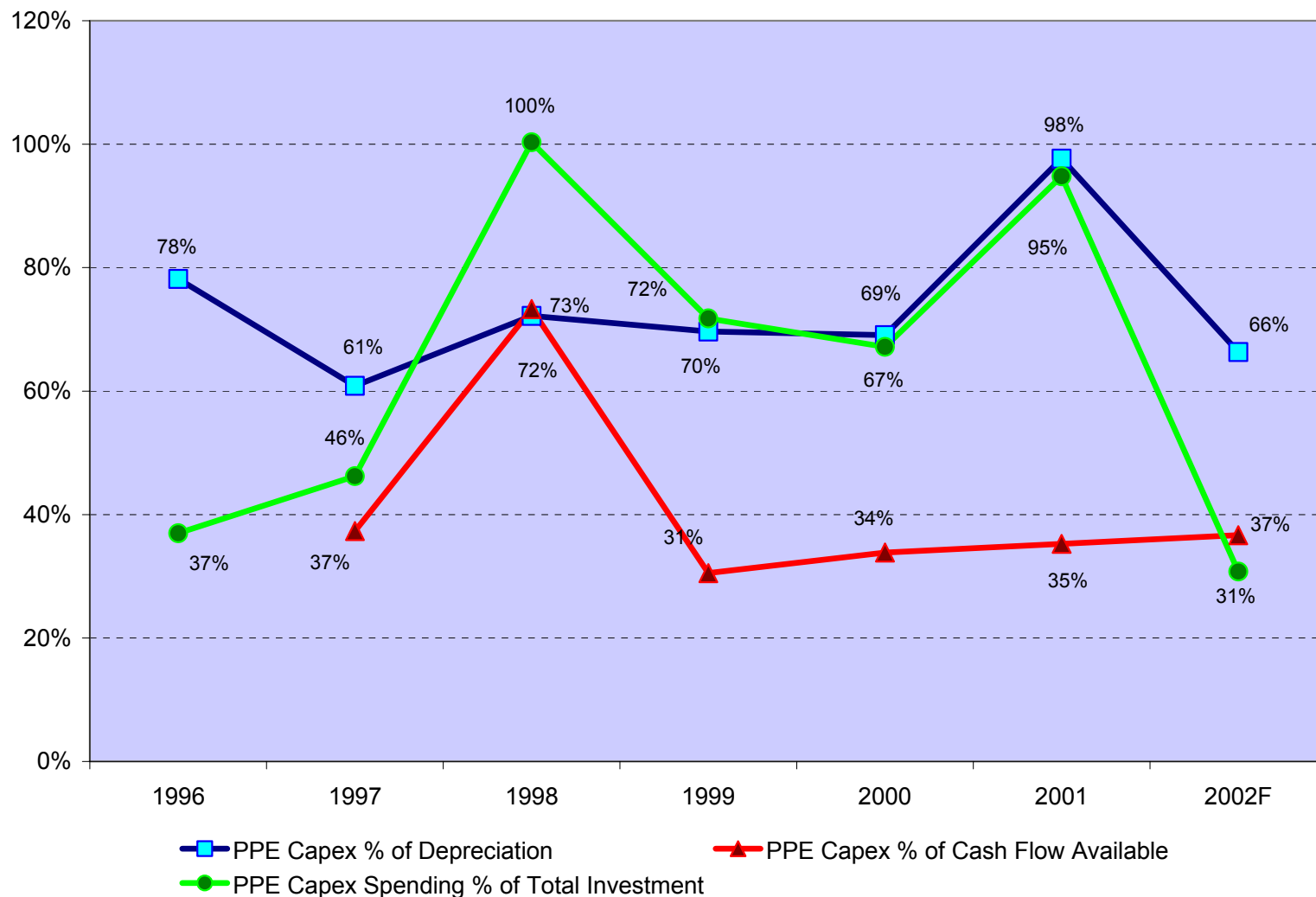
CAPEX Propensity - Summary

SAPPI's 2002 Capex on PPE Are Down But Displaying A Positive Overall Trend



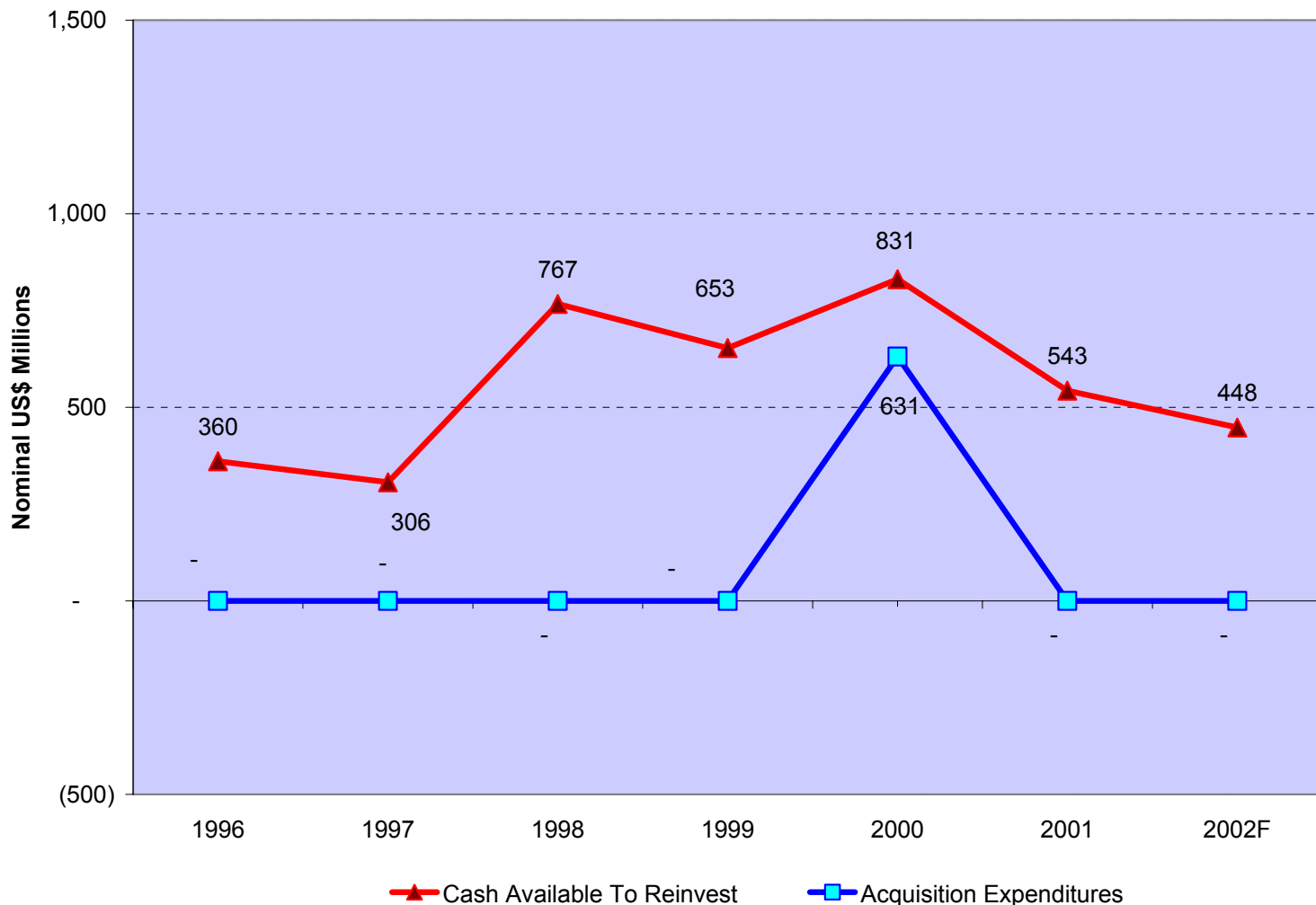
CAPEX Propensity - Summary

SAPPI Consistently Invests 60%-100% of Depreciation



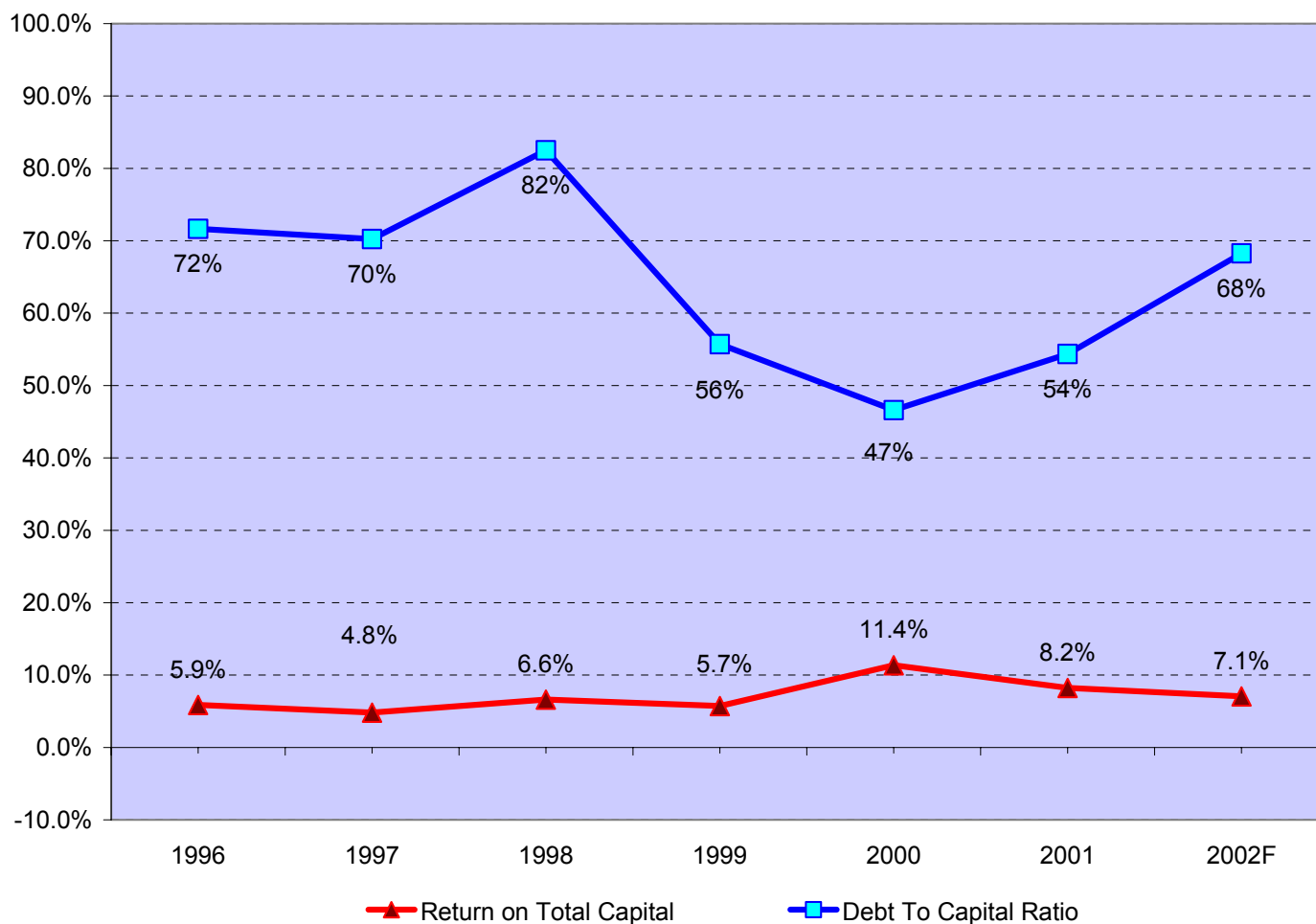
CAPEX Propensity - Summary

SAPPI's Cash Available For Expenditures Is Down But Still Significant



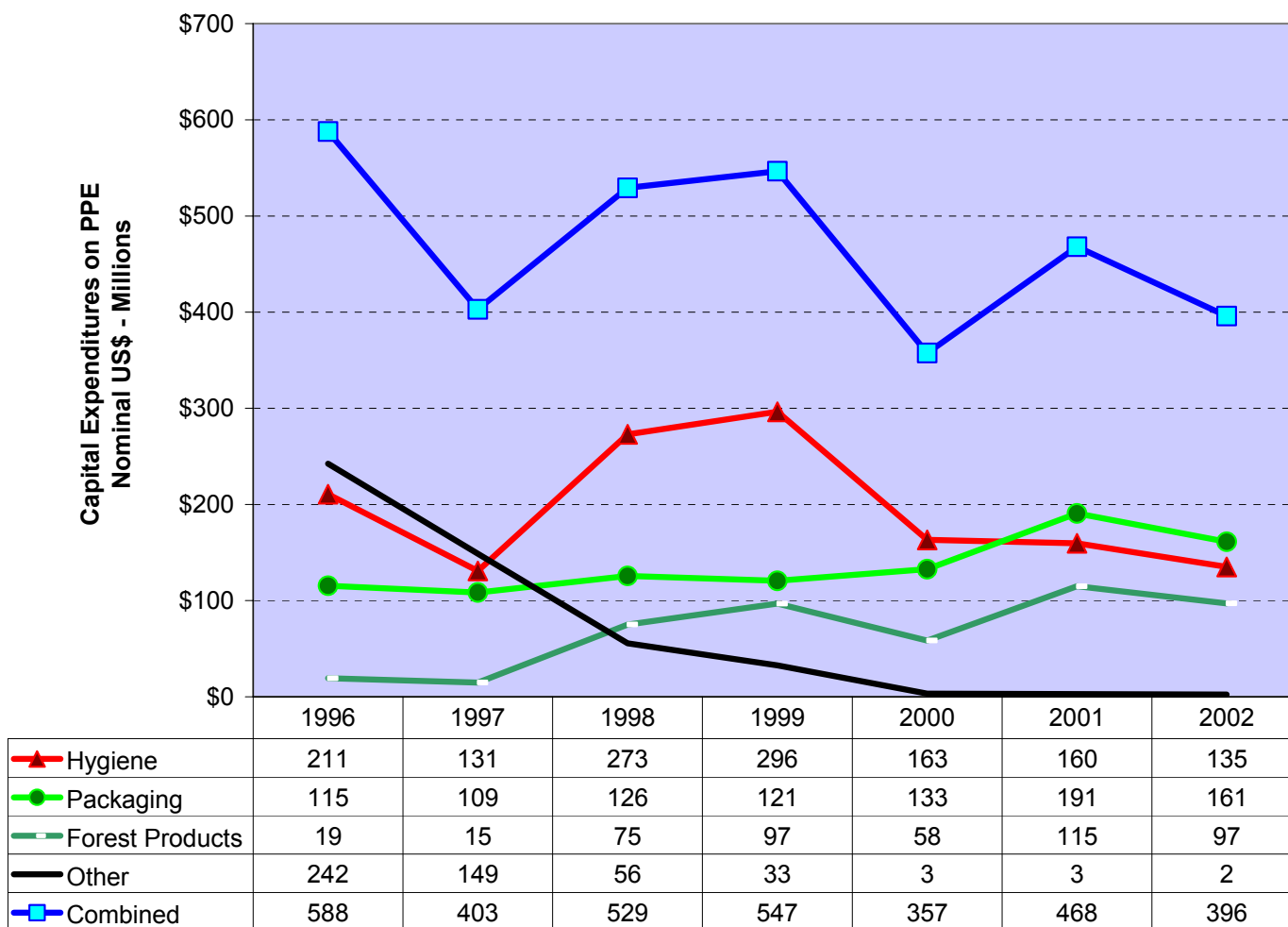
CAPEX Propensity - Summary

SAPPI's Returns Have Been Better Than Average,
But Leverage Is Rising



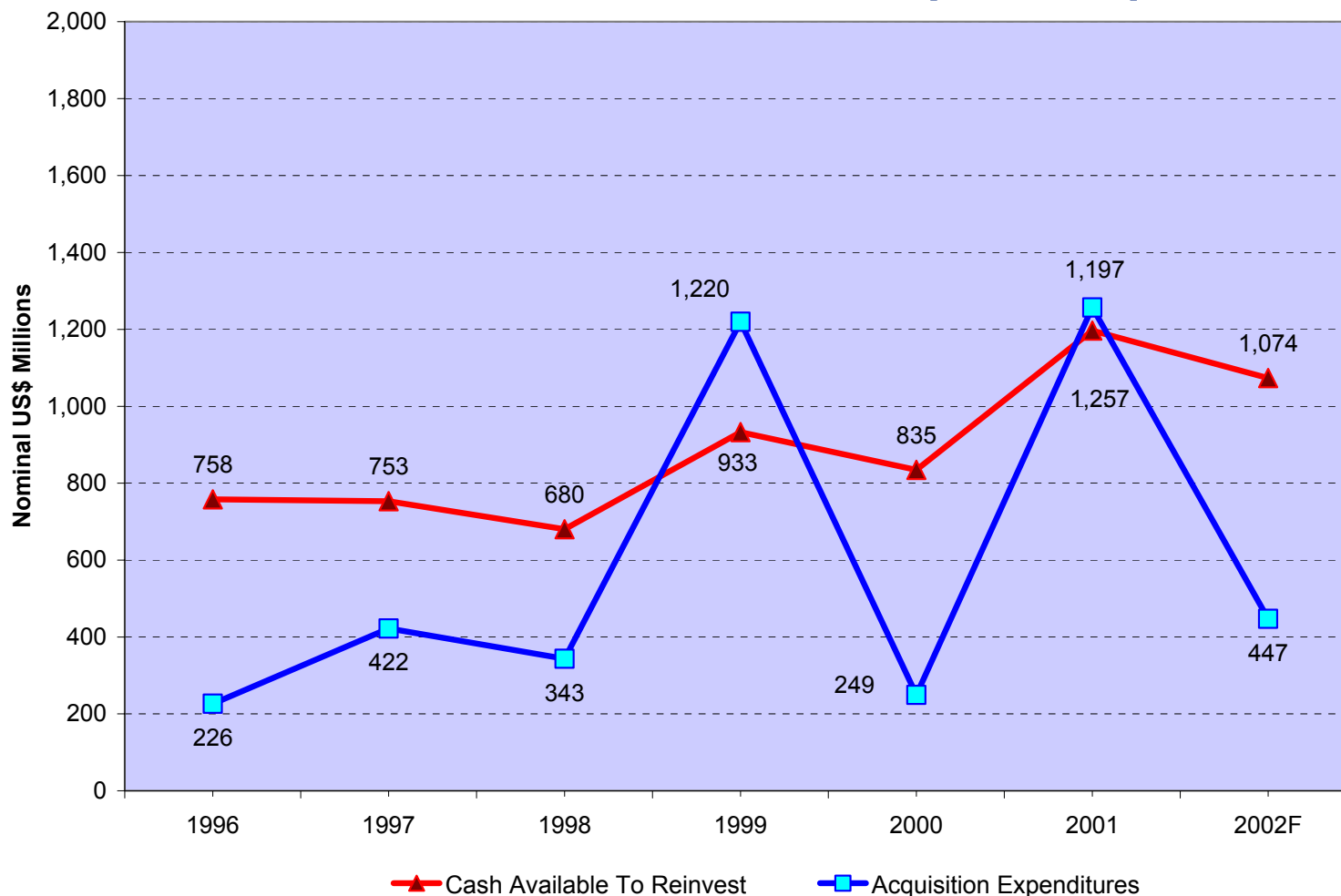
CAPEX Propensity - Summary

SCA Invested Most Heavily In Packaging PPE In 2001 and 2002



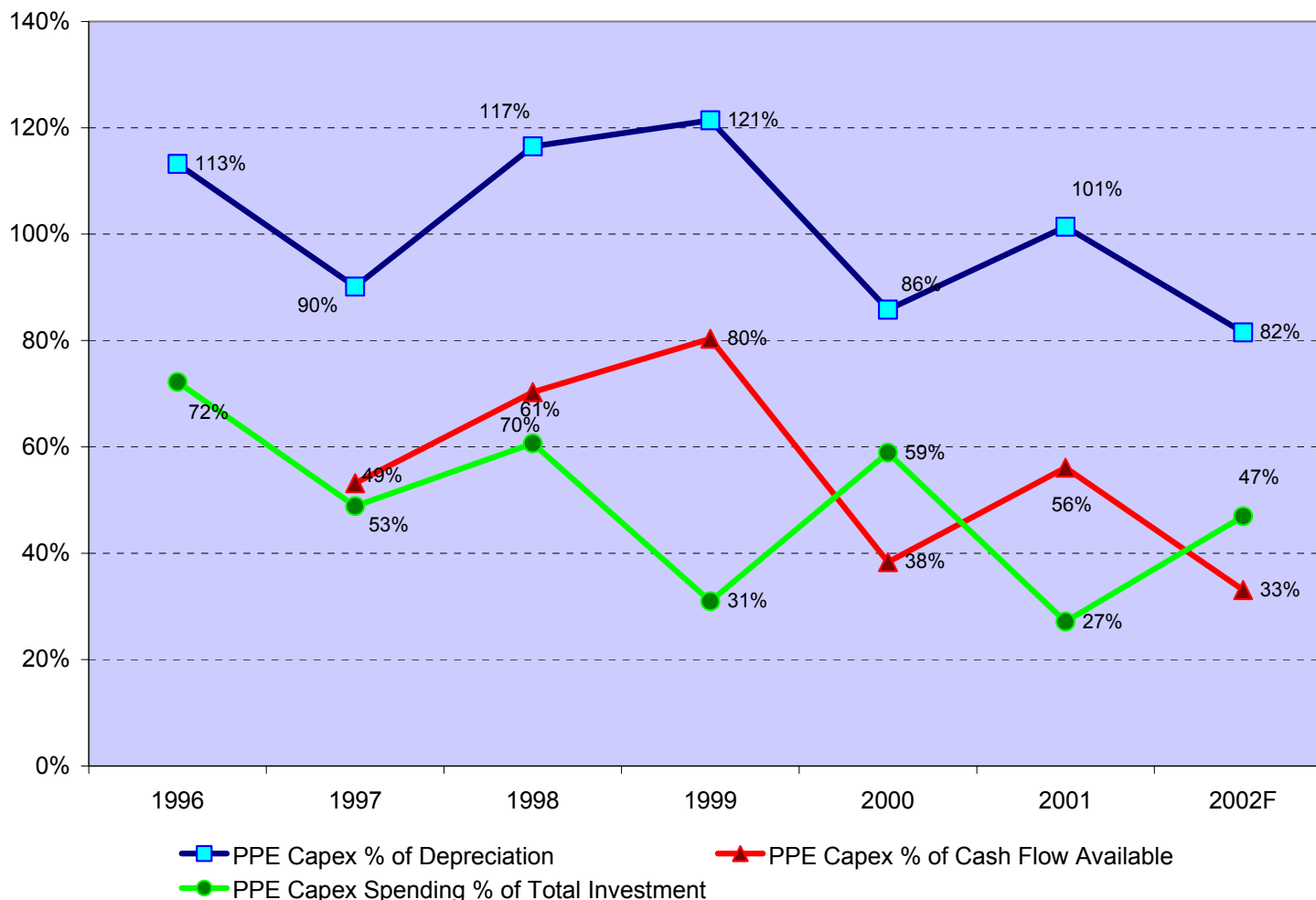
CAPEX Propensity - Summary

SCA Has A Positive Available Cash Flow Trend – Large Acquisitions In 1999 and 2001 Did Not Displace Capex



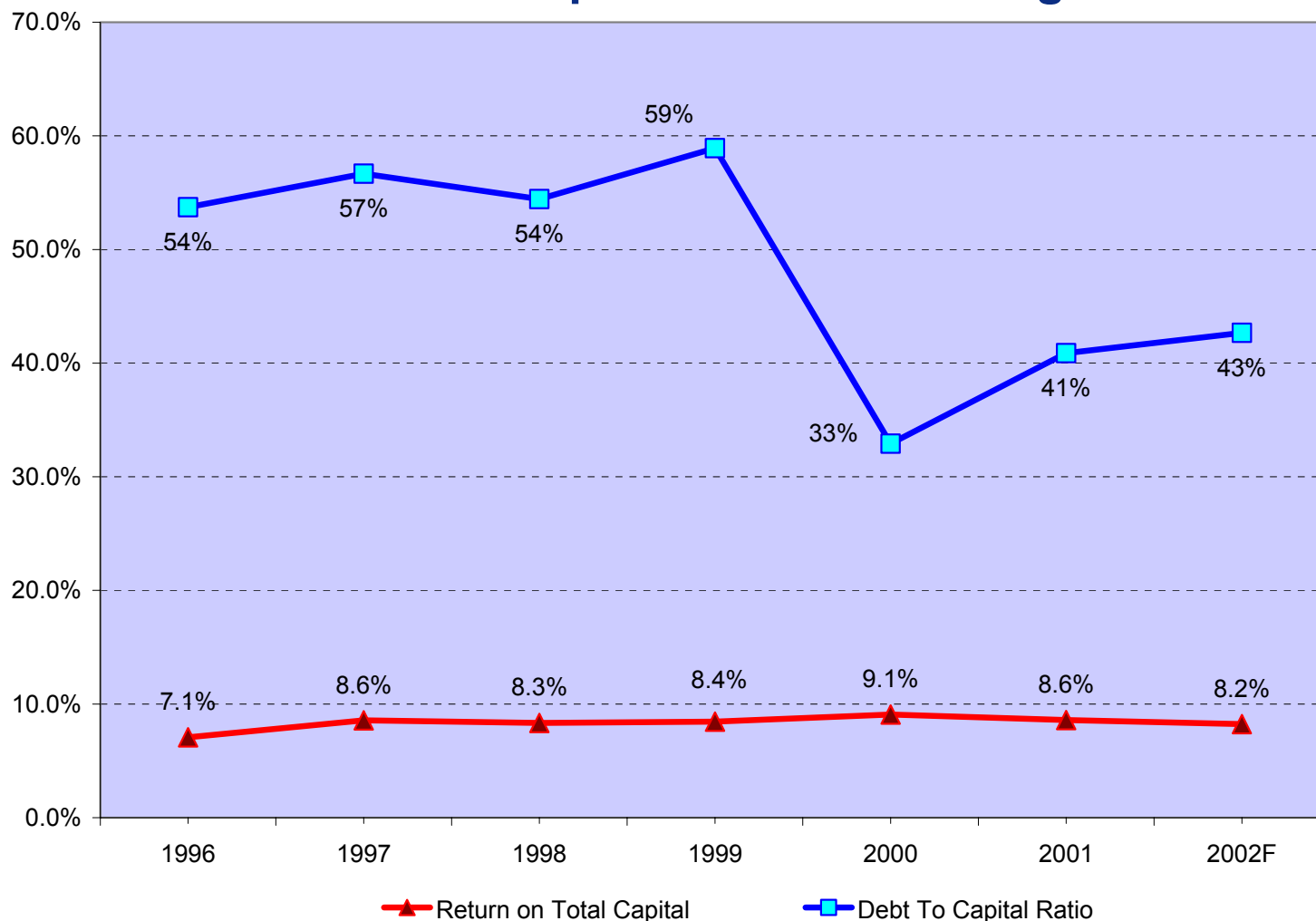
CAPEX Propensity - Summary

SCA Continues To Invest At A Relatively High Percentage of Depreciation



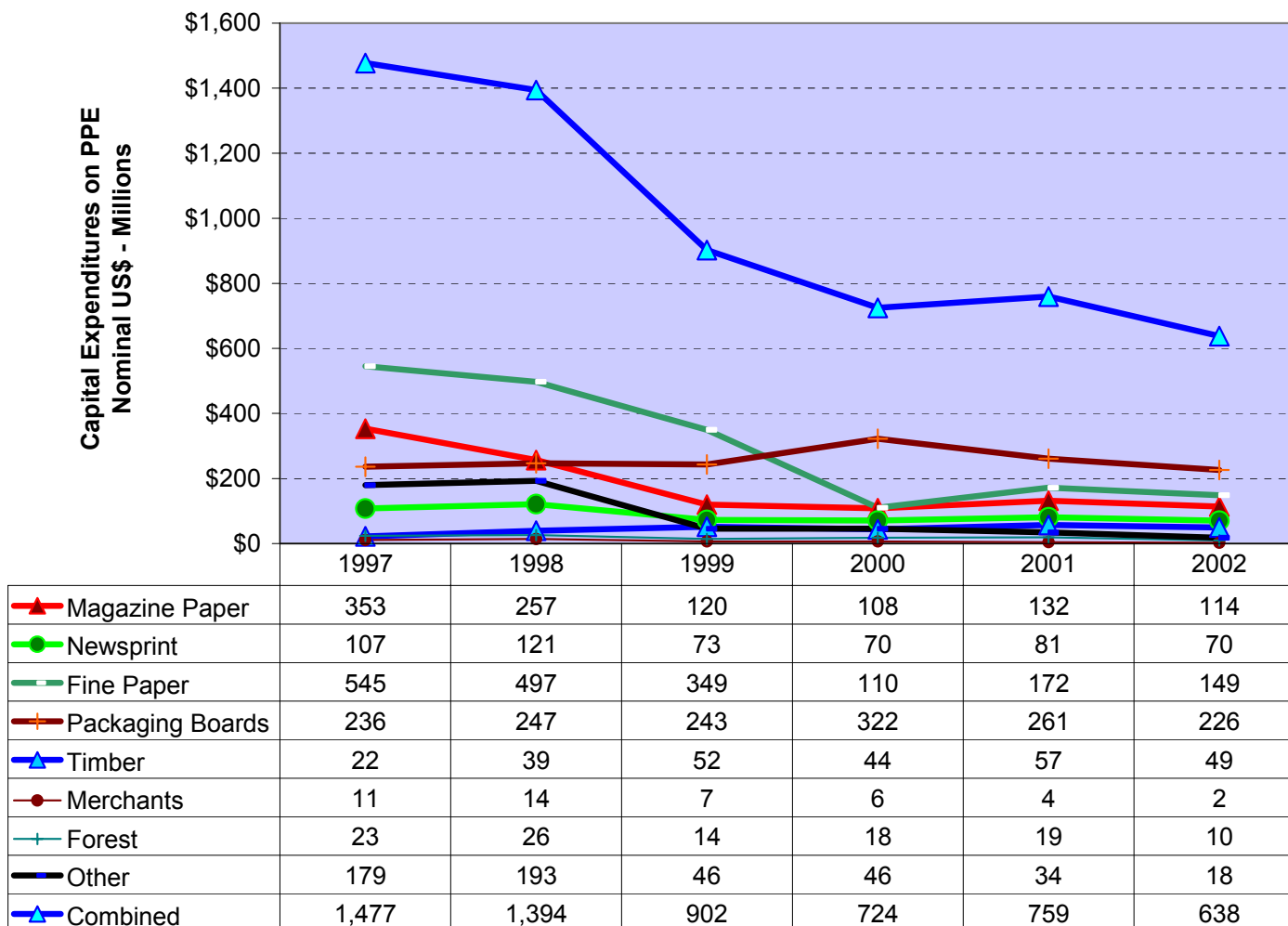
CAPEX Propensity - Summary

SCA Returns Are Better Than Average But Continue Below The Cost of Capital – Debt Is At Target Level



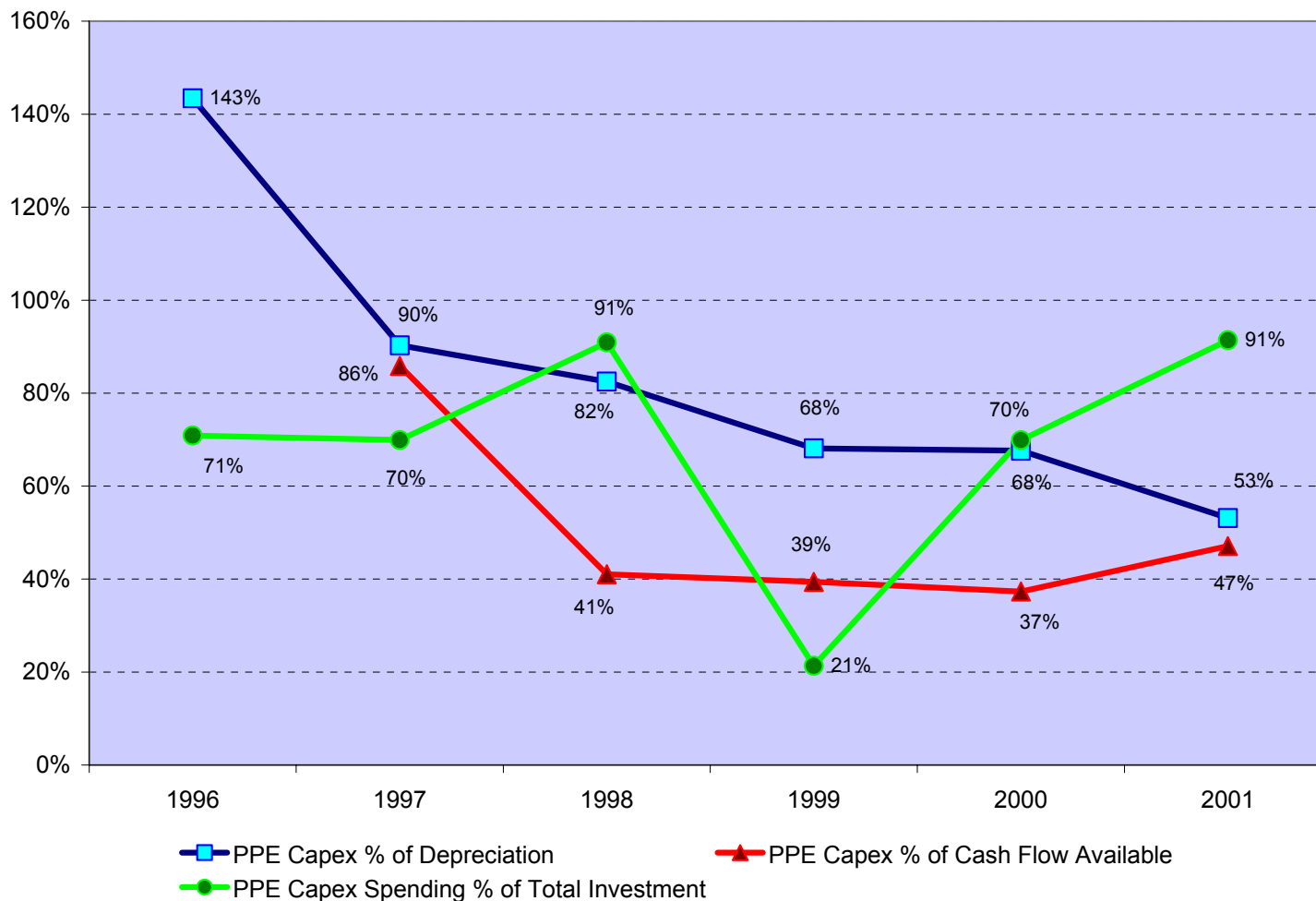
CAPEX Propensity - Summary

Stora's Capex On PPE Is Trending Steadily Downward
At Stora Enso



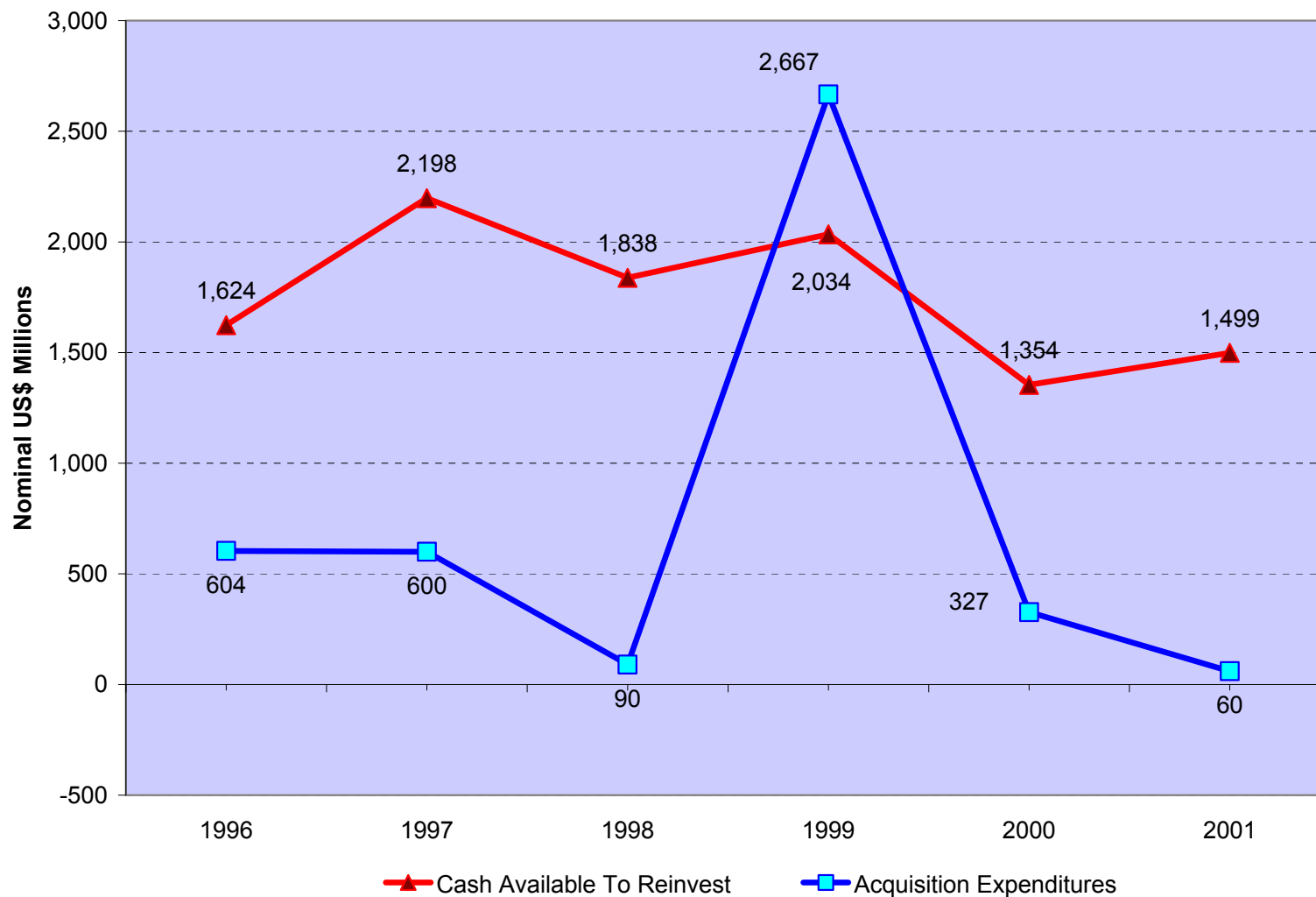
CAPEX Propensity - Summary

Stora's PPE Capex Has Fallen To 53% Of Depreciation



CAPEX Propensity - Summary

Stora's Cash Available For Reinvestment Has Been Relatively Strong At \$1.5 billion



CAPEX Propensity - Summary

Stora's Returns Have Regressed Back Towards Industry Averages

