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PIMA Leadership Conference: Forecasting the Future



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Outline

- ◆ Economic Backdrop
- ◆ Impact of Rising Interest Rates
- ◆ Impact of a Weak \$
- ◆ Impact of China
- ◆ Impact of High Energy Costs
- ◆ Outlook for High Fiber Costs

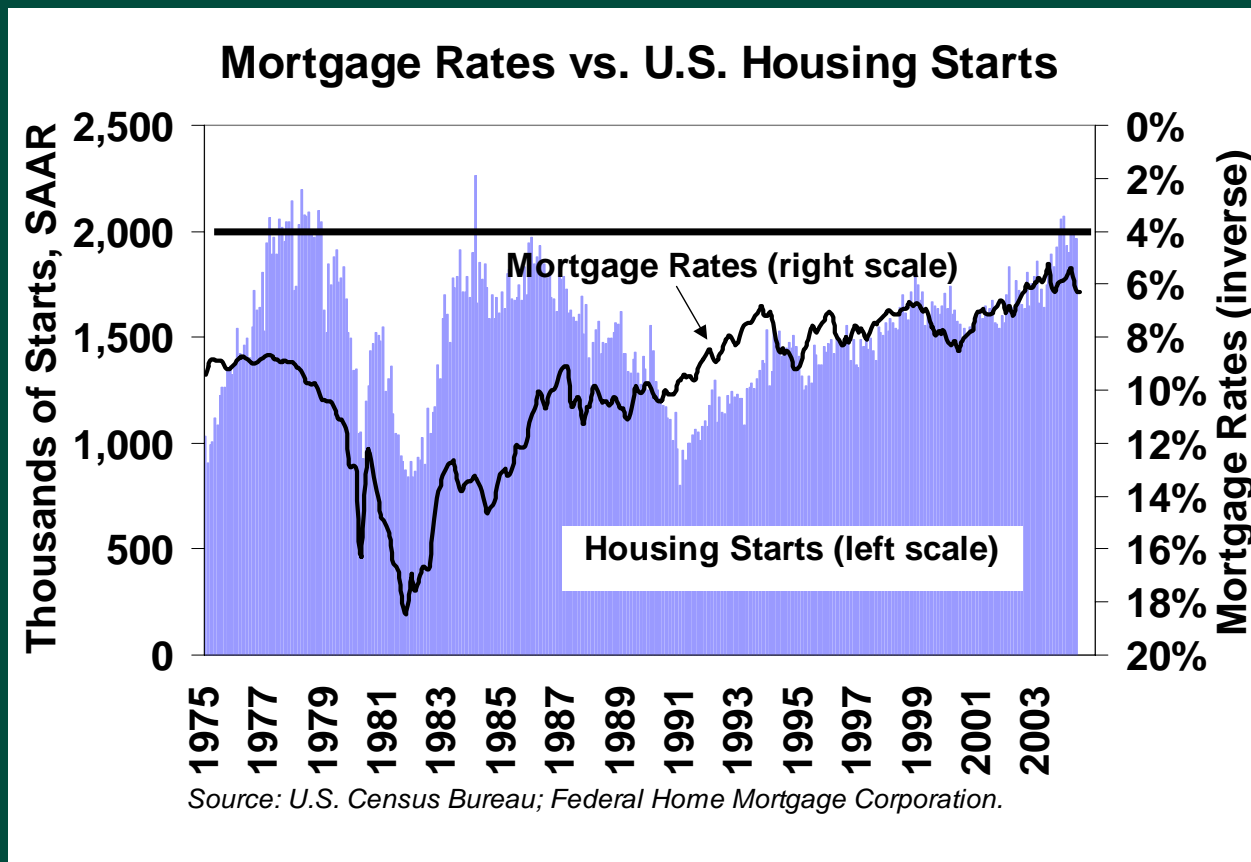


Outline

- ◆ Favorable Supply/Demand Balance
- ◆ Improving Capital Efficiency
- ◆ Consolidation
- ◆ Risk Factors
- ◆ Action Steps for U.S. Producers
- ◆ Summary

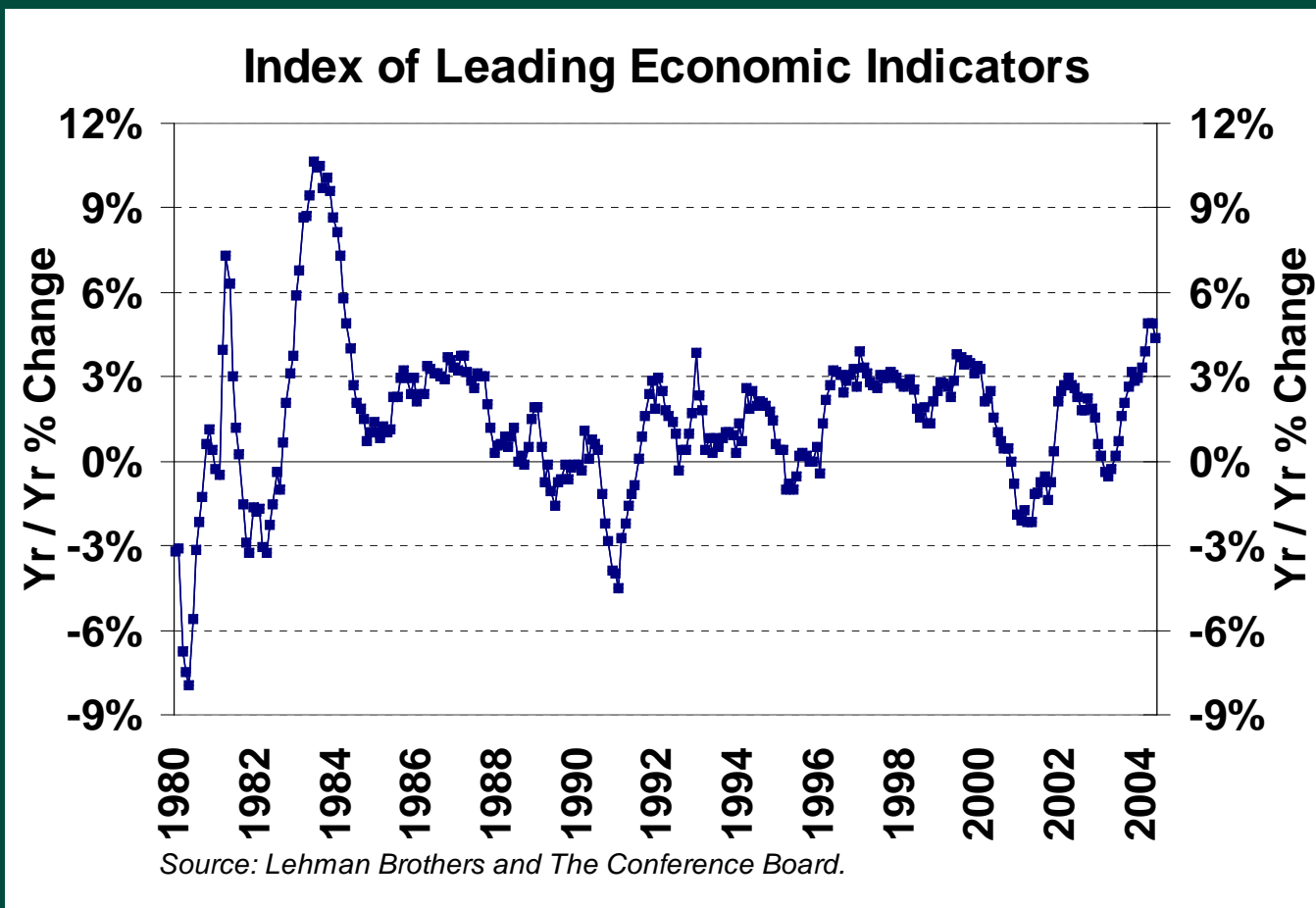
Economic Backdrop

- ◆ Low interest rates and favorable demographics are supporting the highest housing starts in 20 years. At best, rising interest rates and reduced affordability are likely to keep a lid on housing starts.



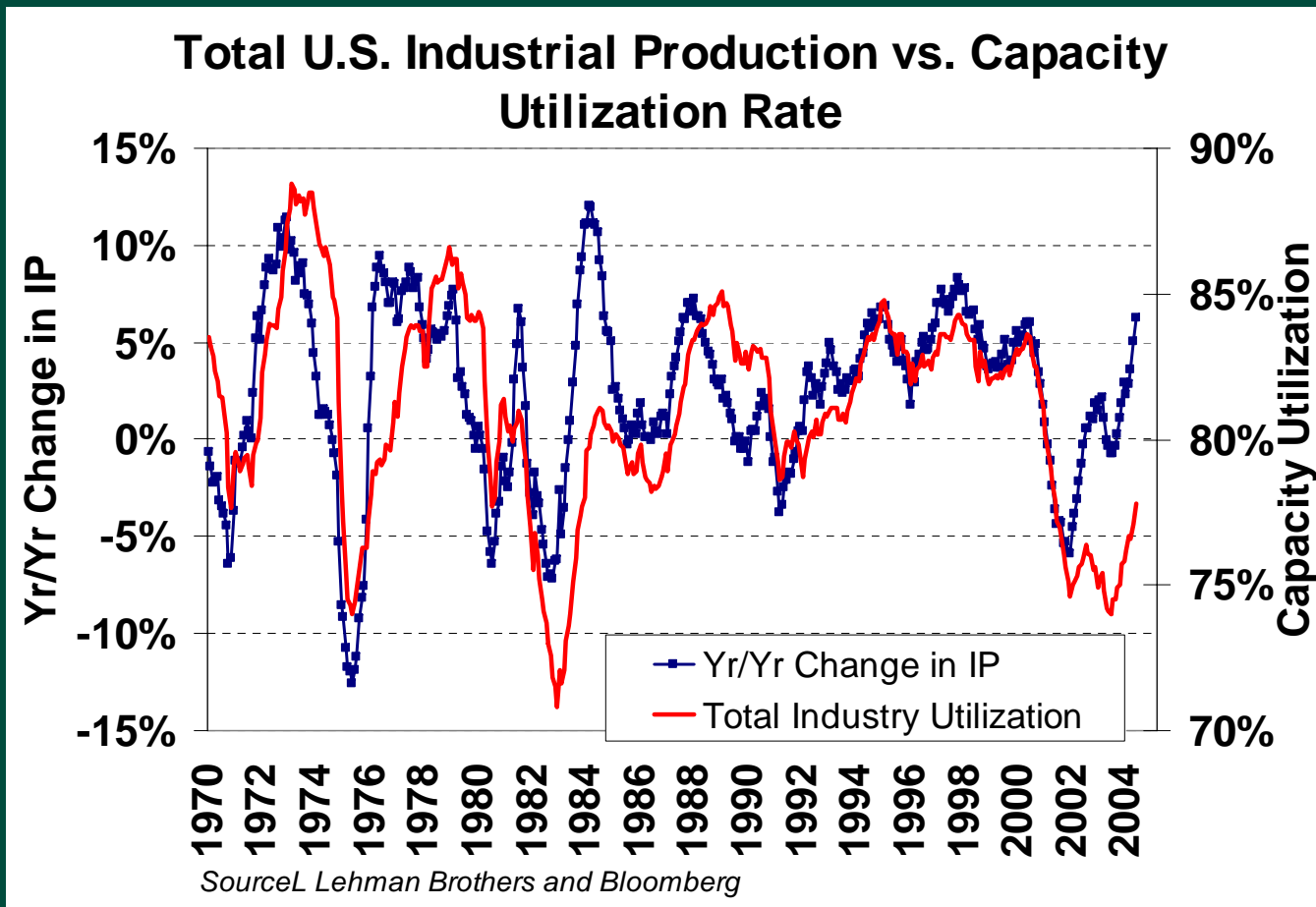
Economic Backdrop

- ◆ The index of leading economic indicators is enjoying its strongest rebound in 20 years...



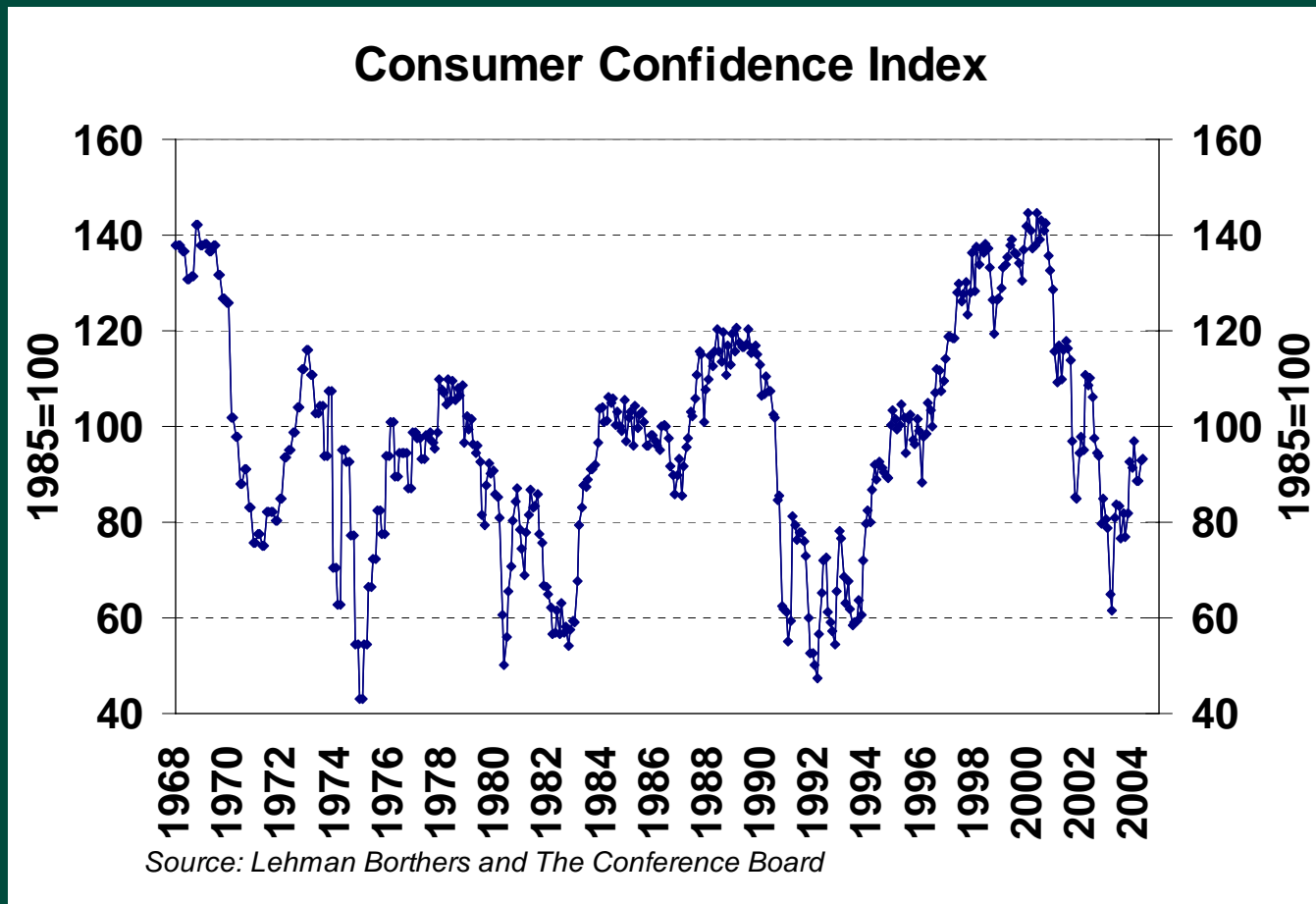
Economic Backdrop

- ◆ The trajectory of the recovery in U.S. industrial production and capacity utilization is vertical...



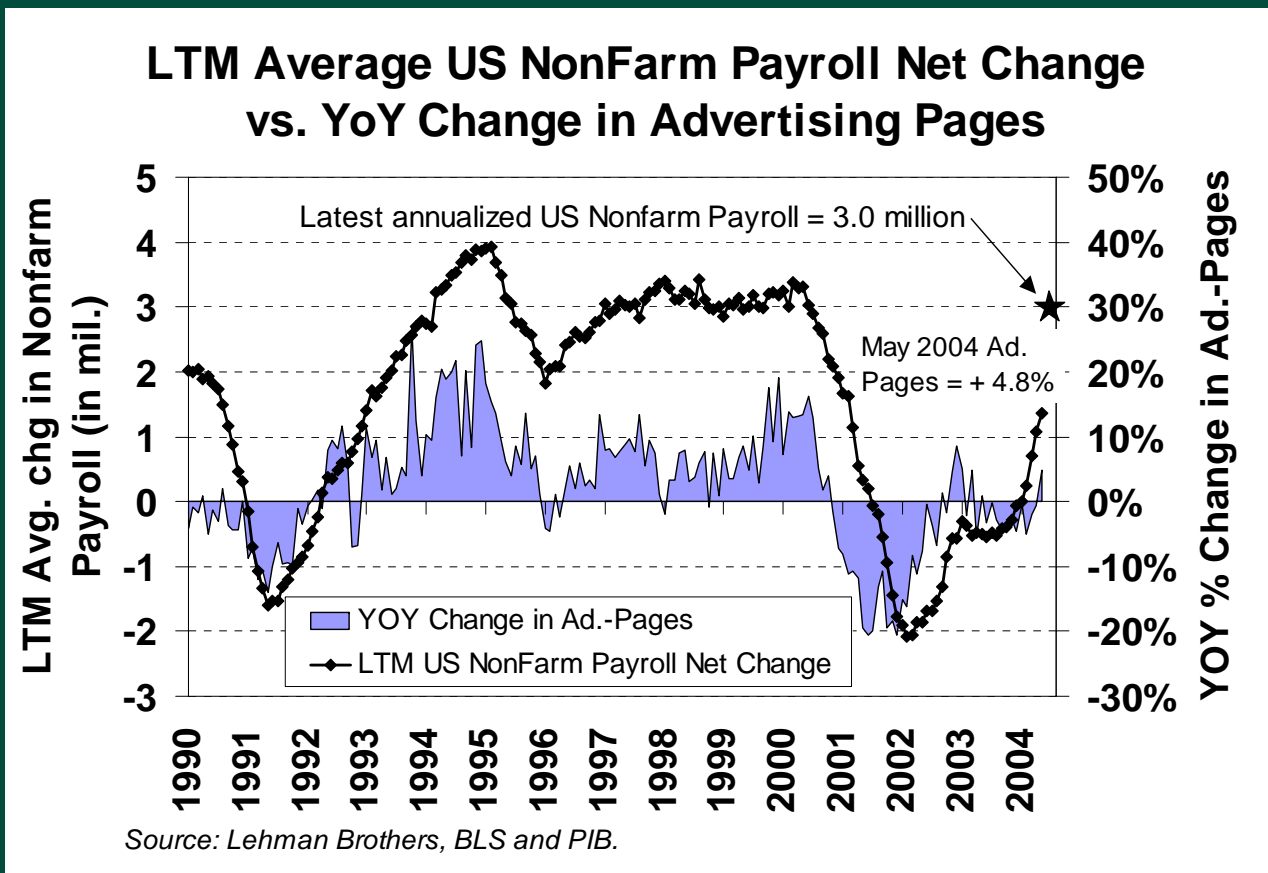
Economic Backdrop

- ◆ Consumer confidence is starting to recover, but remains subdued...



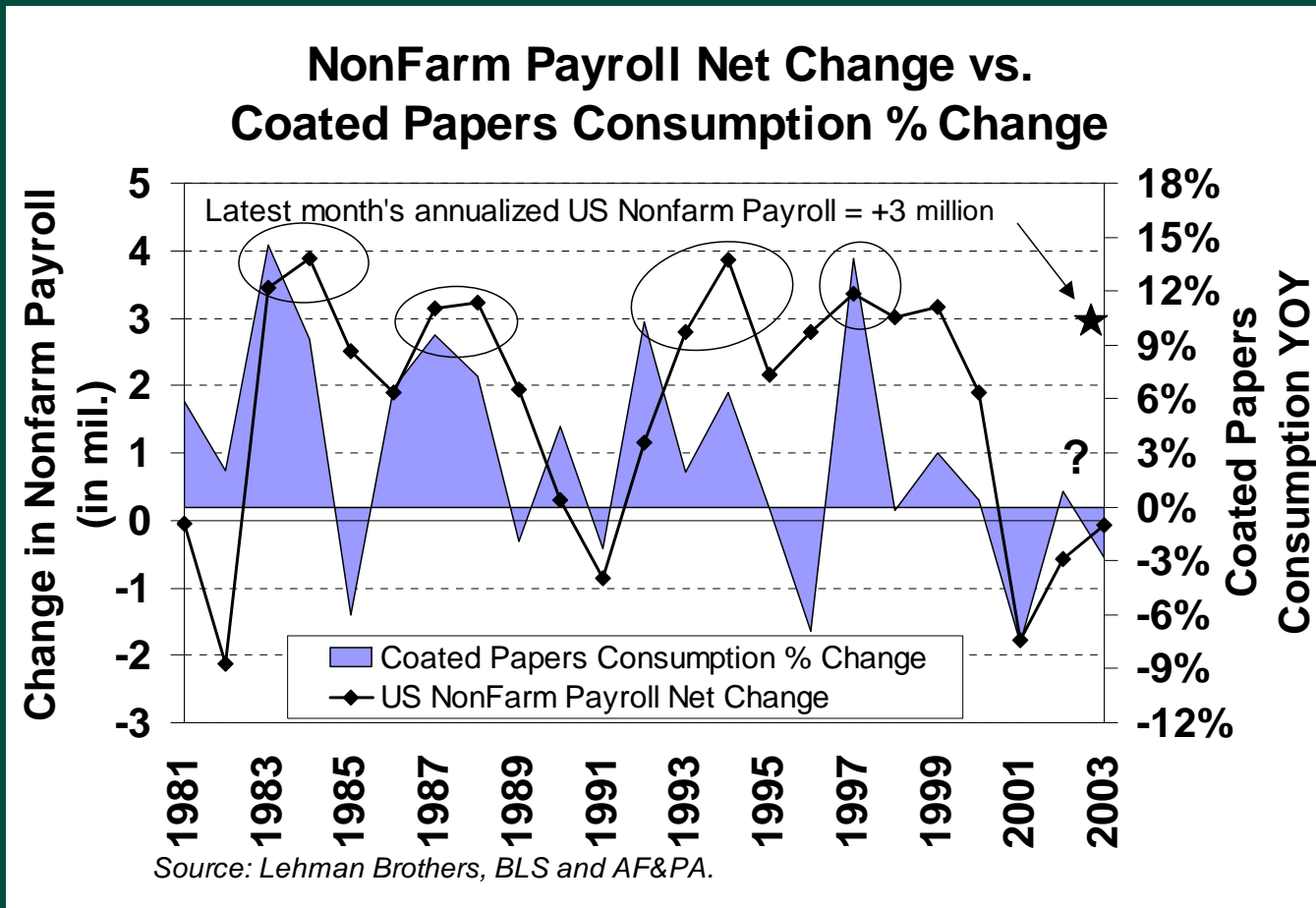
Economic Backdrop

- ◆ When businesses regain confidence to boost employment (as they have in recent months) they normally regain confidence to advertise. May marked the strongest YoY comparison for magazine ad pages in 14 months.



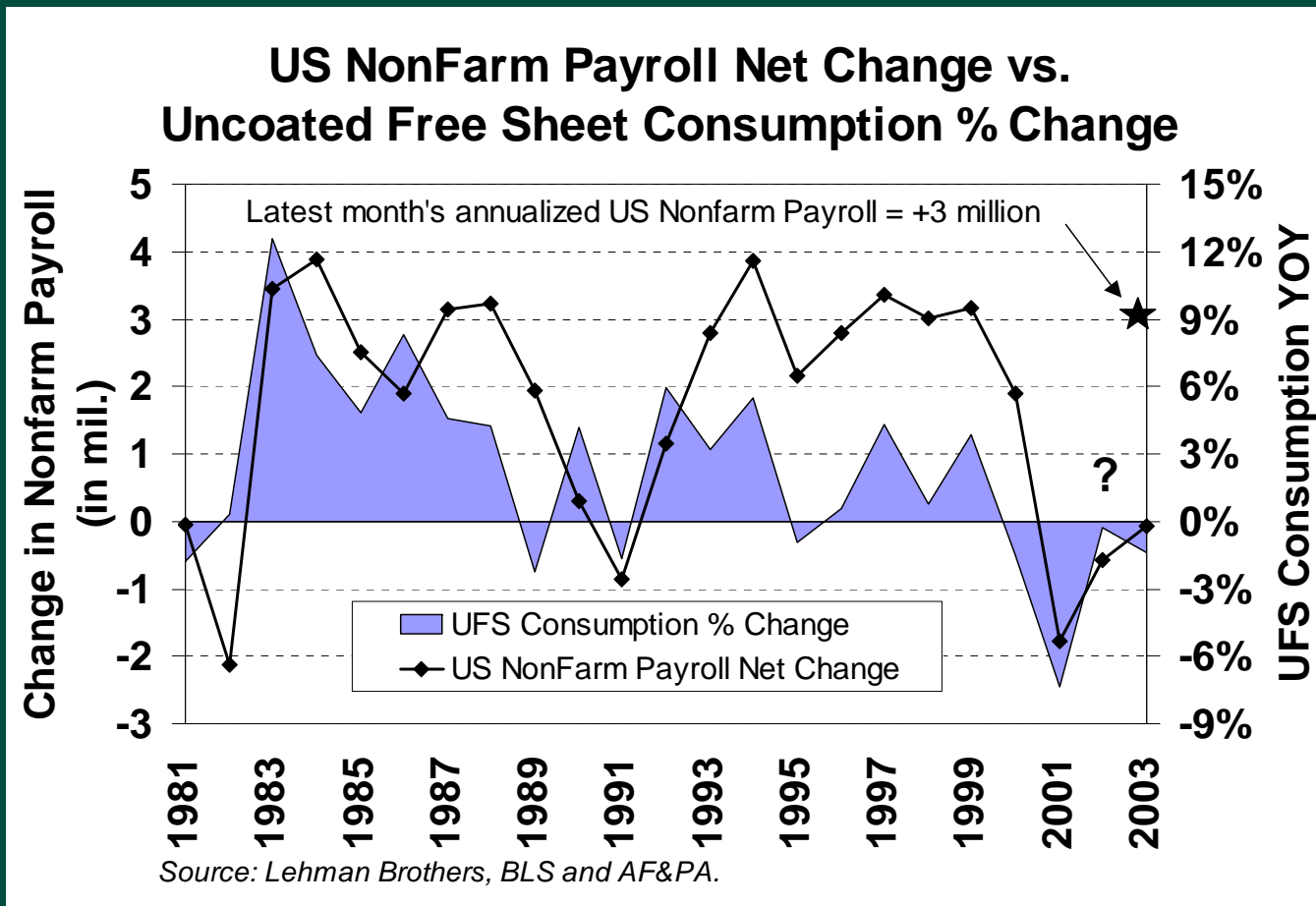
Economic Backdrop

- Employment gains have surged past the 3 MM mark 4X in the past 23 years. Each was associated with coated paper consumption gains of 9%+.



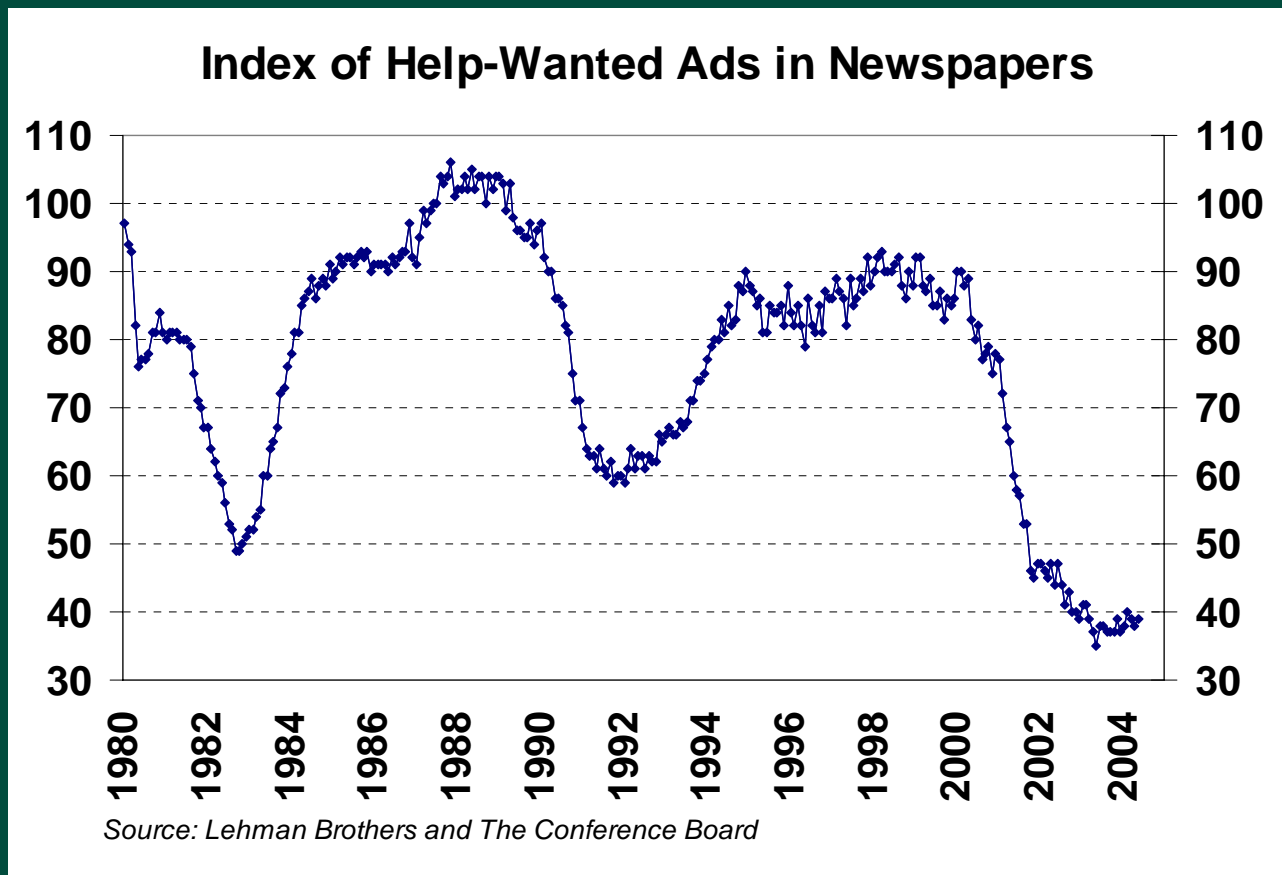
Economic Backdrop

- ◆ Demand for uncoated free sheet grows less rapidly than coated papers, but employment gains should lead to stronger consumption growth.



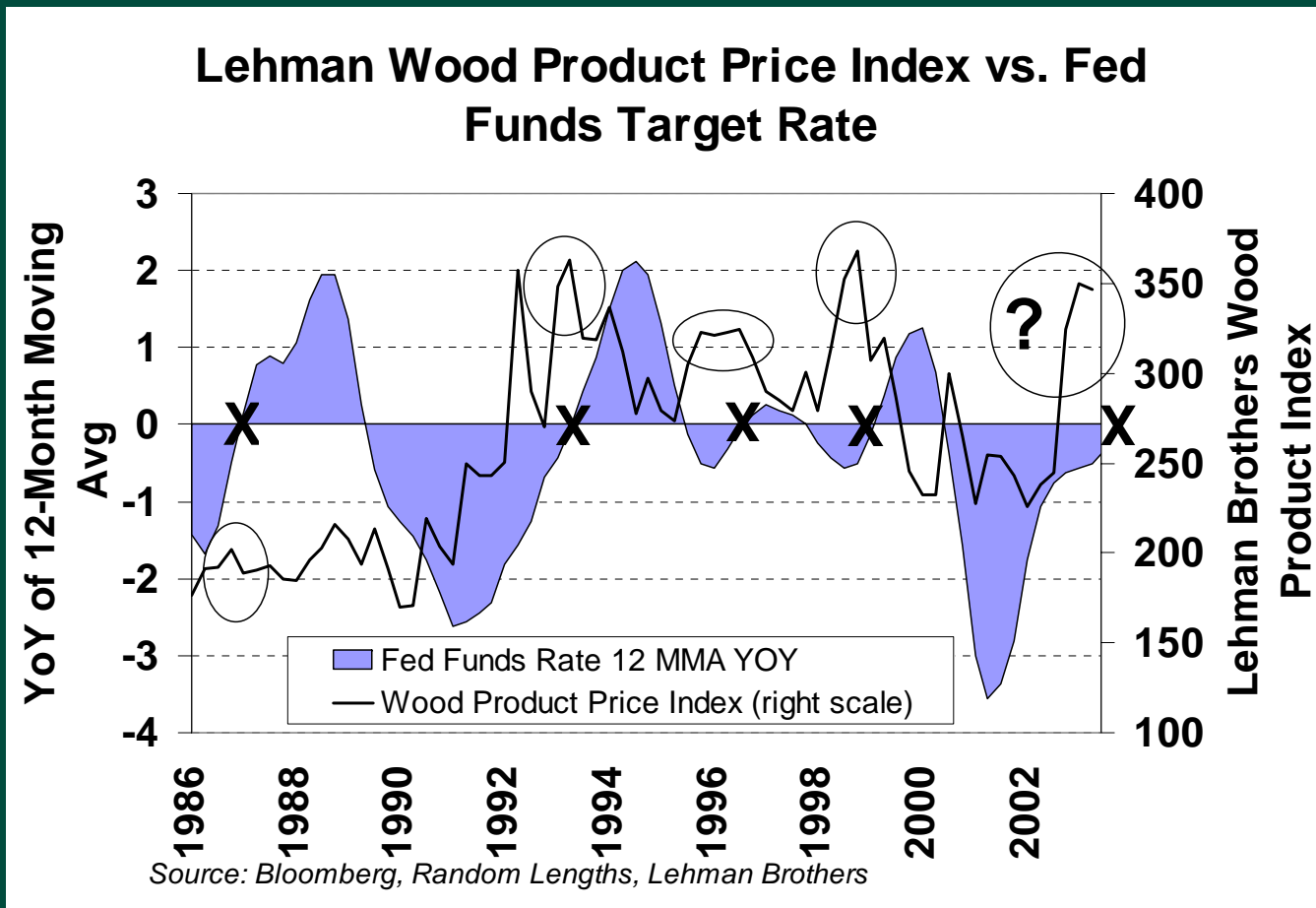
Economic Backdrop

- ◆ Despite increased competition from electronic media, we expect to see a modest cyclical upturn in the help wanted index, which remains near multi-decade lows.



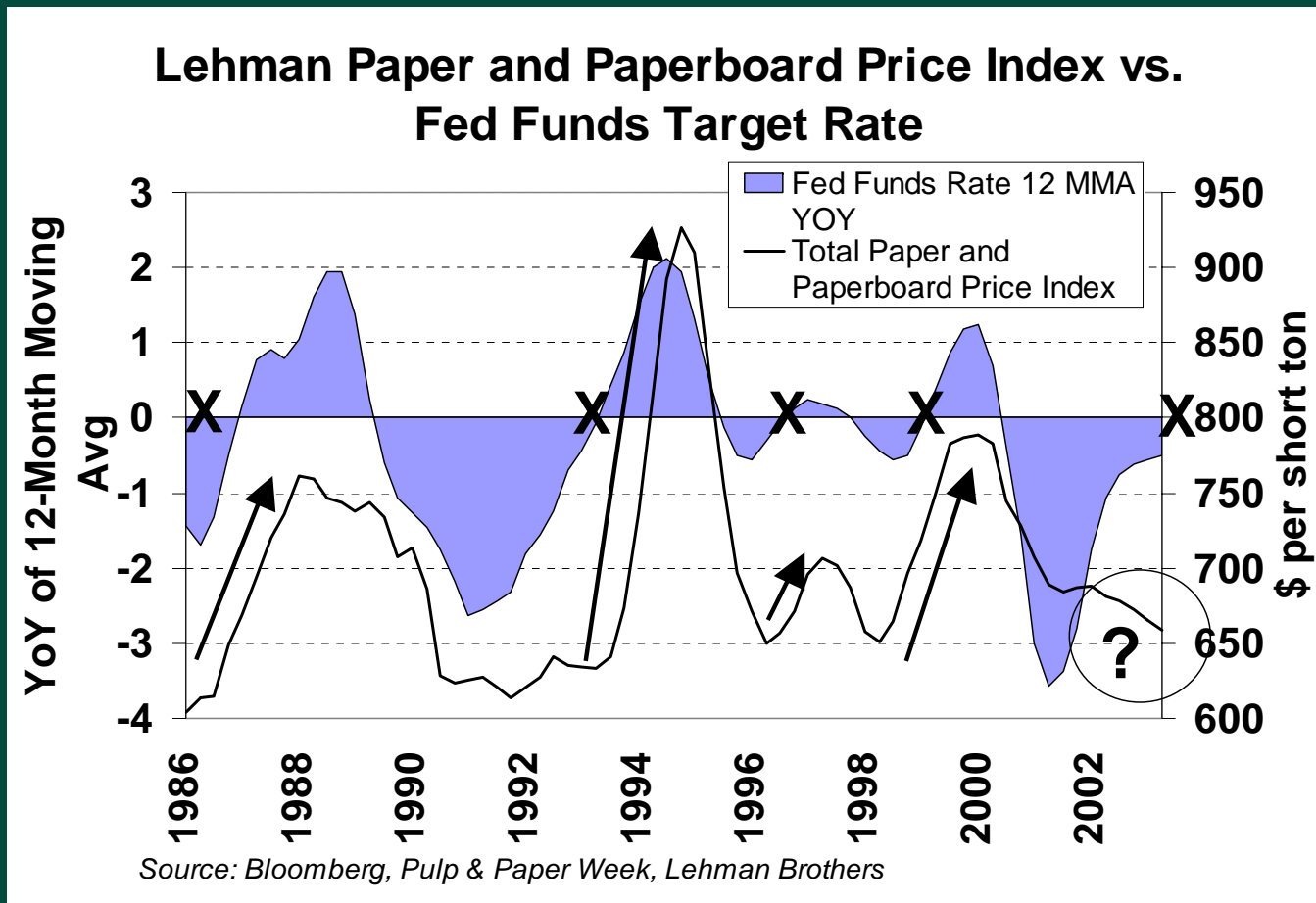
Impact of Rising Interest Rates

- ◆ A rising Federal Funds rate typically marks a peak in wood product pricing.



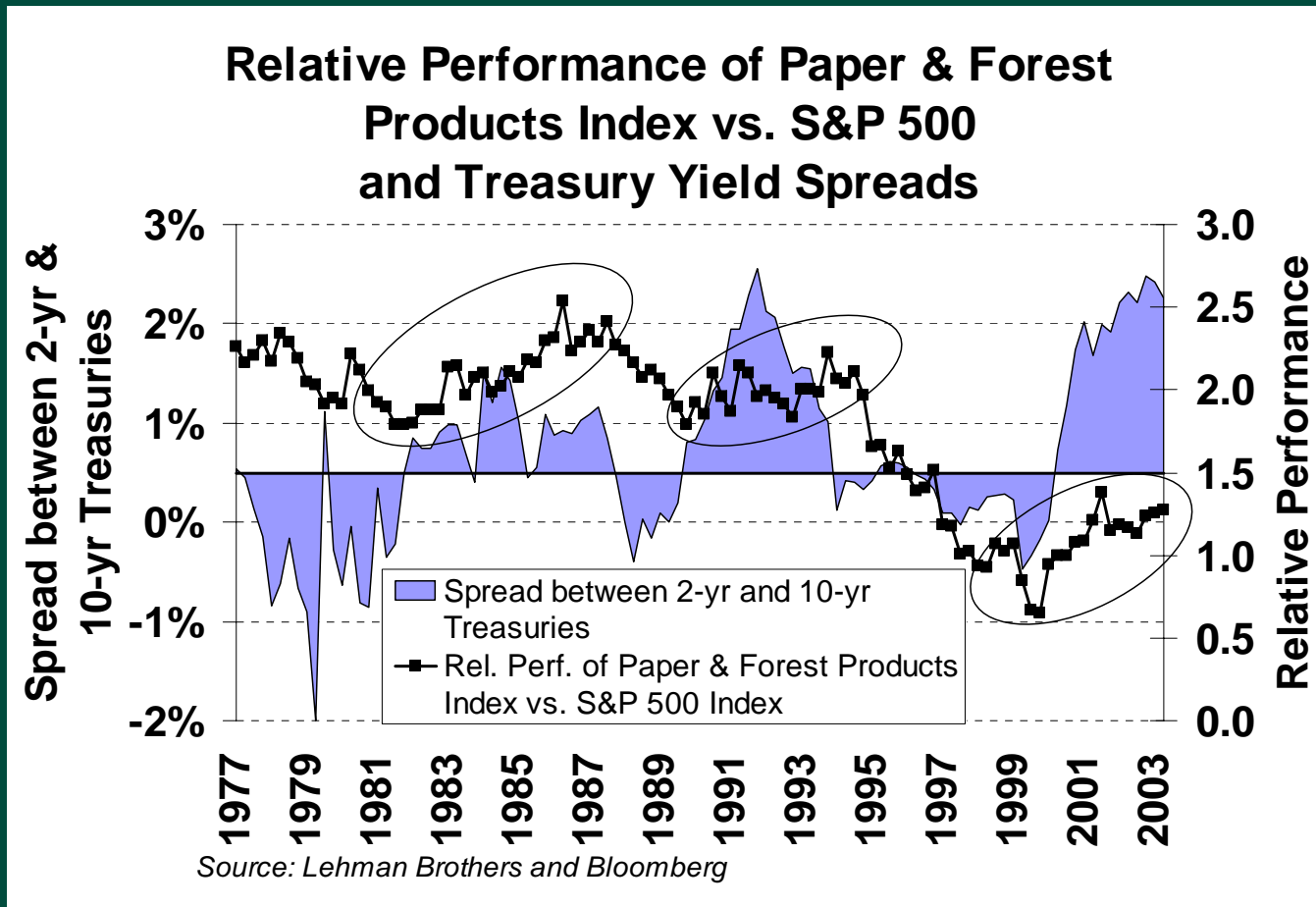
Impact of Rising Interest Rates

- ◆ Meanwhile, history shows that a rising Fed Funds rate coincides with a strong rally in pulp, paper, and paperboard prices...



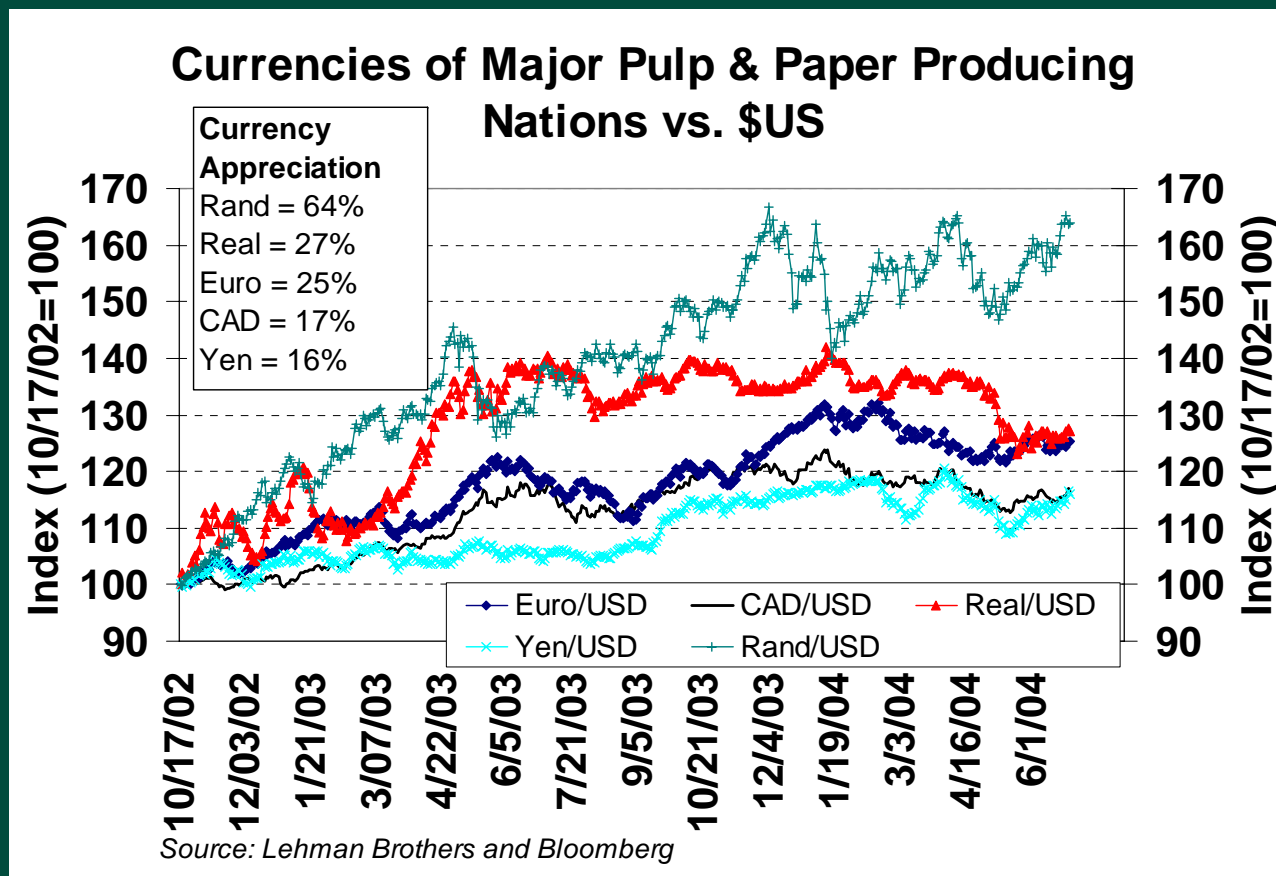
Impact of Rising Interest Rates

- ◆ Despite concerns of a rising Federal Funds rate, paper stocks typically outperform the S&P 500 when the 2-Yr/10-Yr spread exceeds 50 basis pts...



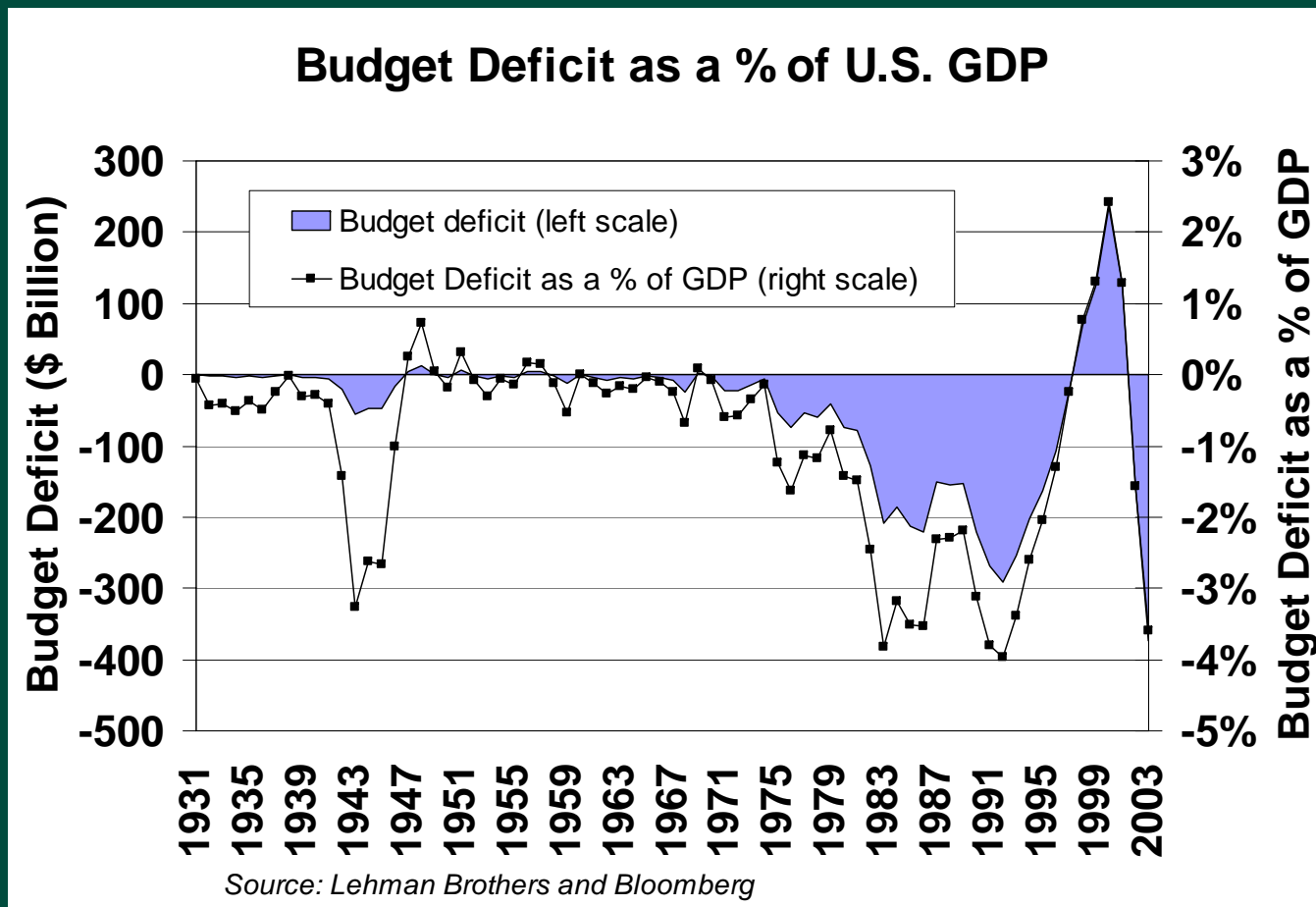
Impact of a Weak \$

- ◆ Despite the prospect of higher U.S. interest rates, the currencies of key paper producing/consuming regions have outpaced the \$ by 17% to 64%. Lehman's house view calls for a 2005 \$/Euro of 1.35 and a Yen/\$ of 95.



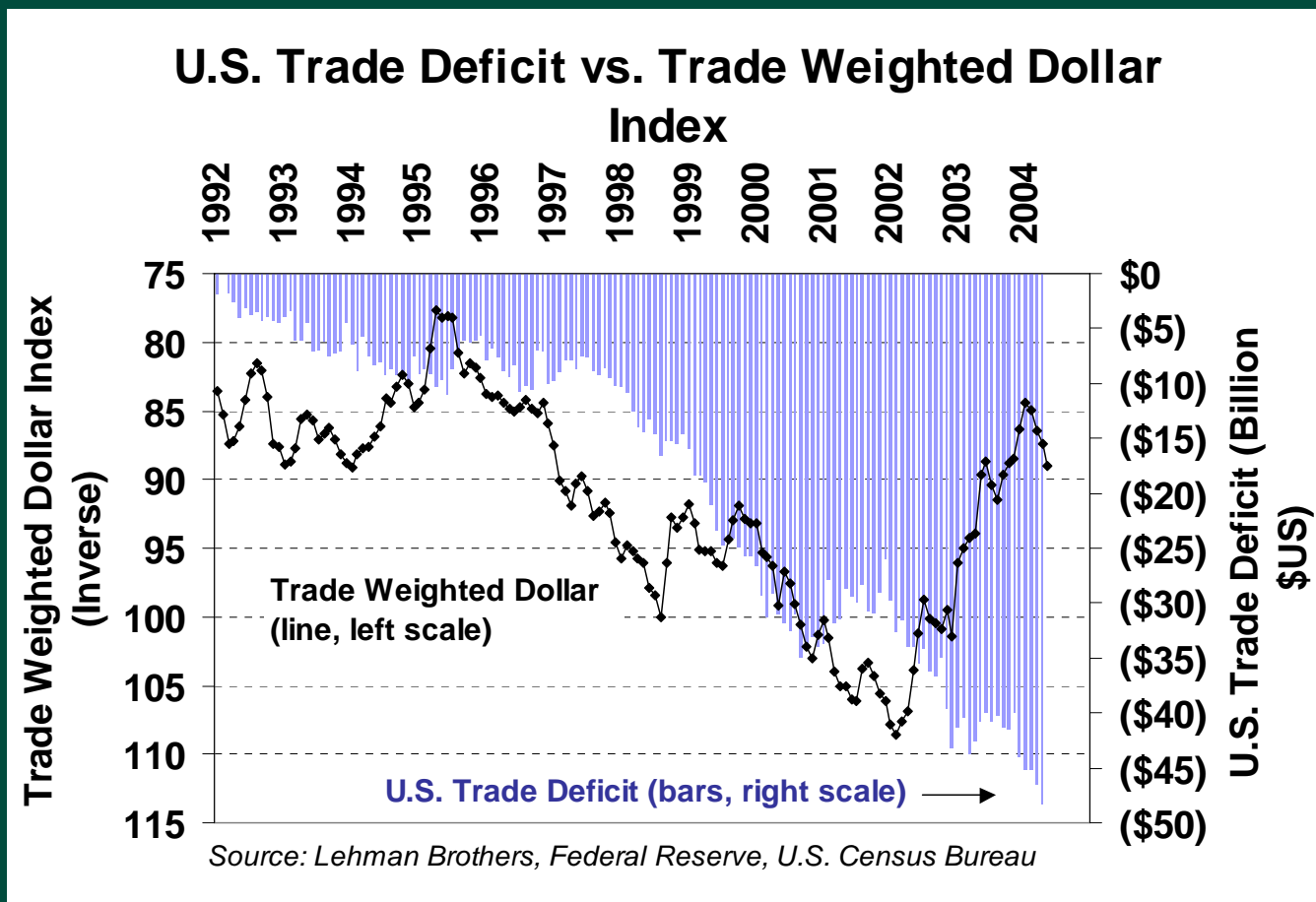
Impact of a Weak \$

- ◆ A budget deficit of > \$300 BB (nearly 4% of GDP) could weigh on the \$.



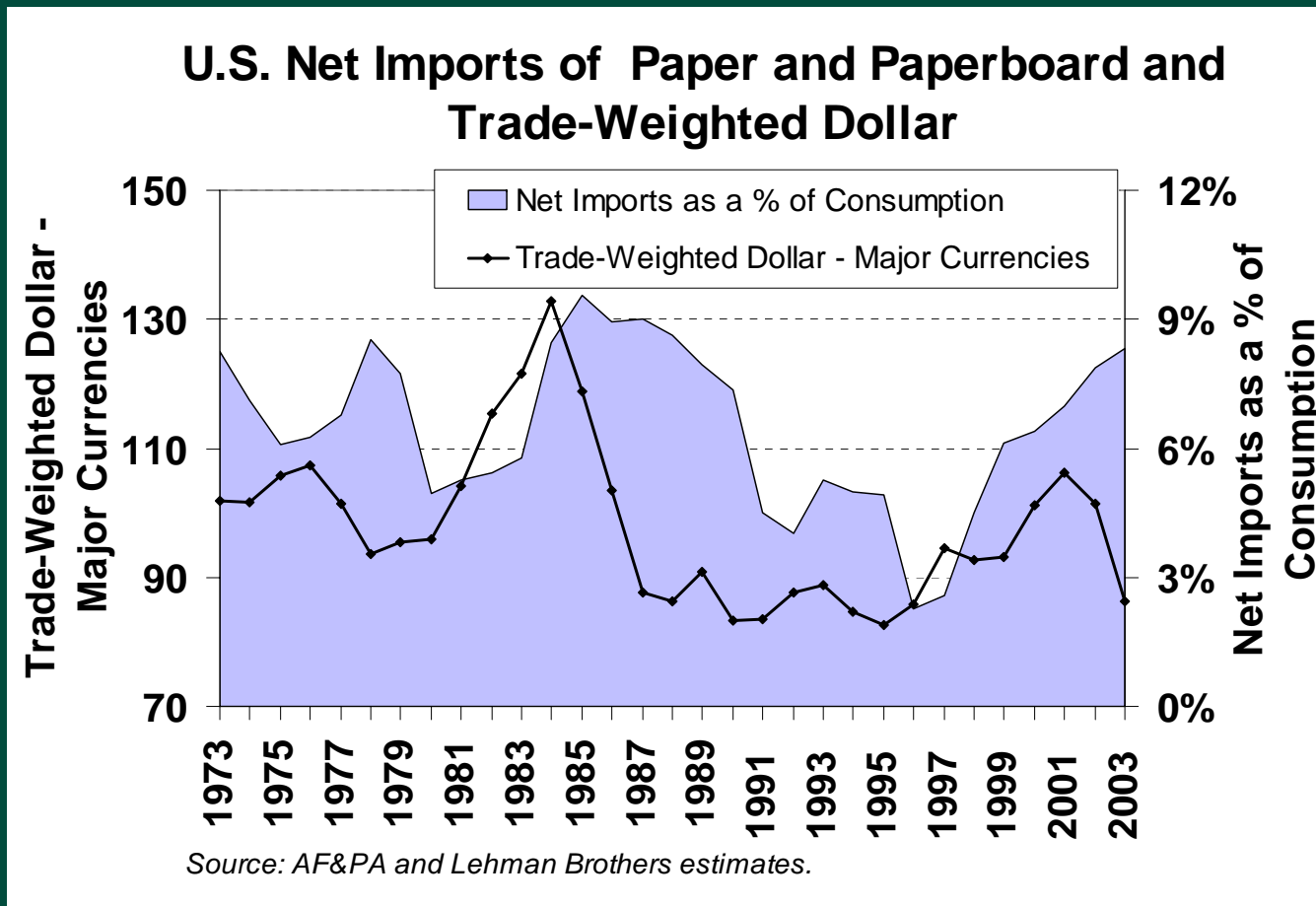
Impact of a Weak \$

- ◆ A very large trade deficit (more than ½ TRILION \$) could also weigh on the dollar, eventually leading to a stabilization/reversal of the trade deficit.



Impact of a Weak \$

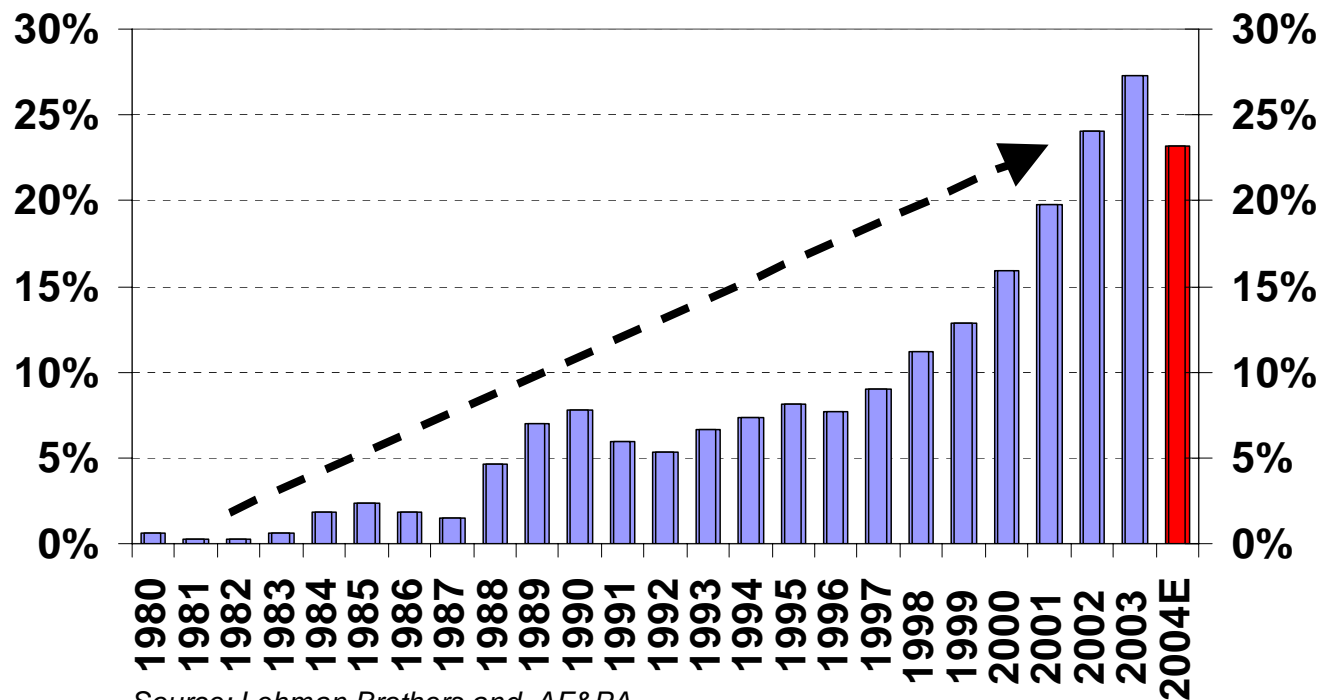
- ◆ Net imports of paper and paperboard as a % of consumption tend to rise and fall with the dollar.



Impact of a Weak \$

- ◆ A strong \$ contributed to a 23% decline in market share for U.S. coated free sheet producers in just 10 years. We believe a weak \$ will reverse this trend.

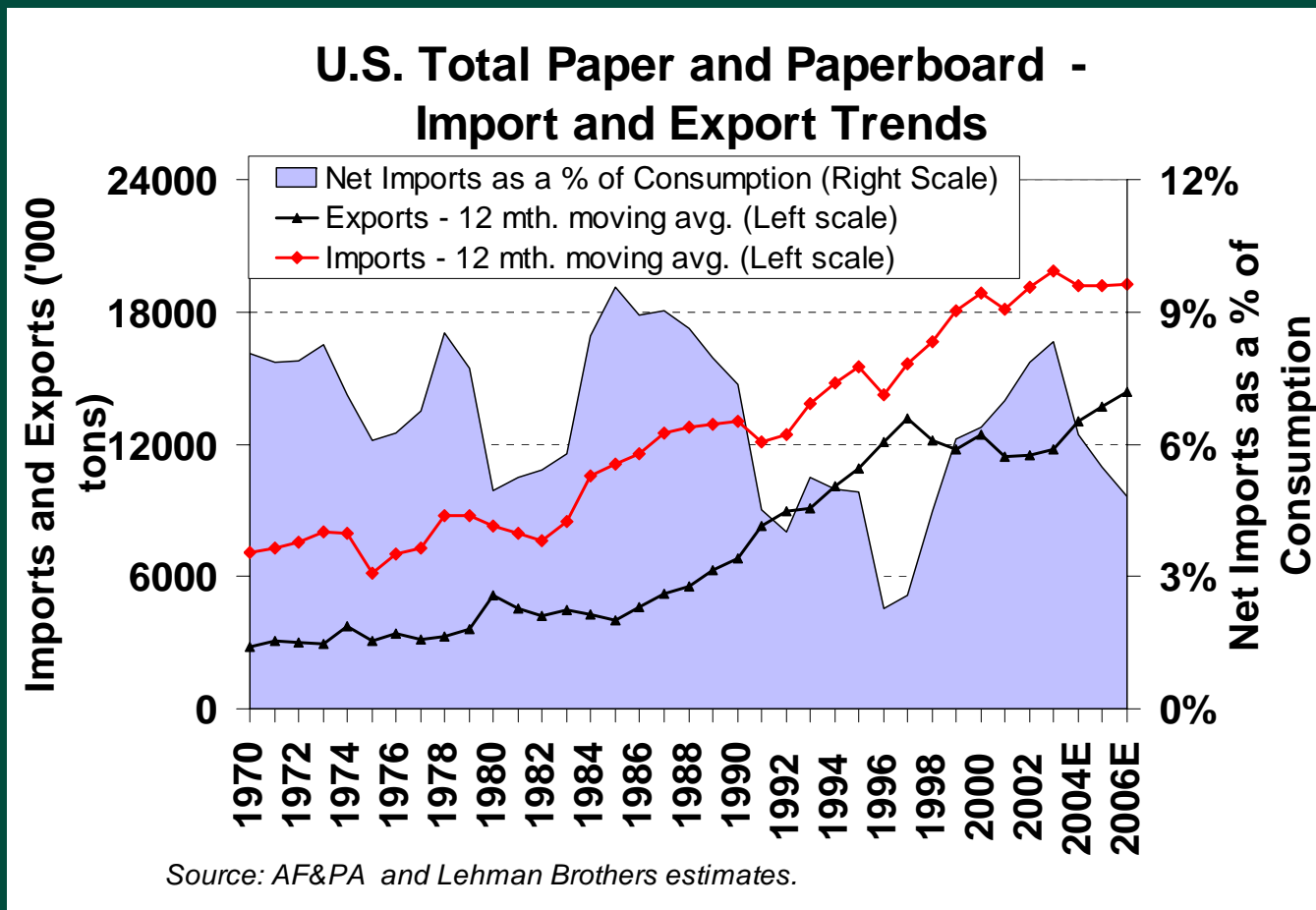
Coated Free Sheet Imports as a % of U.S. Consumption



Source: Lehman Brothers and AF&PA

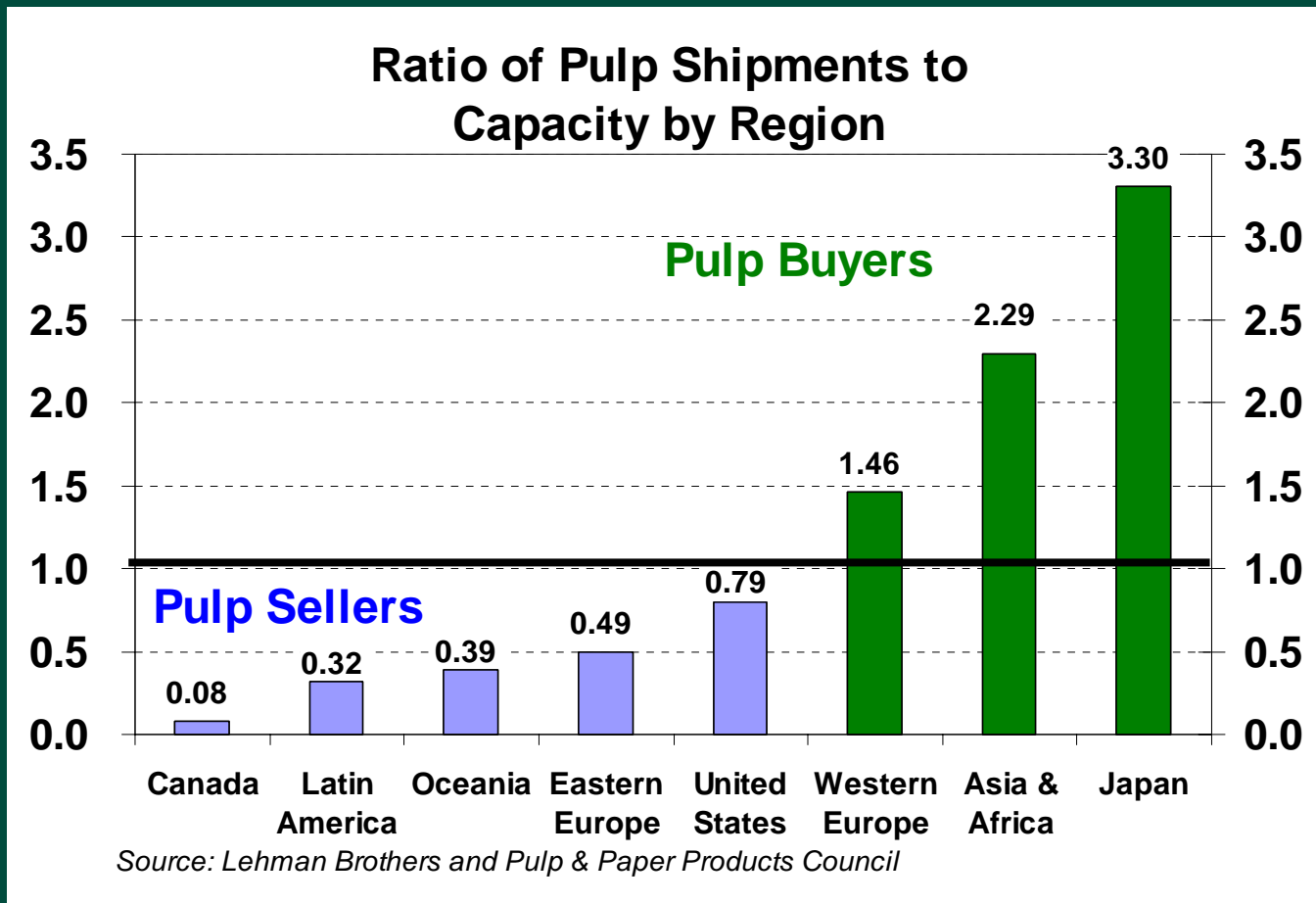
Impact of a Weak \$

- ◆ We forecast easing import pressure and rising export volumes for the U.S. industry, leading to roughly 300 basis points of improved trade flows.



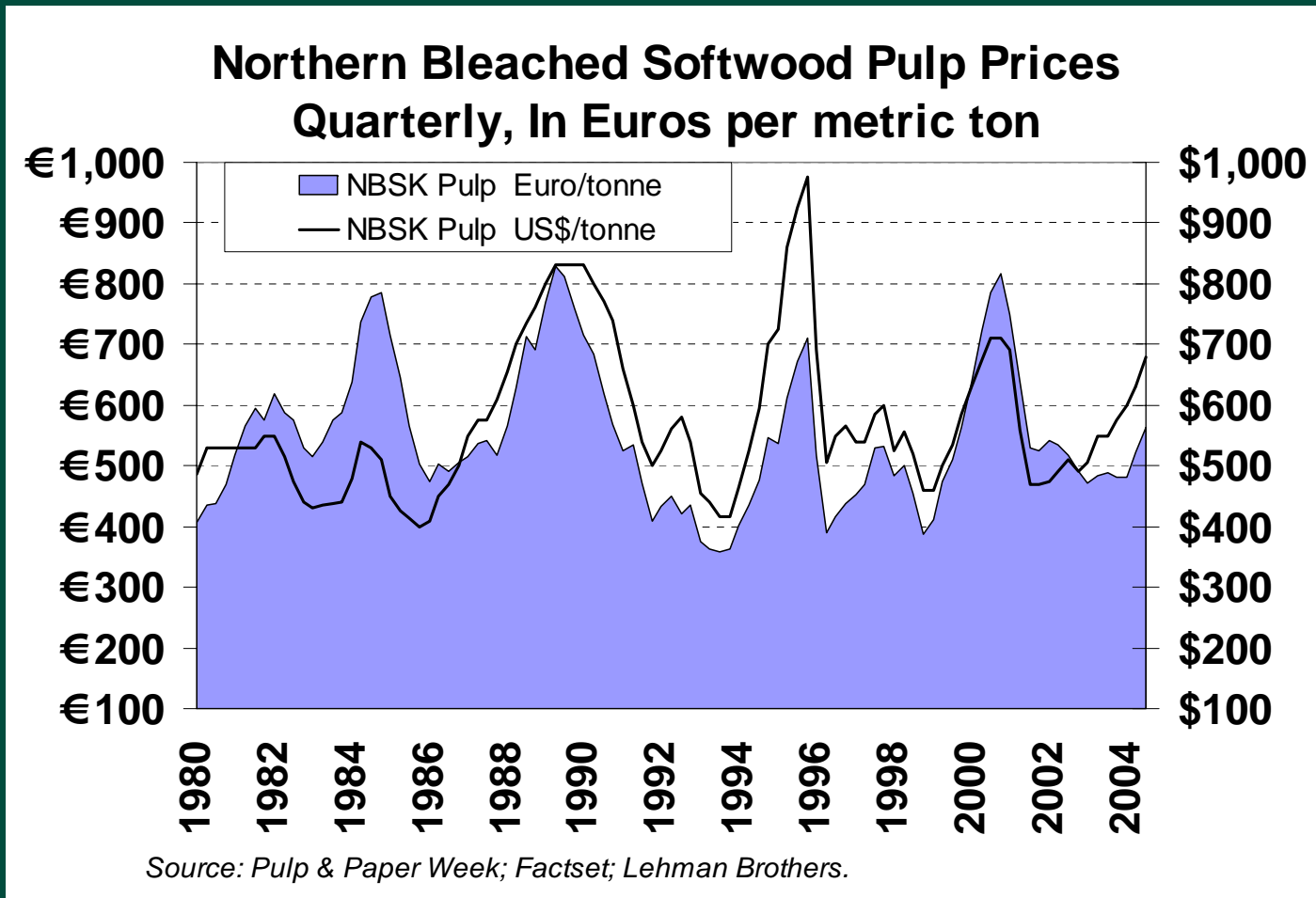
Impact of a Weak \$

- ◆ A weak \$ is likely to have a positive effect on restricting supply of producers and enhancing purchasing power of buyers.



Impact of a Weak \$

- ◆ A weak dollar is bullish for dollar-based commodities such as market pulp...





Impact of China

- ◆ CHINA IS BIG...we estimate 42 MM metric tonnes of paper and paperboard consumption, placing them #2 in size behind the U.S. at 88 MM metric tonnes.
- ◆ CHINA IS GROWING FAST...the Chinese Paper Institute estimates growth rates of roughly 6.5%. We believe it could be DOUBLE that rate, because pulp consumption is growing at 25%, wastepaper consumption is growing at 13%, and newsprint consumption is growing close to 12%.
- ◆ There is SCOPE FOR FUTURE GROWTH. Using Japan and Korea as a proxy, TREND GROWTH in China may not slow before per capita income reaches \$8,000+. Starting from \$1,000, it could take several decades for China to slow.



Impact of China

- ◆ GROWTH RATES MATTER...at 6.5% growth in China and 2% growth in the U.S. China will surpass the U.S. in size by 2020. If China grows at closer to 13% as we expect, China will become as large as U.S. by 2011, and 2X the size by 2017. China is already the world's largest consumer of steel by a factor of 2X.
- ◆ China lacks the timber, pulp, and wastepaper needed to sustain growth.
- ◆ Other than coal, China lacks the energy resources needed, and, among other factors, China is helping to drive global oil/energy prices higher.
- ◆ Due to shipping distances, freight costs to/from China are high, causing import costs and export costs to rise.

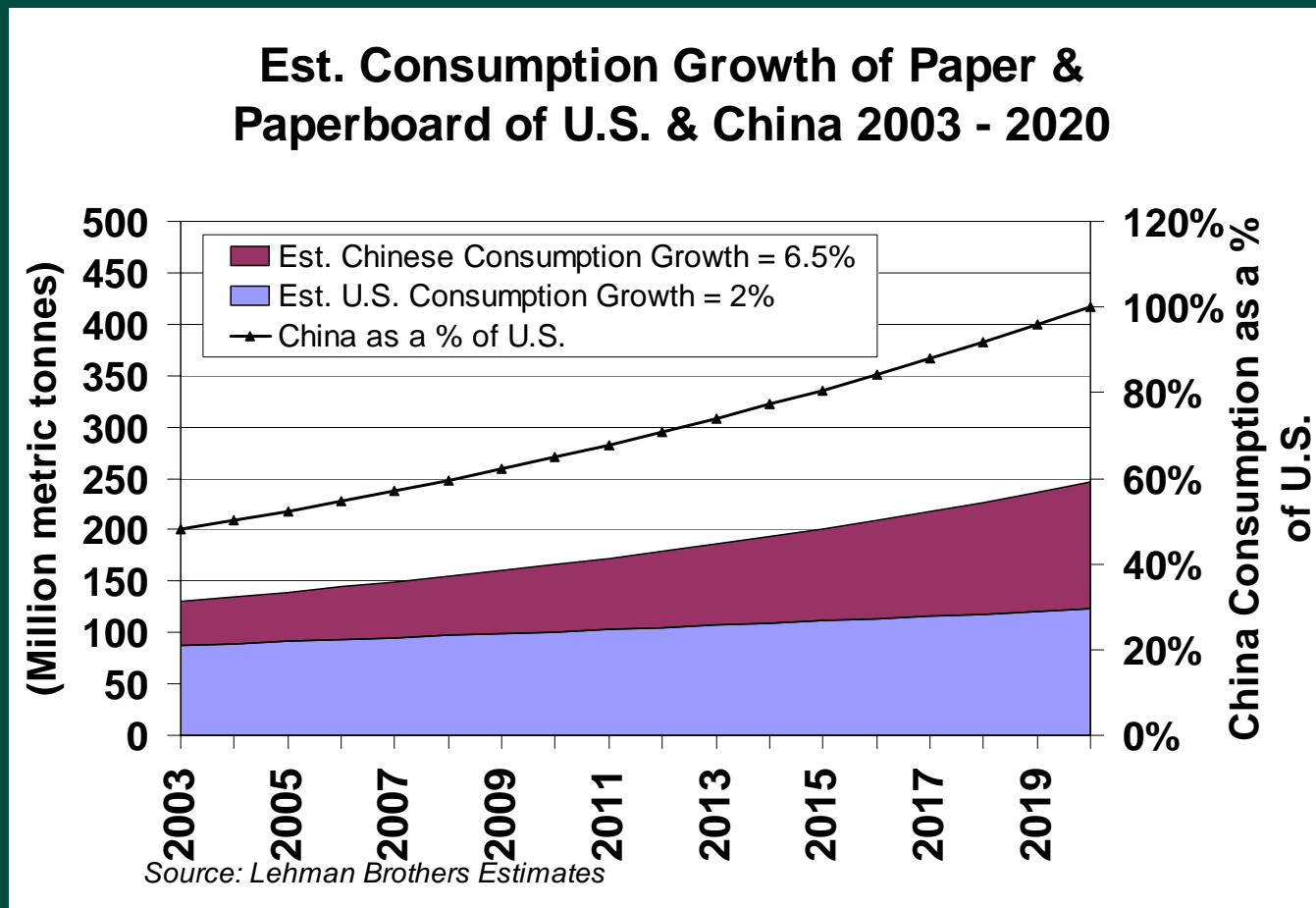


Impact of China

- ◆ Although China lacks a competitive advantage in fiber, energy, freight, and possibly even capital costs, China is capitalizing on a labor cost advantage where LABOR COSTS ARE 1/40th THOSE OF THE U.S.
- ◆ As a result, China is attempting to backward integrate labor-intensive downstream businesses such as furniture, consumer goods manufacturing, corrugated box plants, etc. into upstream manufacturing capacity such as aluminum, containerboard, and pulp and paper mills.
- ◆ These forces are so powerful, that we envision an extended period of raw material cost inflation (trend) and finished good deflation for years to come.

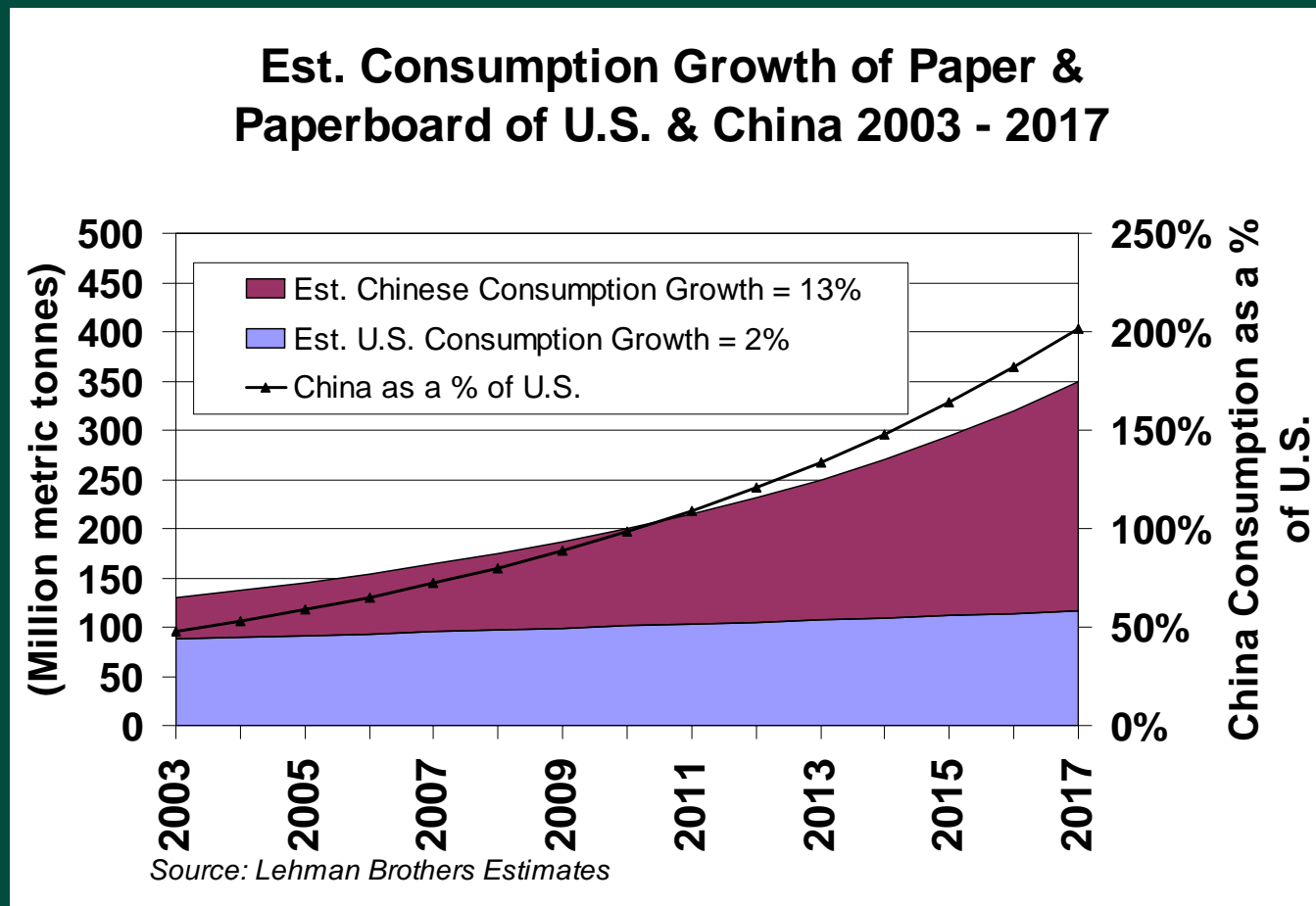
Impact of China

- ◆ Assuming 6.5% growth in China's demand and 2% in U.S., China's paper and paperboard consumption could exceed the U.S. by 2020.



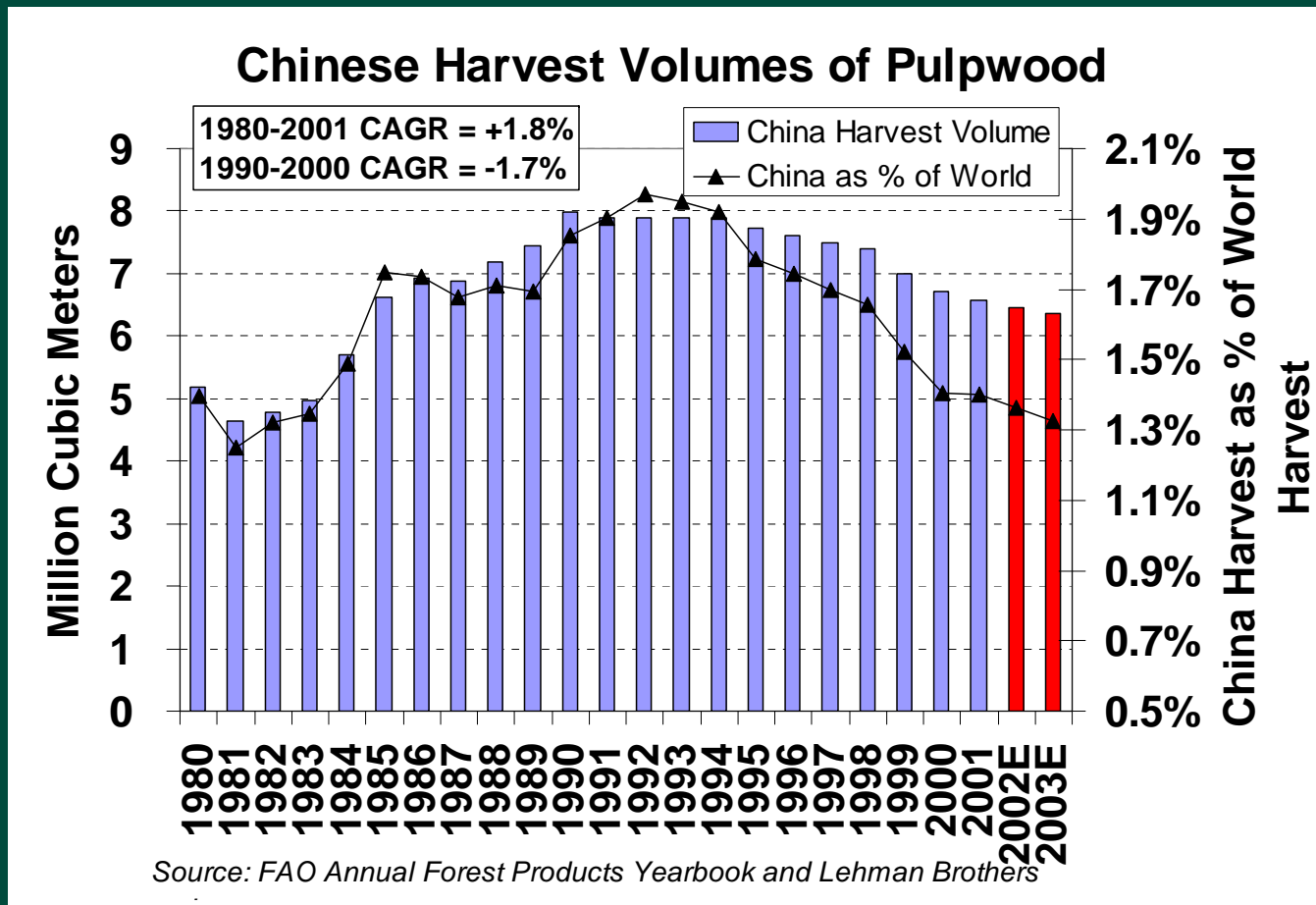
Impact of China

- ◆ A growth rate of 13% in China and 2% in U.S. results in China matching the U.S. consumption by 2011 and becoming 2X as large by 2017.



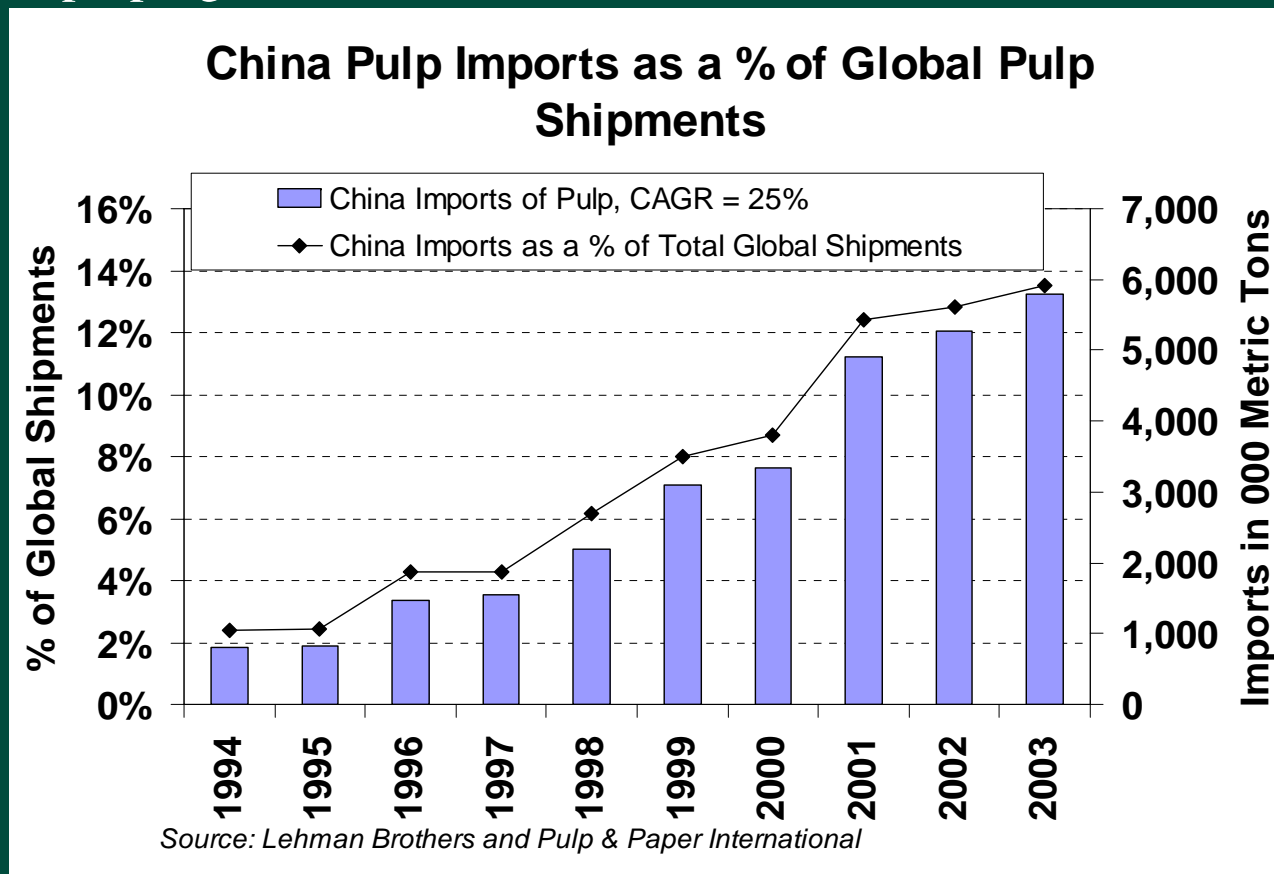
Impact of China

- China's harvest volume of pulpwood has declined since 1994, during a time of significant paper & paperboard capacity expansion.



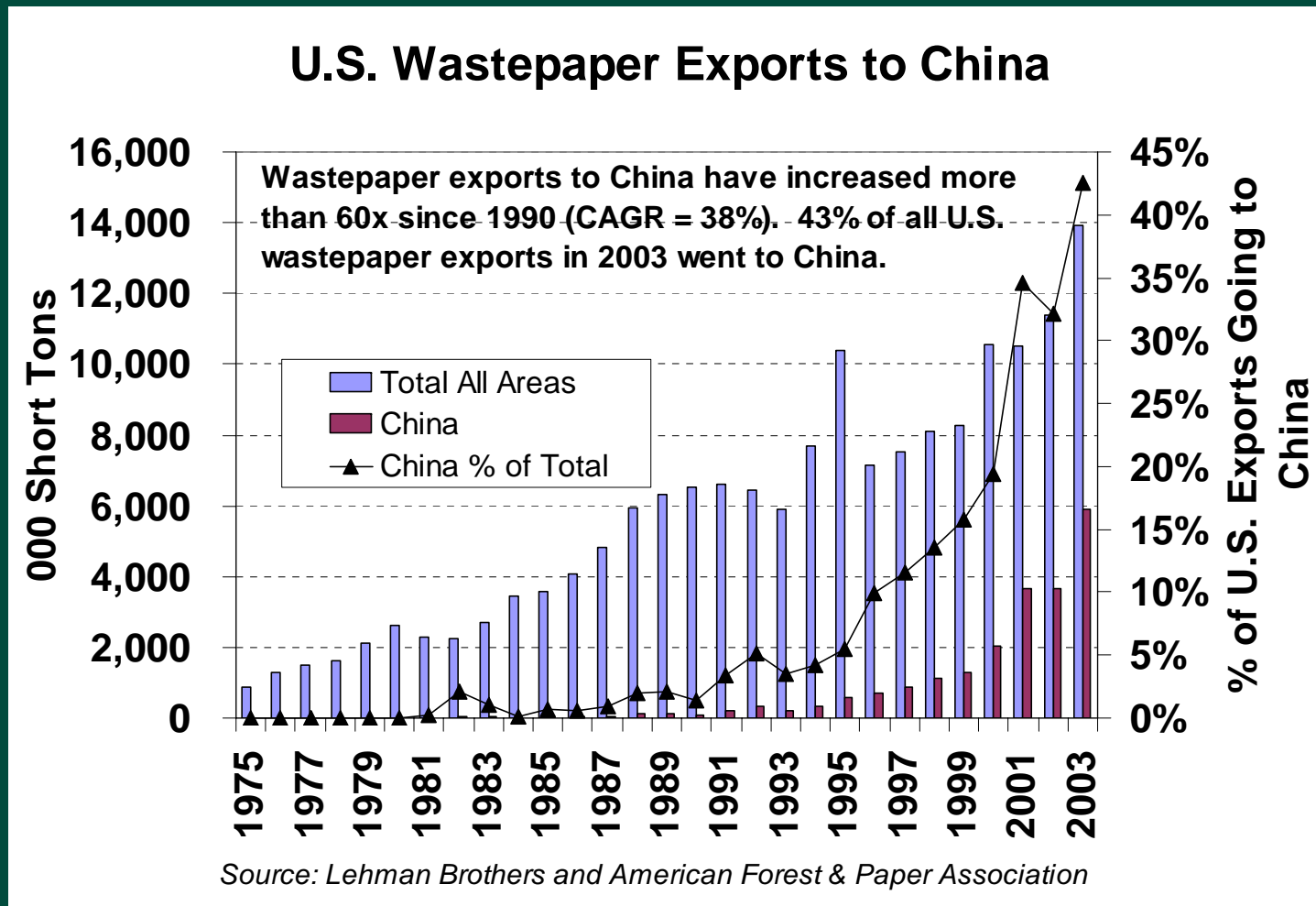
Impact of China

- ◆ China's booming demand growth for pulp is supported by rapidly rising consumption growth for grades that consume pulp, AND an upgrade in the quality of pulping fibers used.



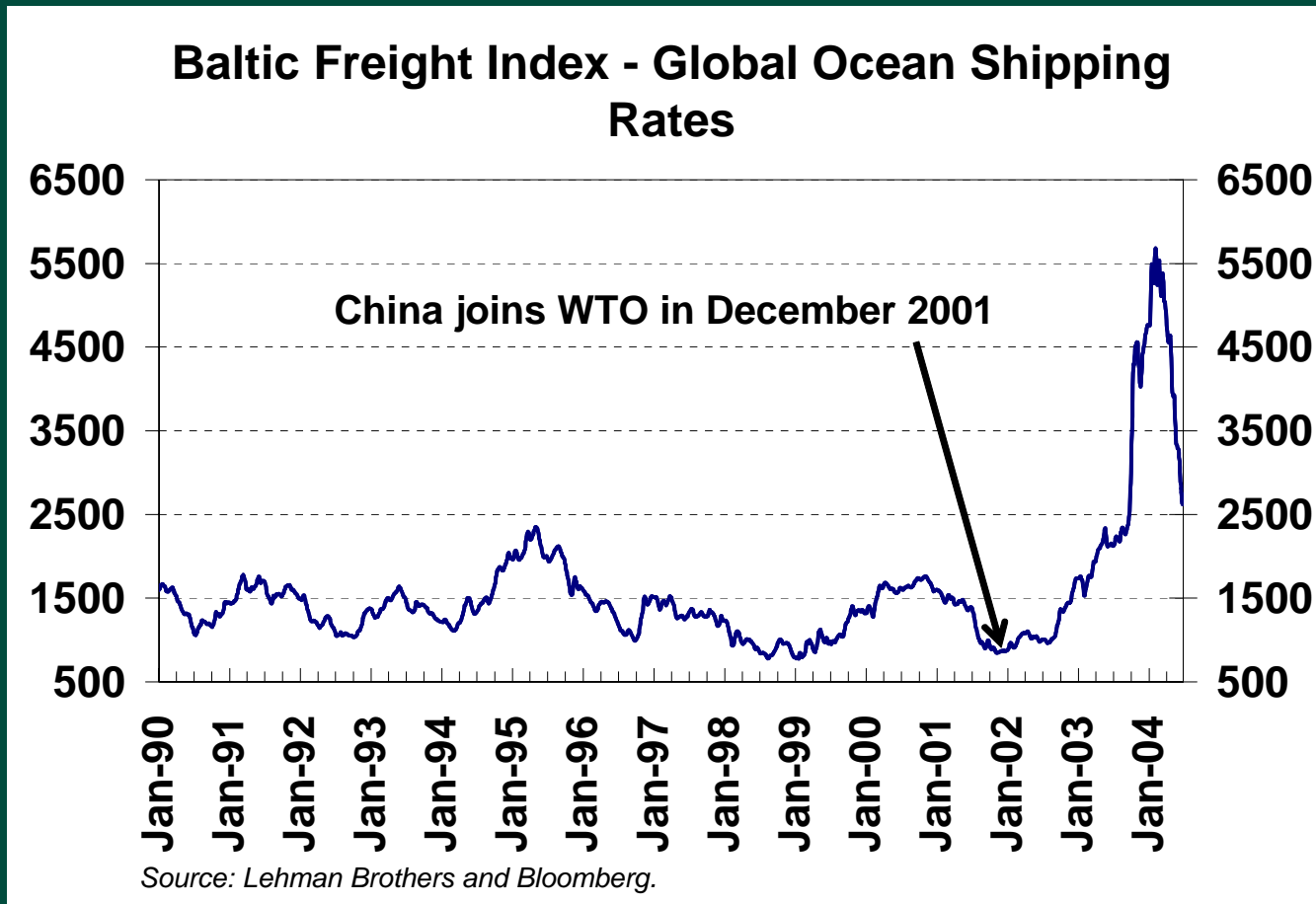
Impact of China

- ◆ China's share of U.S. wastepaper exports has grown 10X in just 10 years.



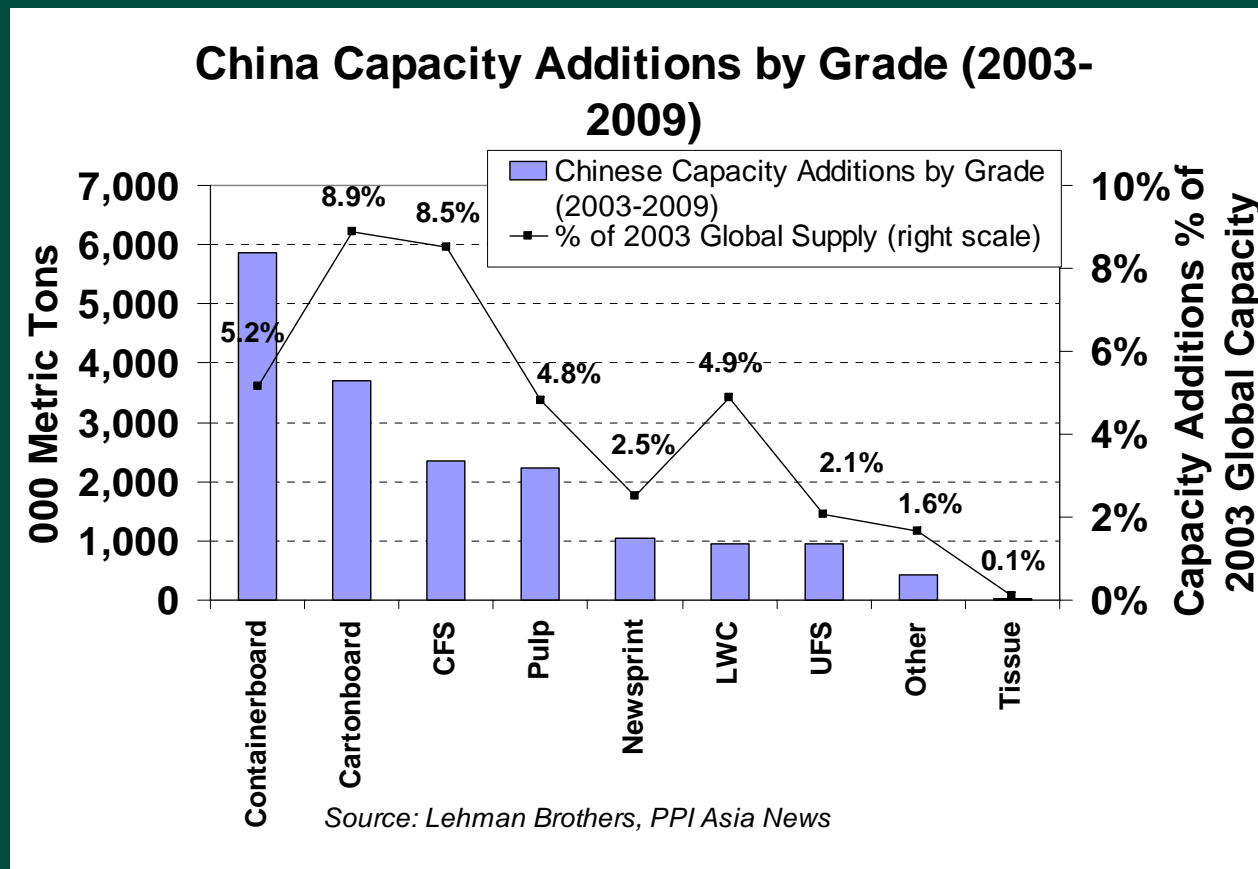
Impact of China

- ◆ China plays a significant role in impacting global freight rates.



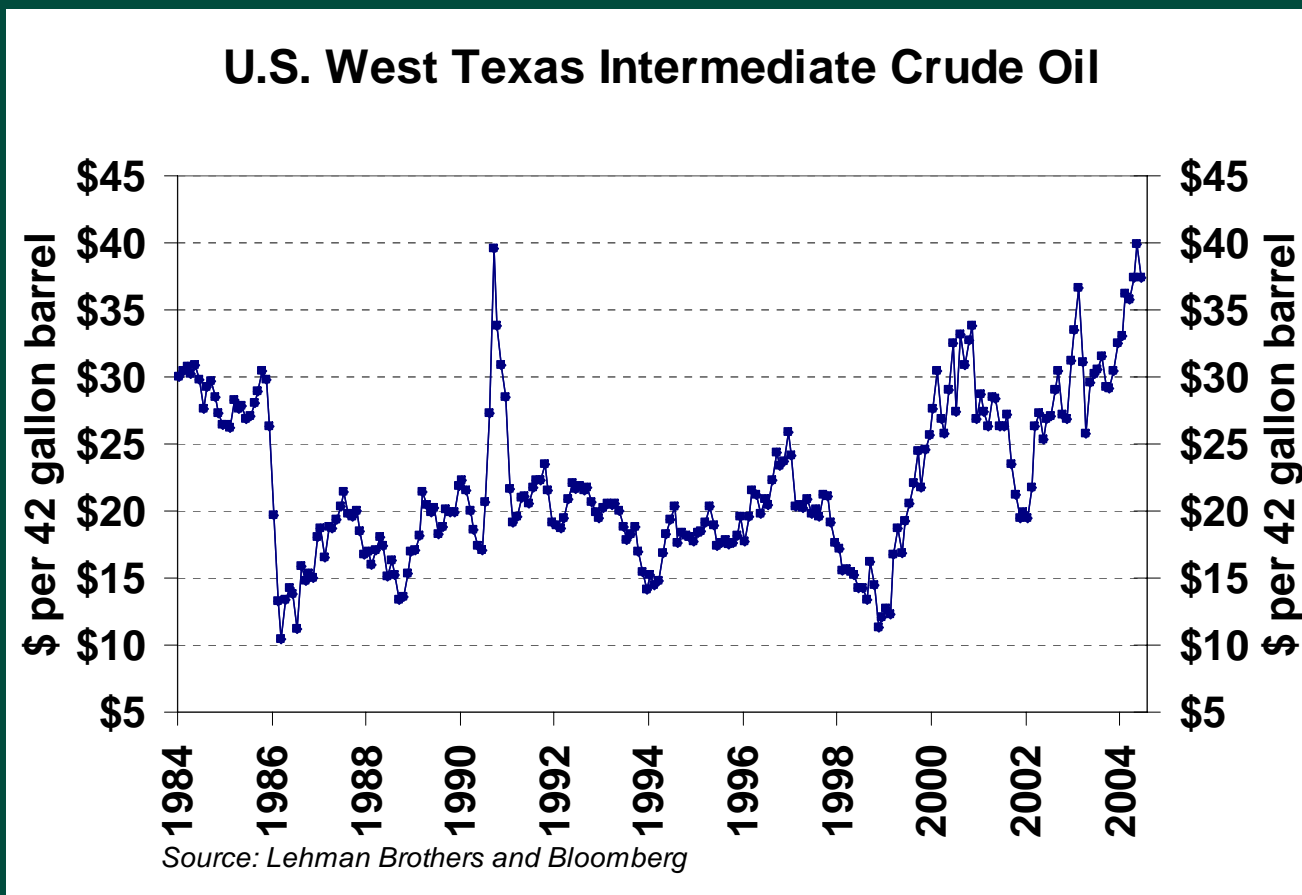
Impact of China

- ◆ China's planned capacity growth is significant, but an expected rebound in fiber costs (especially pulp and wastepaper) may force the cash cost of the new capacity HIGHER than the price of imported commodities.



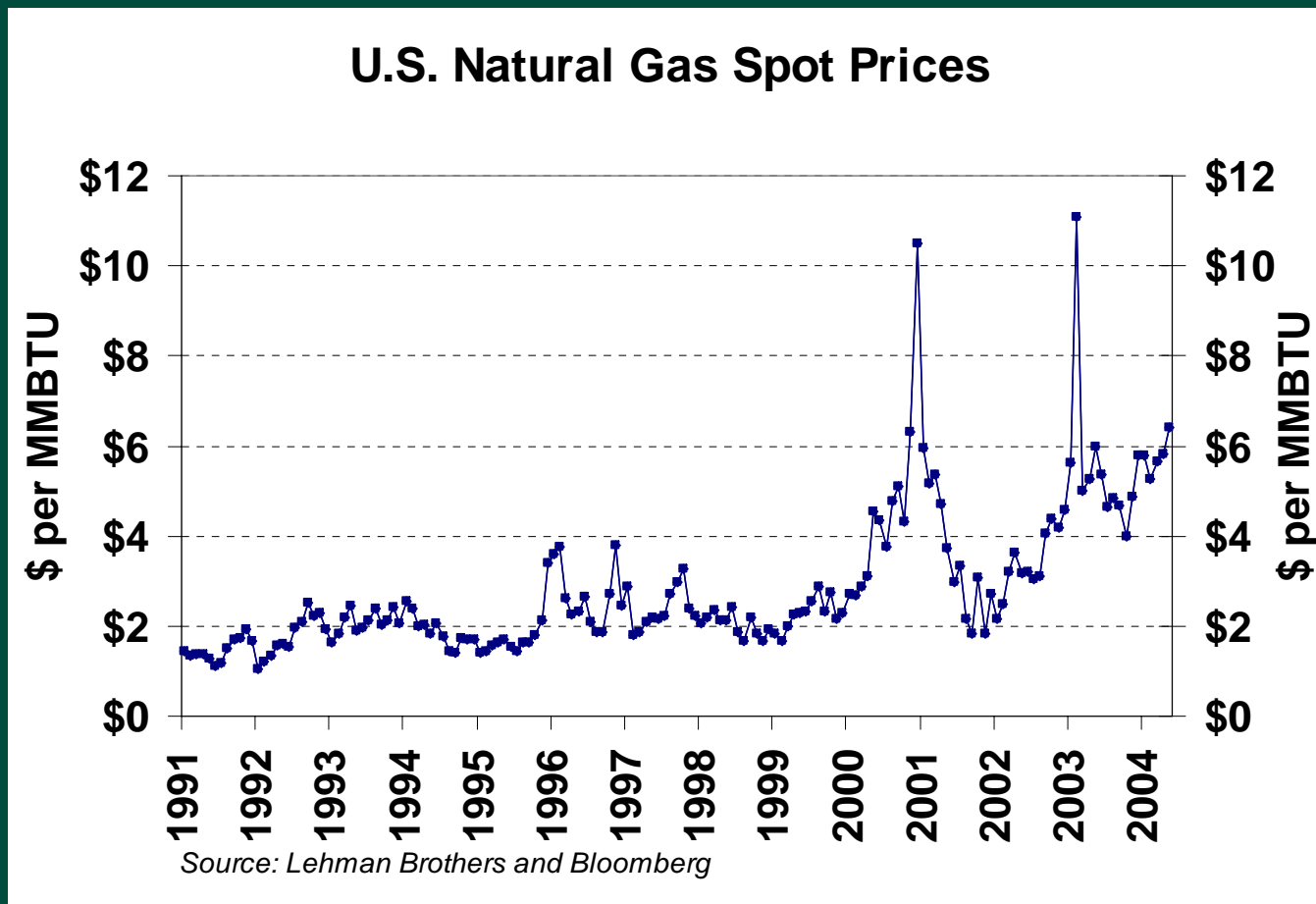
Impact of High Energy Costs

- ◆ Combining strong demand in China with concerns about supply in the Mideast, oil prices are at multi-decade highs.



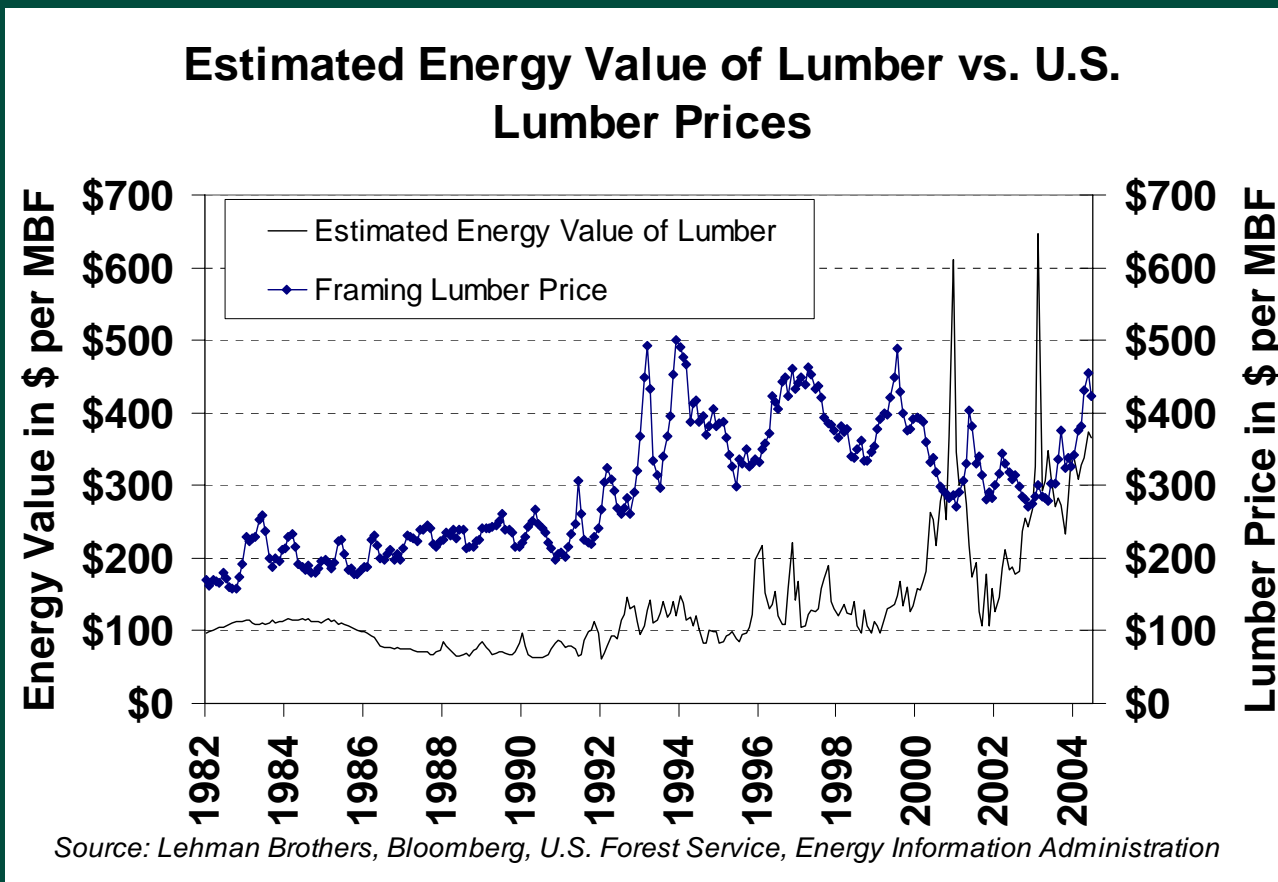
Impact of High Energy Costs

- ◆ Natural gas prices are also approaching record levels.



Impact of High Energy Costs

- ◆ The energy value of logs is rising at a far greater pace than the log (and lumber) price itself.





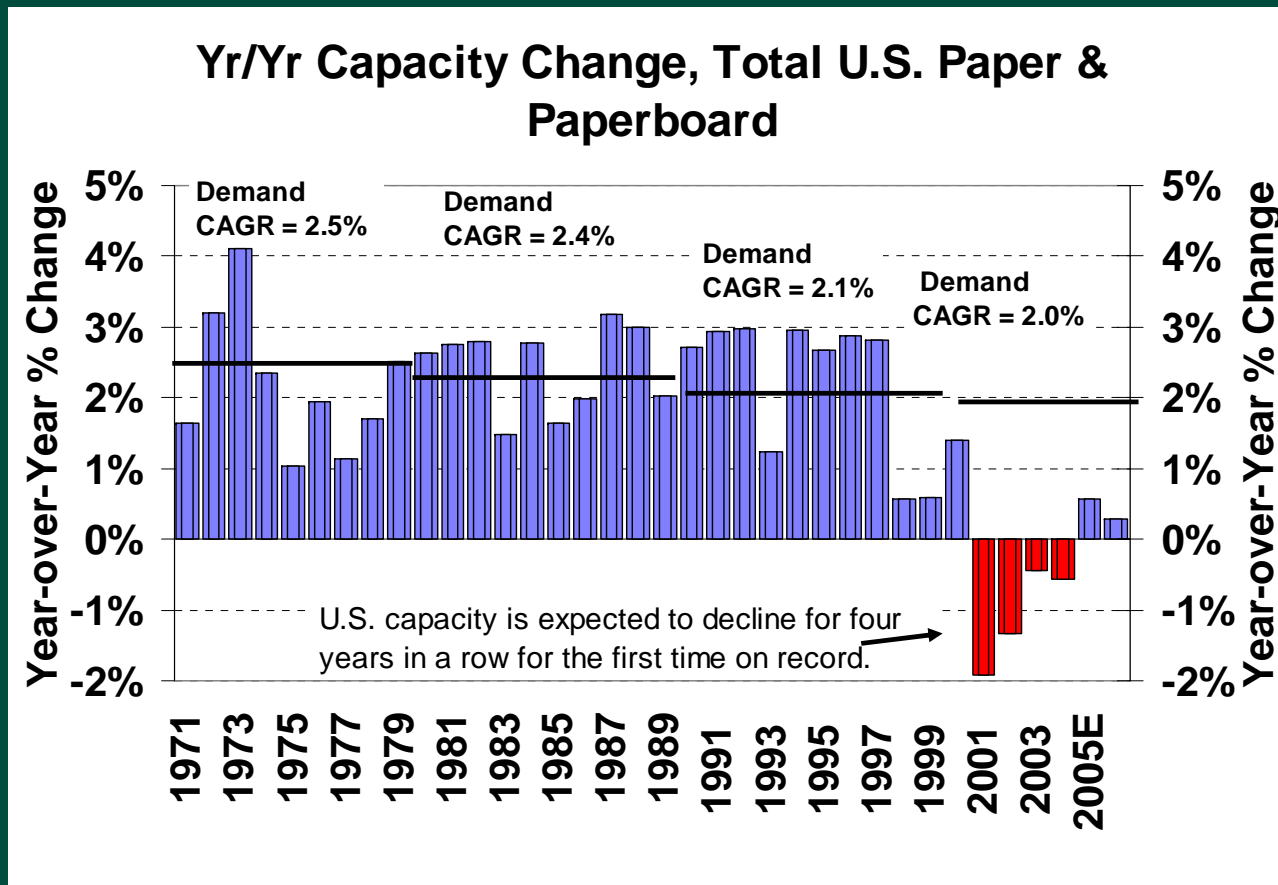
Outlook for High Fiber Costs

From U.S. perspective, high fiber costs (timber, pulp, wastepaper) are supported by the following:

- Record housing starts.
- A strong economy.
- A weak dollar/higher prices.
- Improved trade flows (in the U.S.).
- Strong demand from China.
- High energy costs boost the attractiveness of virgin fiber.
- Below-trend paper and integrated pulp supply growth.

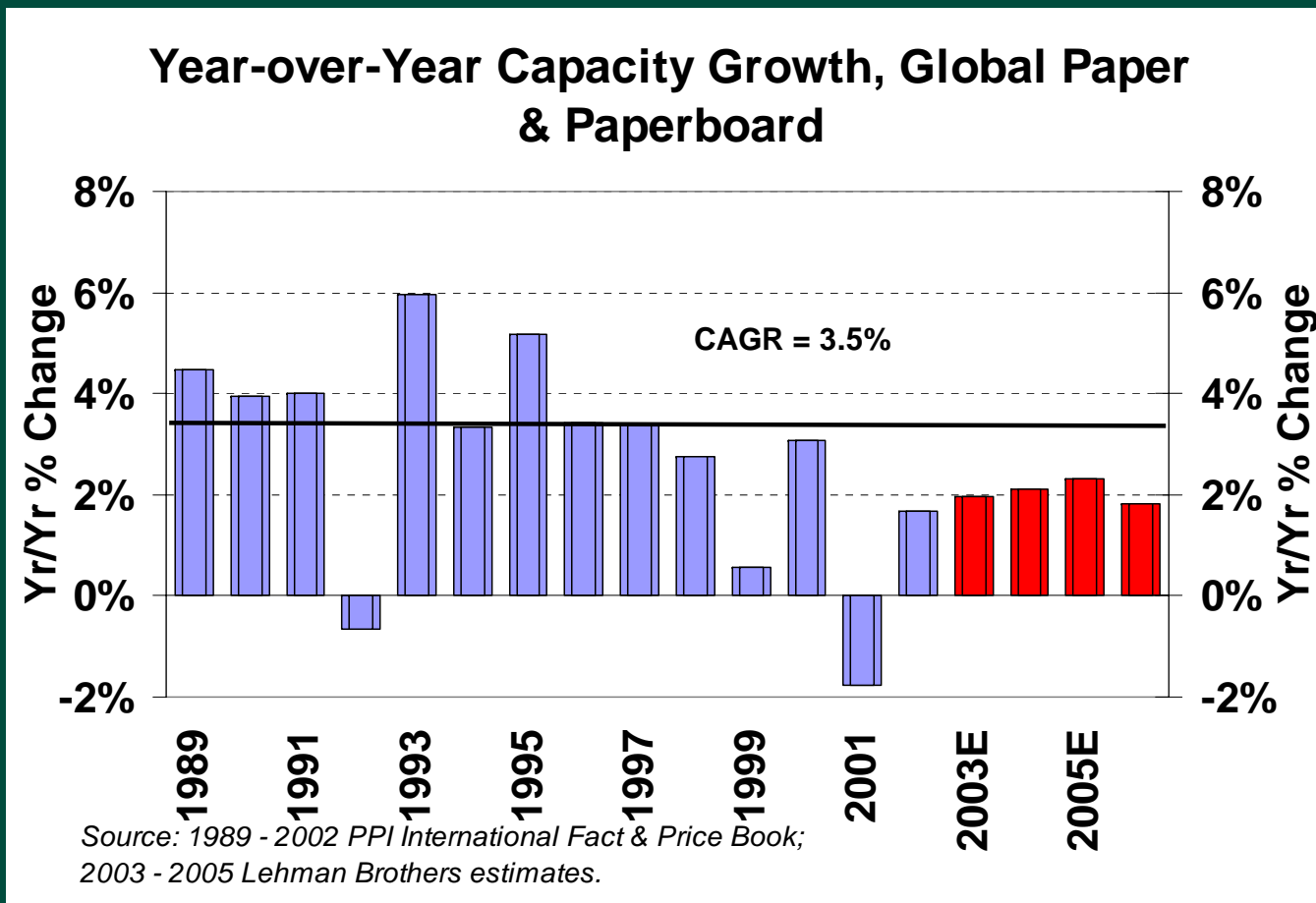
Favorable Supply/Demand Balance

- An increasingly wide gap between supply growth (negative) and demand growth is evident. Rising demand and improved trade flows could result in very tight markets.



Favorable Supply/Demand Balance

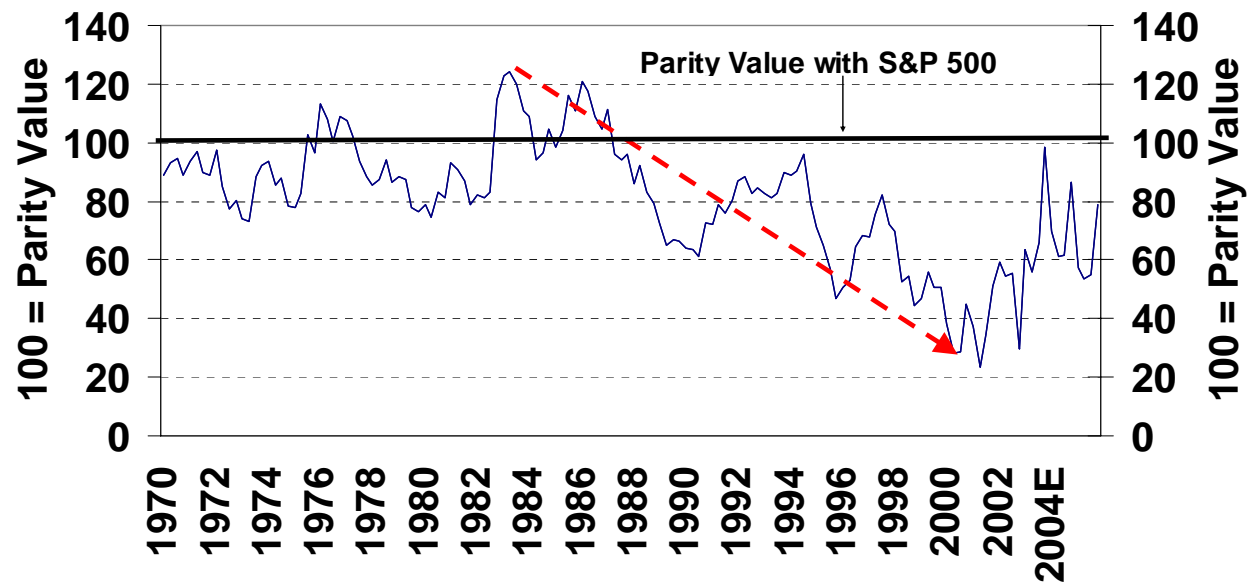
- ◆ We believe global demand growth will also outstrip global supply growth.



Improving Capital Efficiency

- ◆ In the 1970's, cash flow multiples for the S&P Paper/Forest Index and the S&P 500 were similar, but relative cash flow multiples trended lower during the 1980's and 1990's.

S&P Paper and Forest Products Price to Gross Cash Flow Relative to S&P 500 Price to Cash Flow, Using Quarterly Closing Prices

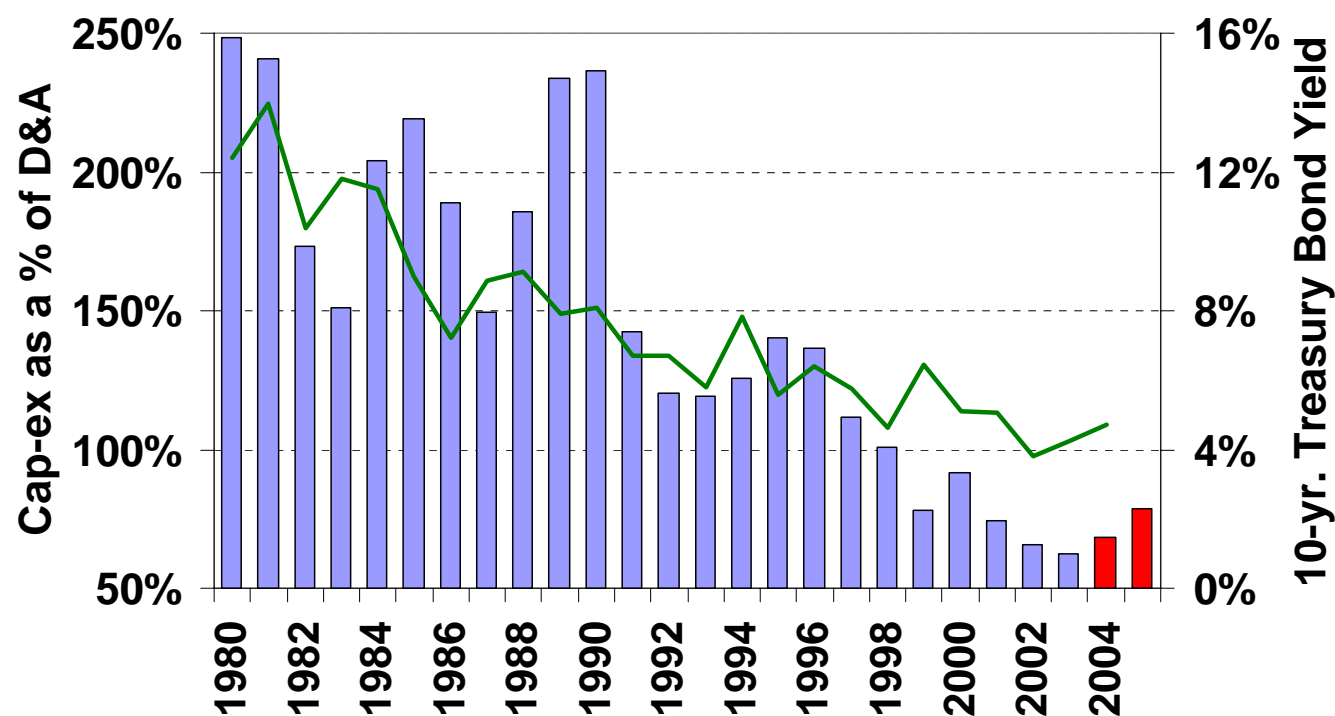


1970-2002 calculated using S&P Analyst Handbook; 2003-2005 Lehman

Improving Capital Efficiency

- ◆ As rates declined, paper companies spent 150-250% of their depreciation rates every year during the 1980's.

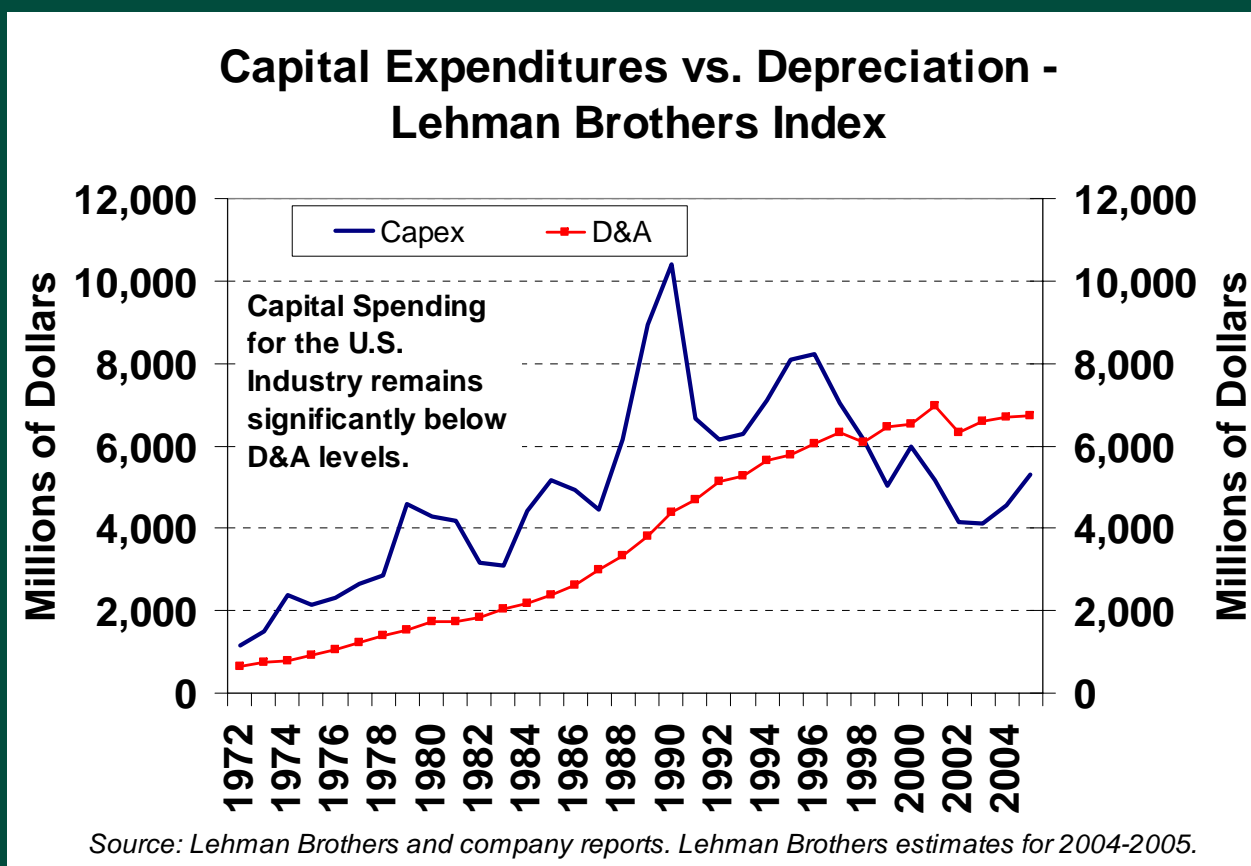
Capex as a % of D&A vs. 10-yr. Treasury Yield



Source: Lehman Brothers and company reports. Lehman Brothers estimates for 2004-2005.

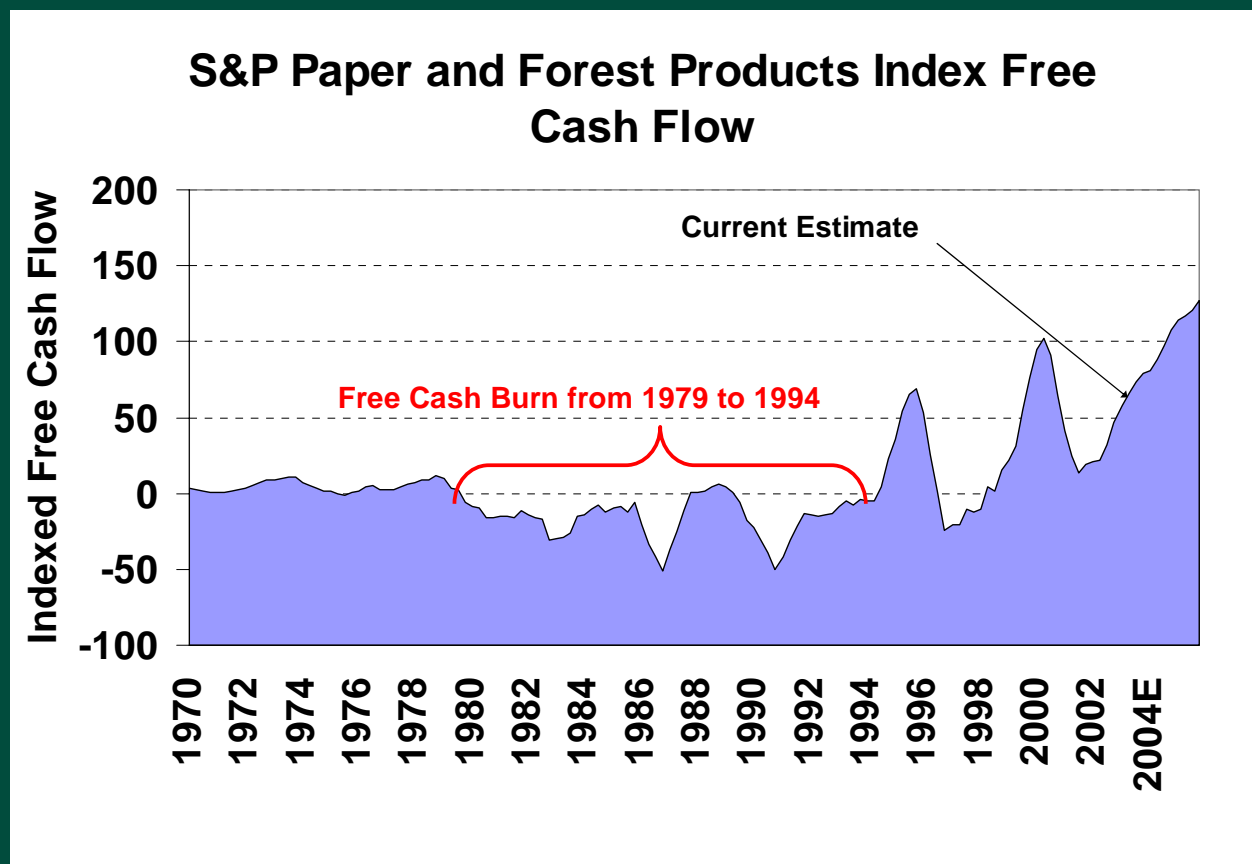
Improving Capital Efficiency

- ◆ Our coverage universe of U.S. paper companies is spending less than their depreciation rates (since 1998). The improved financial discipline has led to better free cash flow and increased investor interest.



Improving Capital Efficiency

- ◆ High capital spending rates generated poor returns on expansion projects, it cannibalized returns on existing capacity, and led to a free cash flow burn for the period 1979-1994.





Consolidation

We believe consolidation is a positive and ongoing trend for the following reasons...

- Scale allows manufacturing flexibility.
- Allows for rationalization of high-cost capacity, shifting business to low-cost machines/mills.
- Improved purchasing power.
- Fewer producers adding capacity.
- Synergy opportunities.
- Reduced volatility of commodity prices with increased consolidation.
- It's cheaper to buy than to build.



Risk Factors

- ◆ Risk factors include the following...
 - Hard landing in China.
 - Terrorism.
 - Ongoing uncertainty in Iraq and the Mideast.
 - Rising interest rates could lead to a decline in wood product demand/prices.
 - Rising rates and high energy costs could brake the economy.
 - A rally in the dollar, despite record trade and budget deficits.
 - Acceleration of manufacturing jobs moving offshore to markets like China.
 - Electronic substitution...we could be overestimating demand growth.
 - Capacity growth in China and elsewhere driven by need to create jobs rather than based on sound economics.



Action Steps for U.S. Producers

- ◆ Maintain capital discipline.
- ◆ Embrace consolidation/rationalization of capacity.
- ◆ Attack the cost structure, even if it means closing mills.
- ◆ Plan on energy/fiber costs remaining higher than the past.
- ◆ Plan on further migration of manufacturing businesses to China/Asia.
- ◆ Plan for higher interest rates.
- ◆ Prepare for a business climate that might include a weak \$ and seize the opportunity to regain share from imports.
- ◆ Focus on generating/returning free cash flow to investors and you will get their attention.



Summary

- ◆ The economy is strong and improving.
- ◆ Early-cycle businesses such as wood products could be hurt by rising interest rates, but most pulp, paper, and paperboard businesses are late cycle and should continue to enjoy a cyclical recovery.
- ◆ A sustained recovery in employment trends should boost demand for publishing papers.
- ◆ Electronic media is a challenge, but even help wanted and newsprint demand should enjoy a cyclical bounce.
- ◆ The record twin deficits (budget and trade) suggest that further dollar weakness is likely (despite higher interest rates).



Summary

- ◆ A weak dollar is likely to improve both trade flows and pricing for U.S. producers.
- ◆ We believe fiber markets (timber, pulp, and wastepaper) will enjoy strong demand and rising prices.
- ◆ We expect energy costs to remain high, leading to a competitive advantage for low-cost, fully integrated, virgin operators.
- ◆ A hard landing in China is a valid near-term concern (we estimate nearly 50% of global growth comes from China) but trend demand growth in China should remain strong for decades, providing opportunities for upstream commodity producers.



Summary

- ◆ Although China lacks a competitive advantage in fiber, energy, and transportation costs, shockingly low labor costs may encourage China to “backward integrate” into upstream commodity businesses.
- ◆ Despite the threat of increased capacity in China, we see a favorable supply/demand balance in both the U.S. and the world.
- ◆ Capital efficiency continues to improve.
- ◆ Consolidation and rationalization of capacity will likely continue.
- ◆ The industry is certainly not without risks, but positives outweigh negatives, in our view.

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