



**Forest Products:**

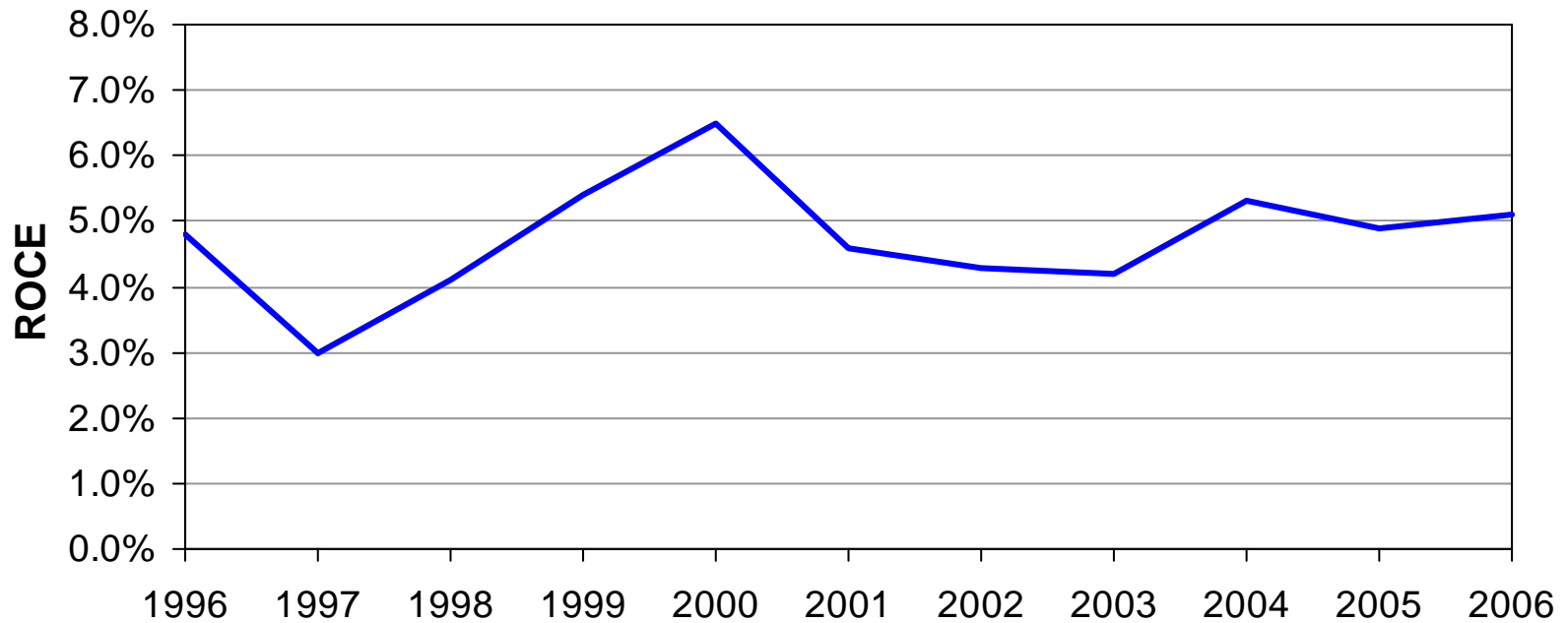
**The Broken Model**

**By: Jim Lopez**

Judge for yourself

# Historical Industry Financial Performance

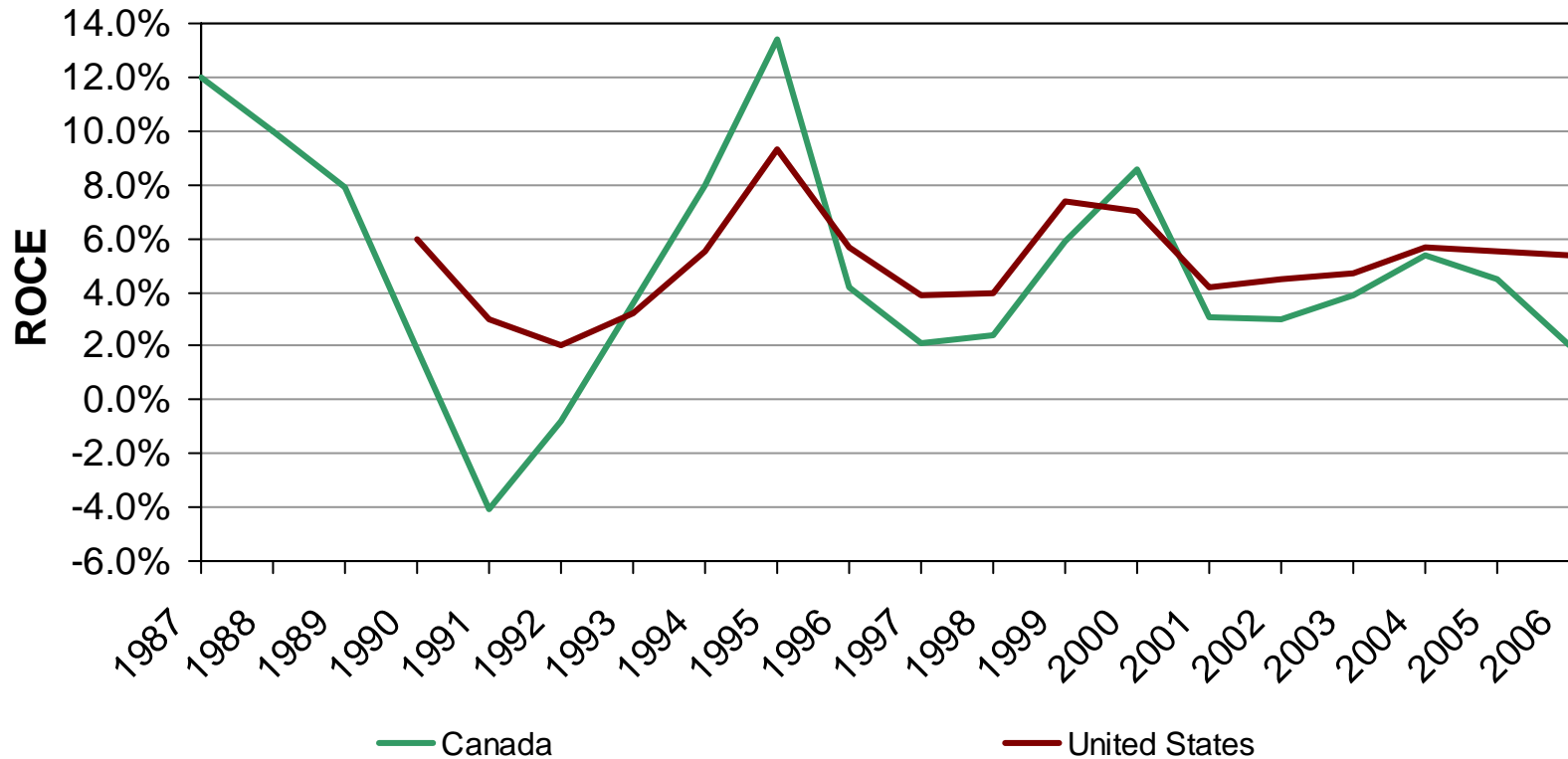
## Global Forest Products Sector Performance - Top 100 Largest Paper & Forest Products Companies by Sales Revenue



Source: PWC's Growth – Global Forest, Paper & Packaging Industry Surveys

# Historical Industry Financial Performance

## North American Forest Products Sector Performance

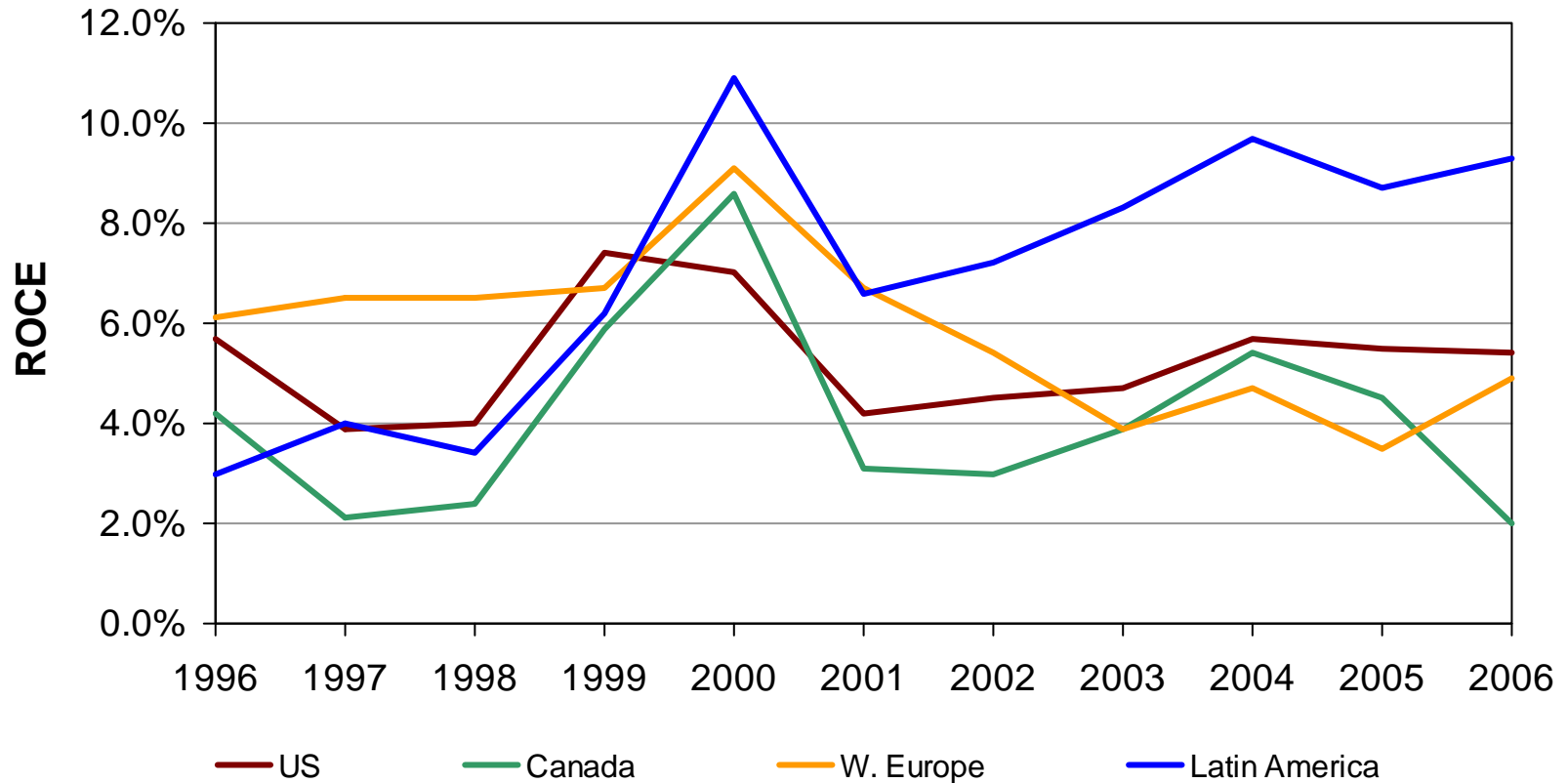


Note: U.S. data unavailable for years prior to 1990

Source: PWC's Growth – Global Forest, Paper & Packaging Industry Surveys

# Historical Industry Financial Performance

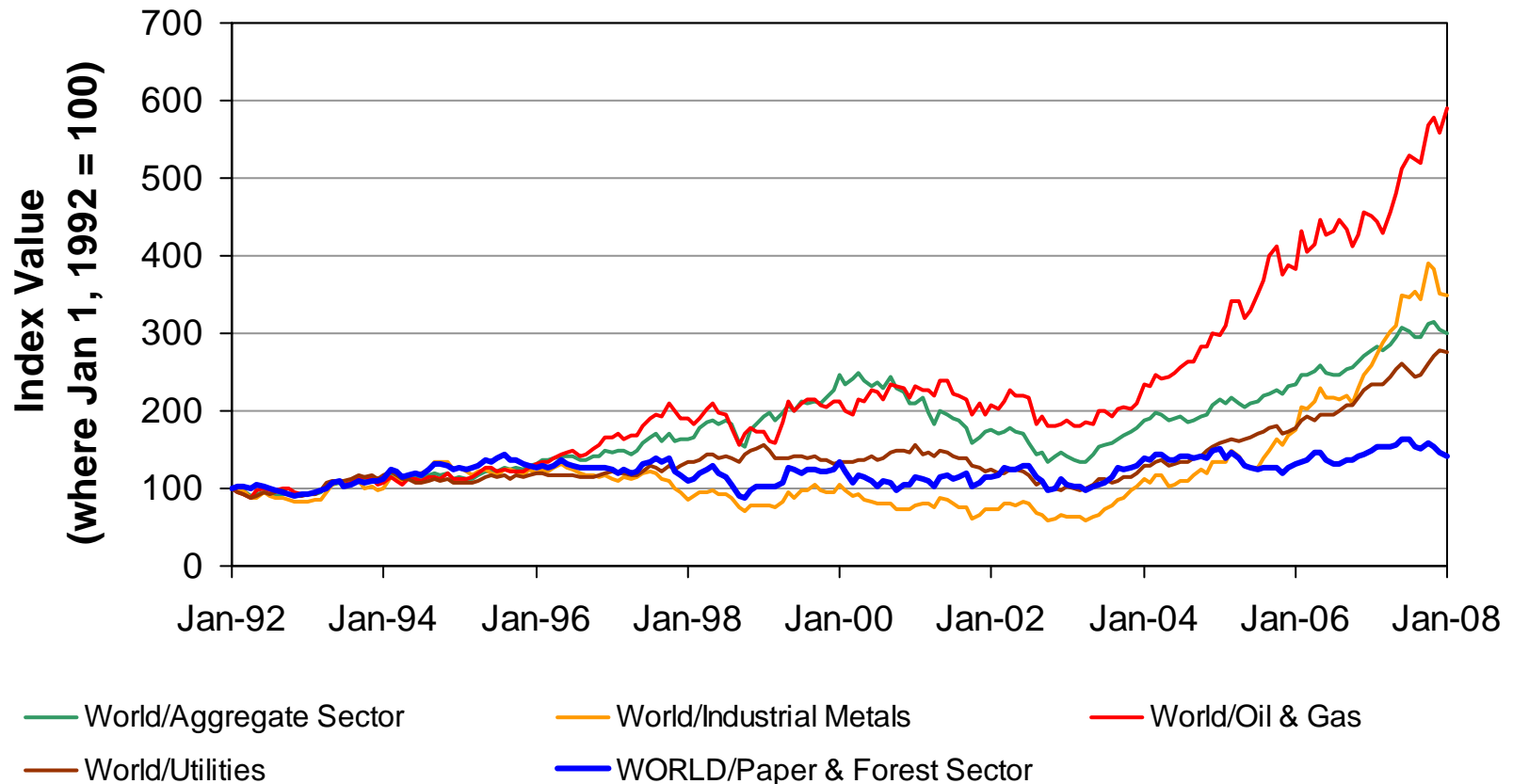
## Regional Forest Products Sector Performance



Source: PWC's Growth – Global Forest, Paper & Packaging Industry Surveys

# Historical Industry Financial Performance

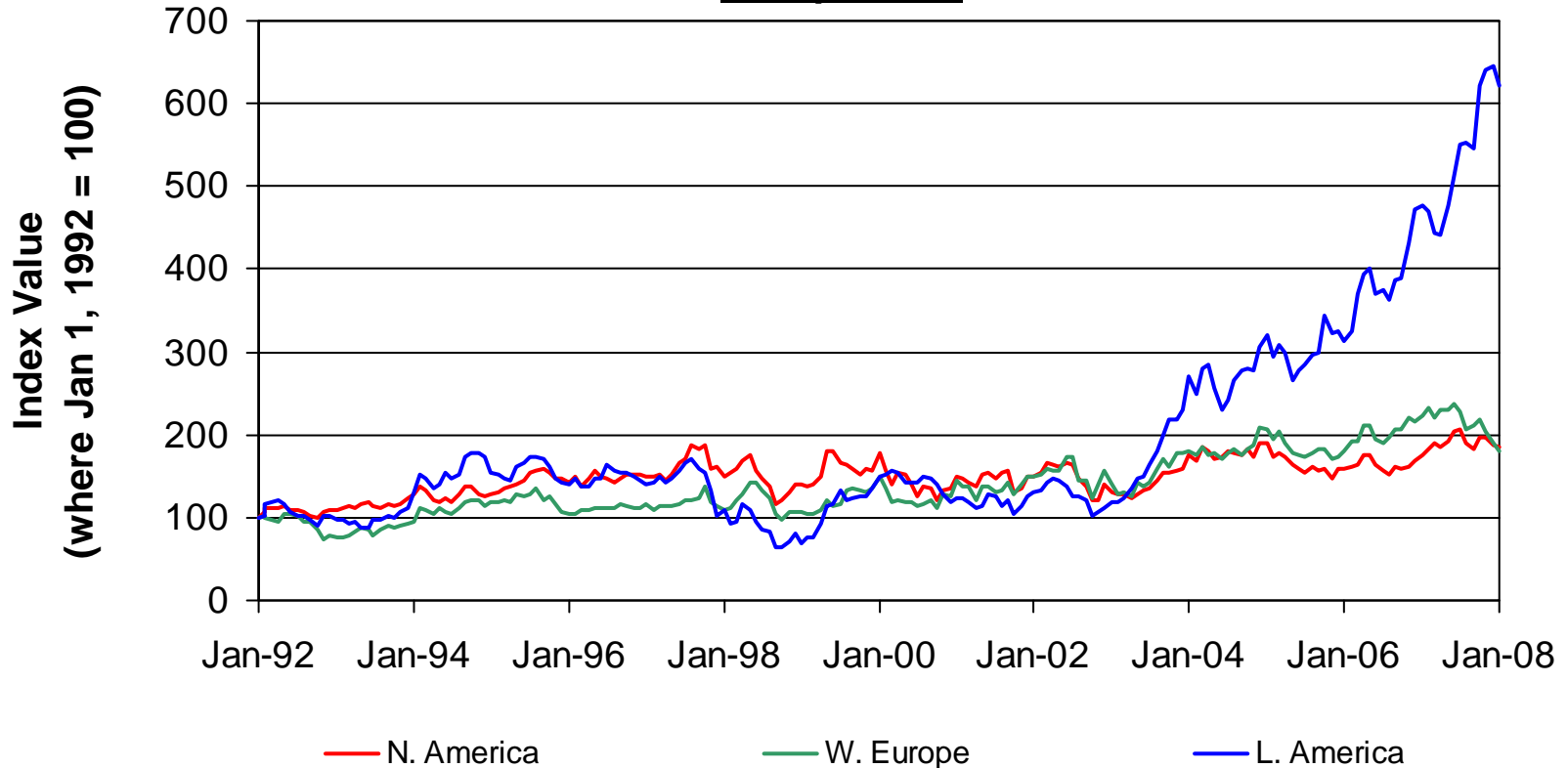
## Dow Jones Industry Sector Indices Comparison



Source: Dow Jones

# Historical Industry Financial Performance

## Dow Jones Paper & Forest Products Regional Index Comparison



Source: Dow Jones

# North American Industry – EBITDA/Sales%

## Q4 December, 2007

<u>Company</u>	<u>EBITDA / Sales %</u>
1 -	22.2
2 -	13.6
3 -	12.0
4 -	8.6
5 -	8.2
6 -	8.1
7 -	7.4
8 -	4.5
9 -	0.9
<hr/>	
10 -	0.0
11 -	(3.1)
12 -	(3.4)
13 -	(4.4)
14 -	(5.6)
15 -	(7.9)
16 -	(9.7)
17 -	(13.8)
18 -	(20.4)
19 -	(24.8)
20 -	(xxx)

**50%**

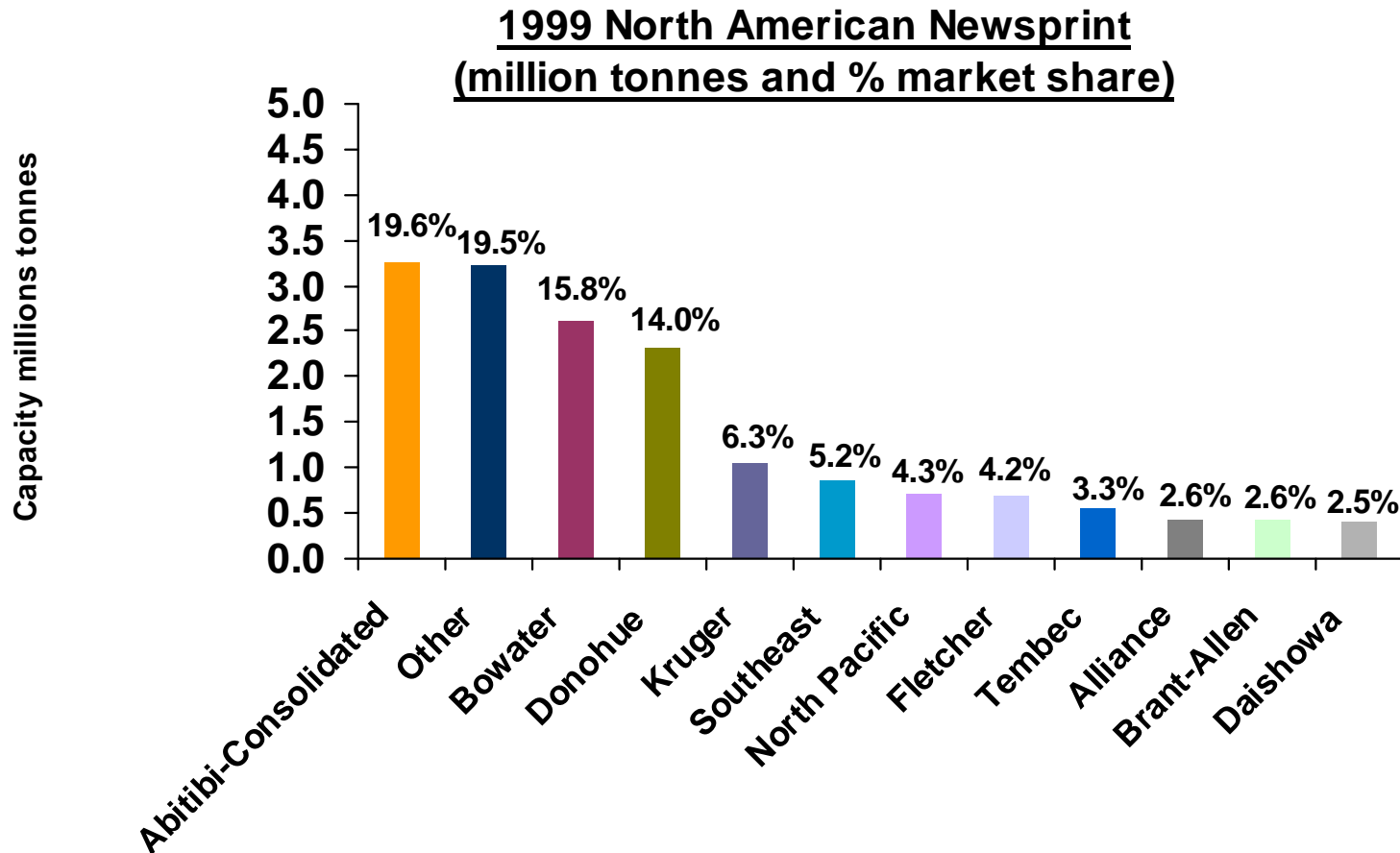
The industry has destroyed value and  
Equity Markets have punished us for it.

Shareholders are demanding change  
and sometimes driving it .....  
.....and rightfully so.

Trend towards consolidation gaining momentum in North America.

# NEWSPRINT CAPACITIES

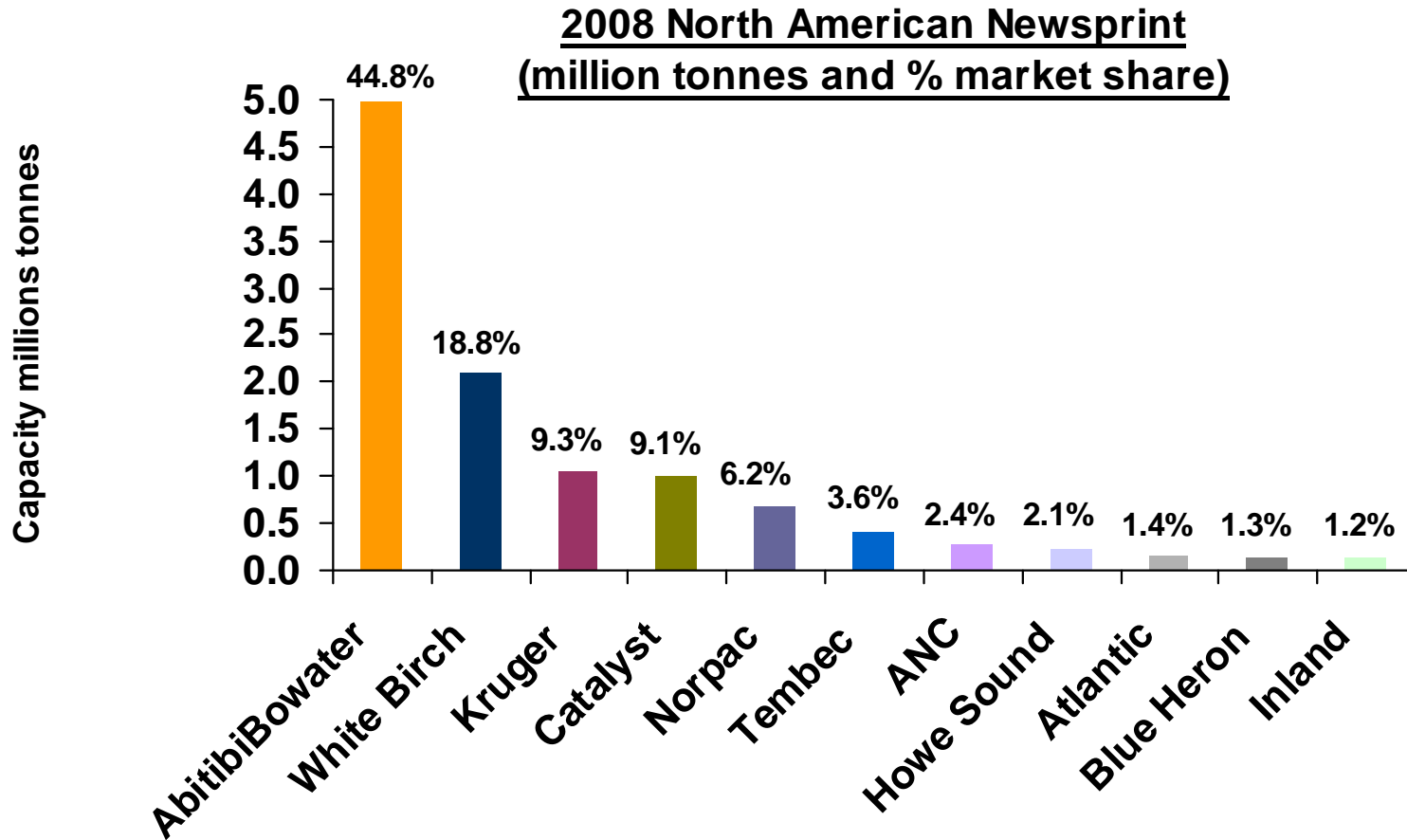
In 1999, N.A. newsprint capacity was 17 million tonnes. The top five producers represent ~ 61% of capacity; more than 15 producers represent the rest of the market.



Source: RISI

# NEWSPRINT CAPACITIES

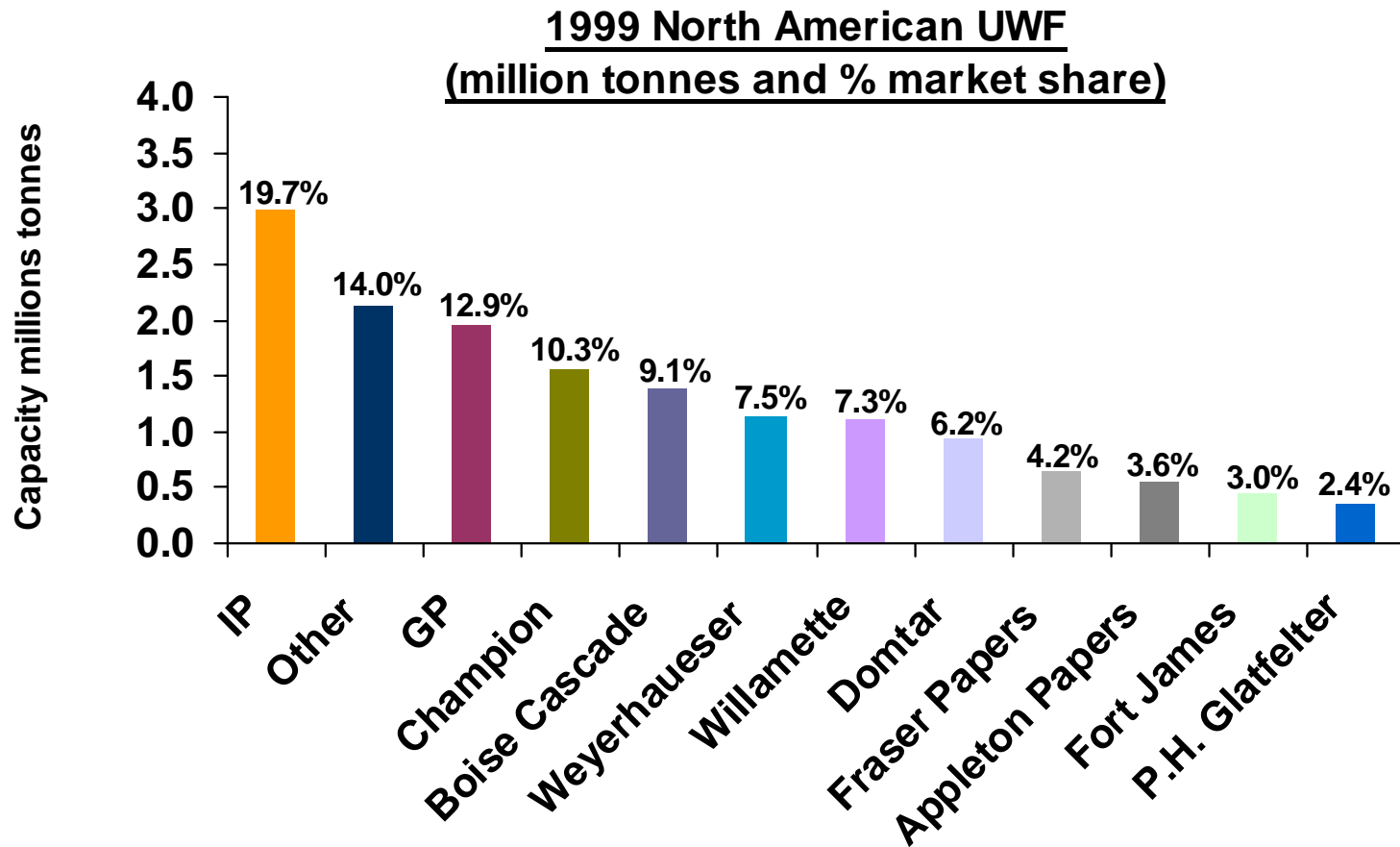
By 2008, N.A. newsprint capacity contracted to 11 million tonnes. The top five producers represent ~ 88% of capacity; another 6 producers represent the rest of the market.



Source: NLK Associates

# UNCOATED WOOD-FREE CAPACITIES

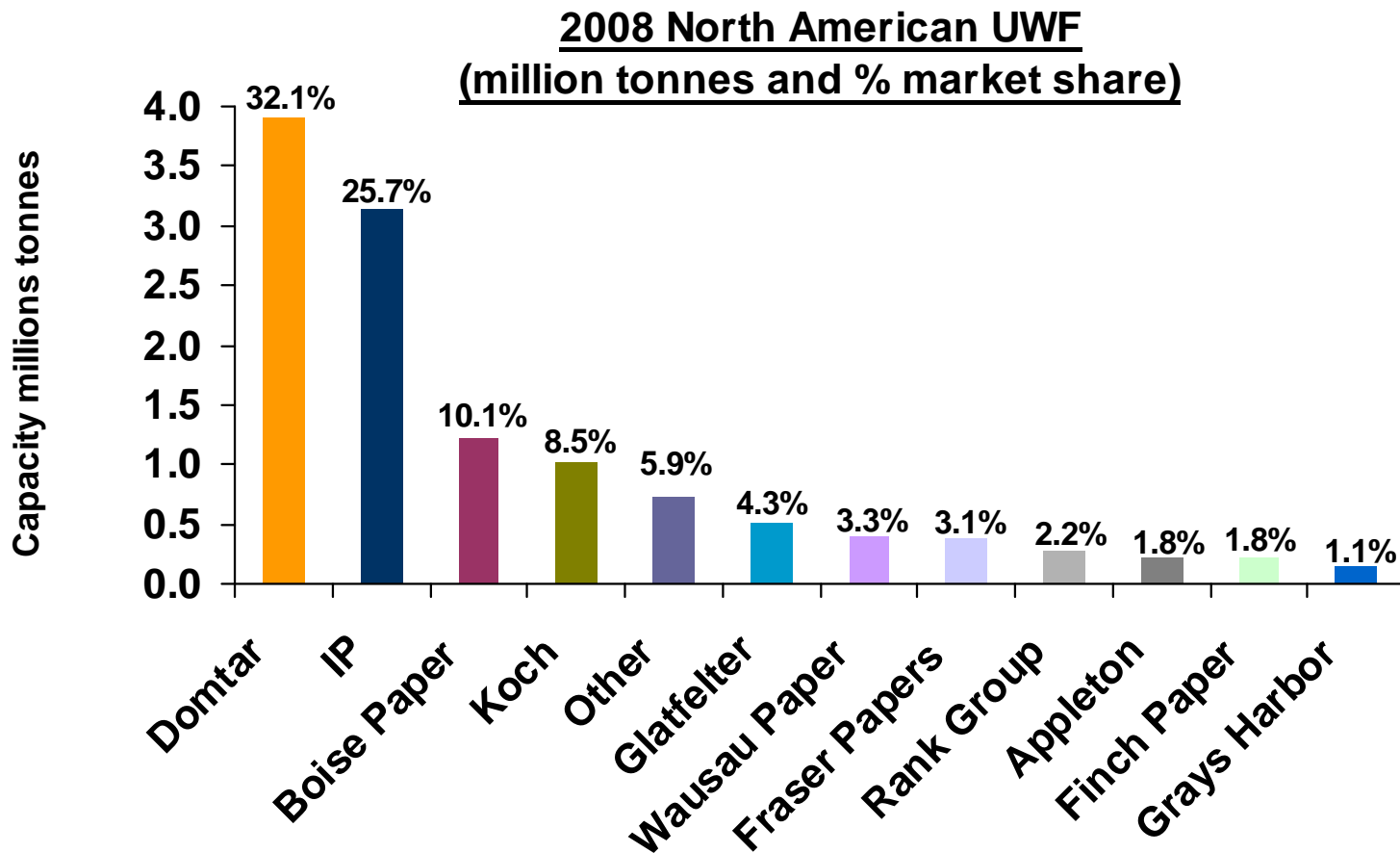
In 1999, North American UWF capacity was 15 million tonnes. The top five producers represent ~ 59% of capacity; another 19 producers represent the rest of the market.



Source: RISI

# UNCOATED WOOD-FREE CAPACITIES

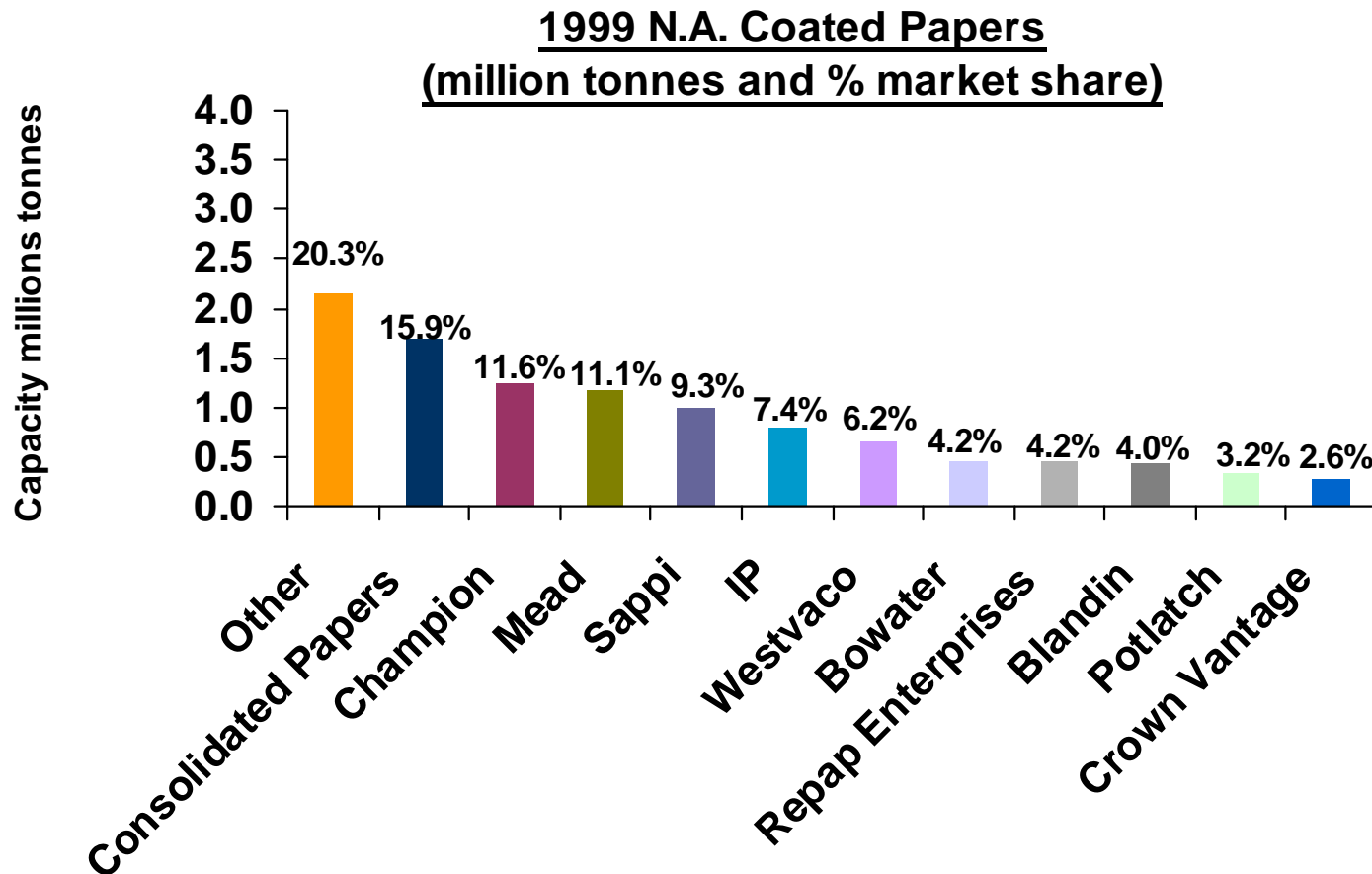
By 2008, North American UWF capacity contracted to 12 million tonnes. The top five producers represent ~ 81% of capacity; another 17 producers represent the rest of the market.



Source: NLK Associates

# COATED PAPERS CAPACITIES

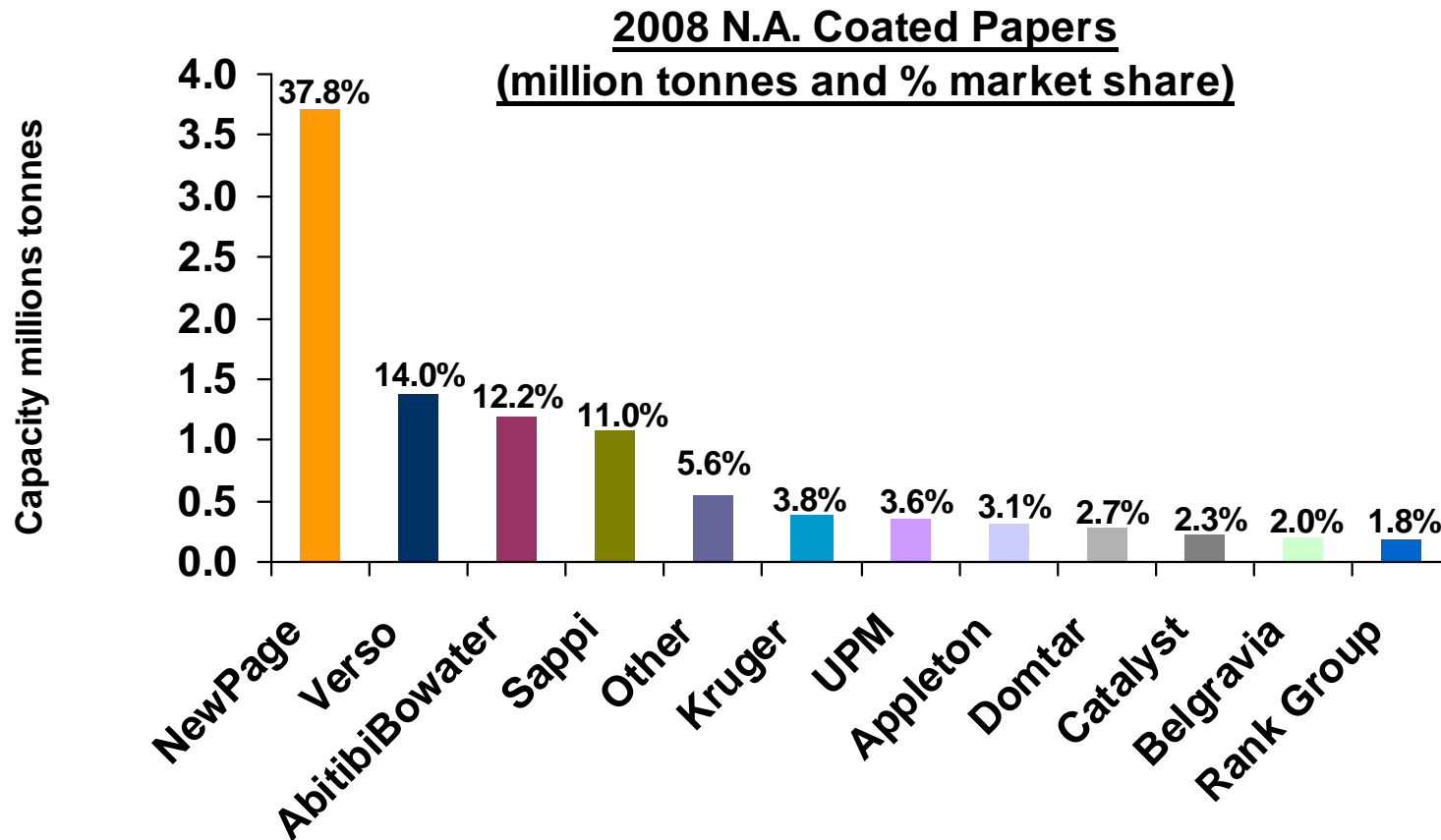
In 1999, N.A. coated papers capacity was 11 million tonnes. The top five producers represent ~ 55% of capacity; another 19 producers represent the rest of the market.



Source: RISI

# COATED PAPERS CAPACITIES

By 2008, N.A. coated papers capacity contracted to 10 million tonnes. The top five producers represent ~ 79% of capacity; another 13 producers represent the rest of the market.



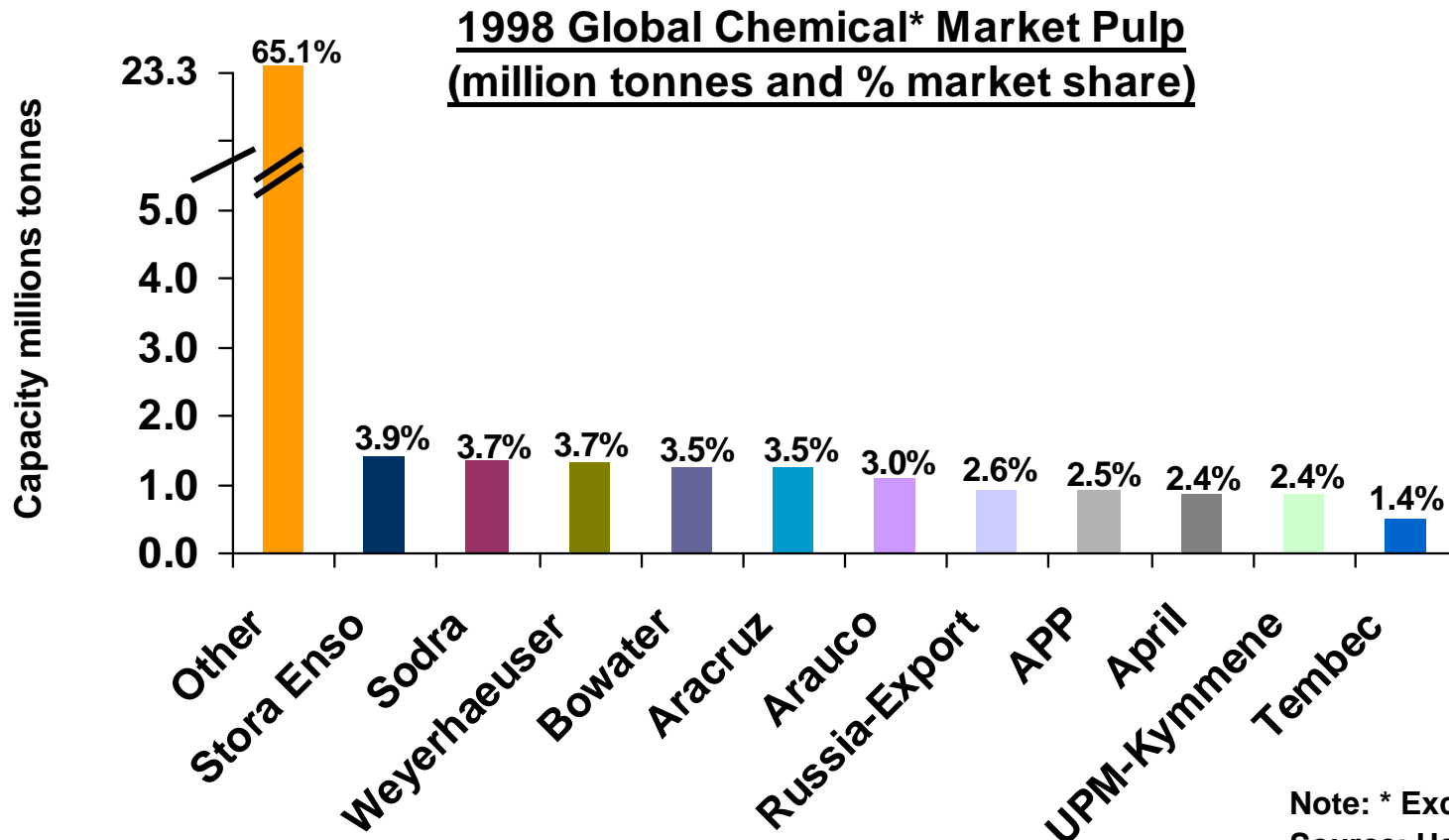
Source: NLK Associates

What about Pulp?

Will we see global consolidation?

# CHEMICAL PULP CAPACITIES

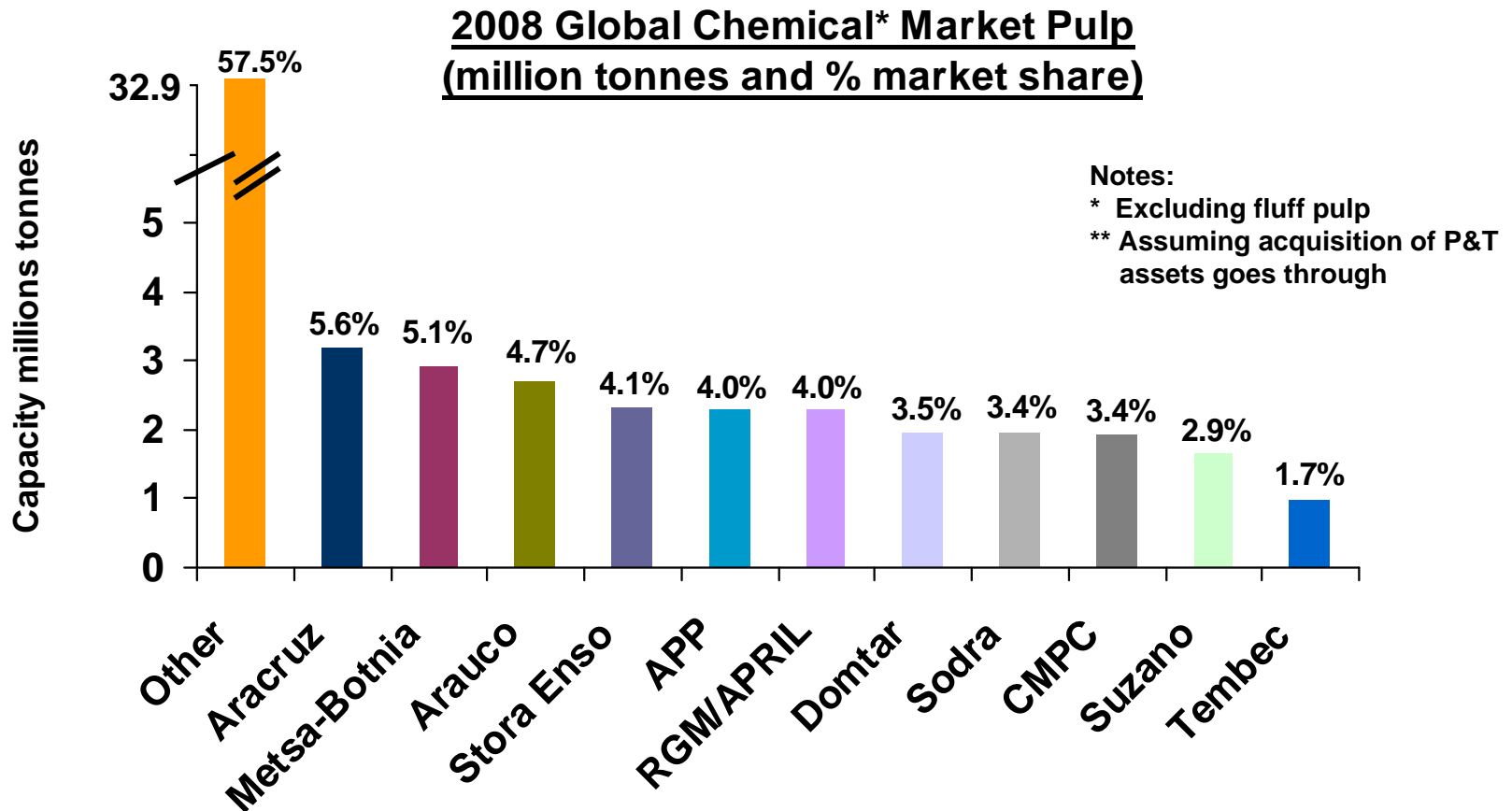
In 1998, global chemical\* market pulp capacity was 36 million tonnes. The top five producers represent ~ 18% of capacity; another 98 producers represent the rest of the market.



Note: \* Excluding fluff pulp  
Source: Hawkins Wright

# CHEMICAL PULP CAPACITIES

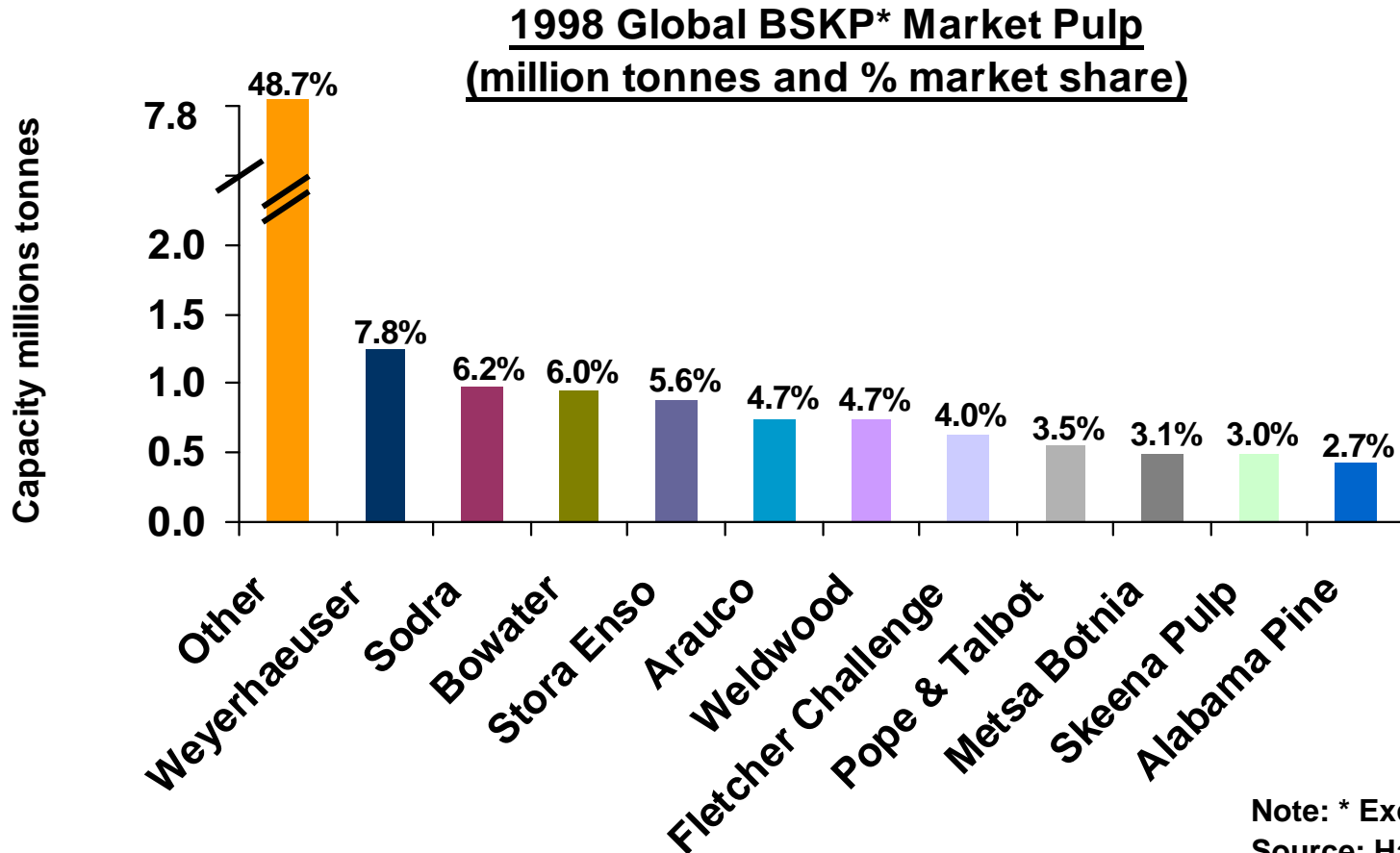
By 2008, global chemical\* market pulp capacity expanded to 57 million tonnes. The top five producers represent ~ 24% of capacity; another 140 producers represent the rest of the market.



Source: NLK Associates

# CHEMICAL PULP CAPACITIES

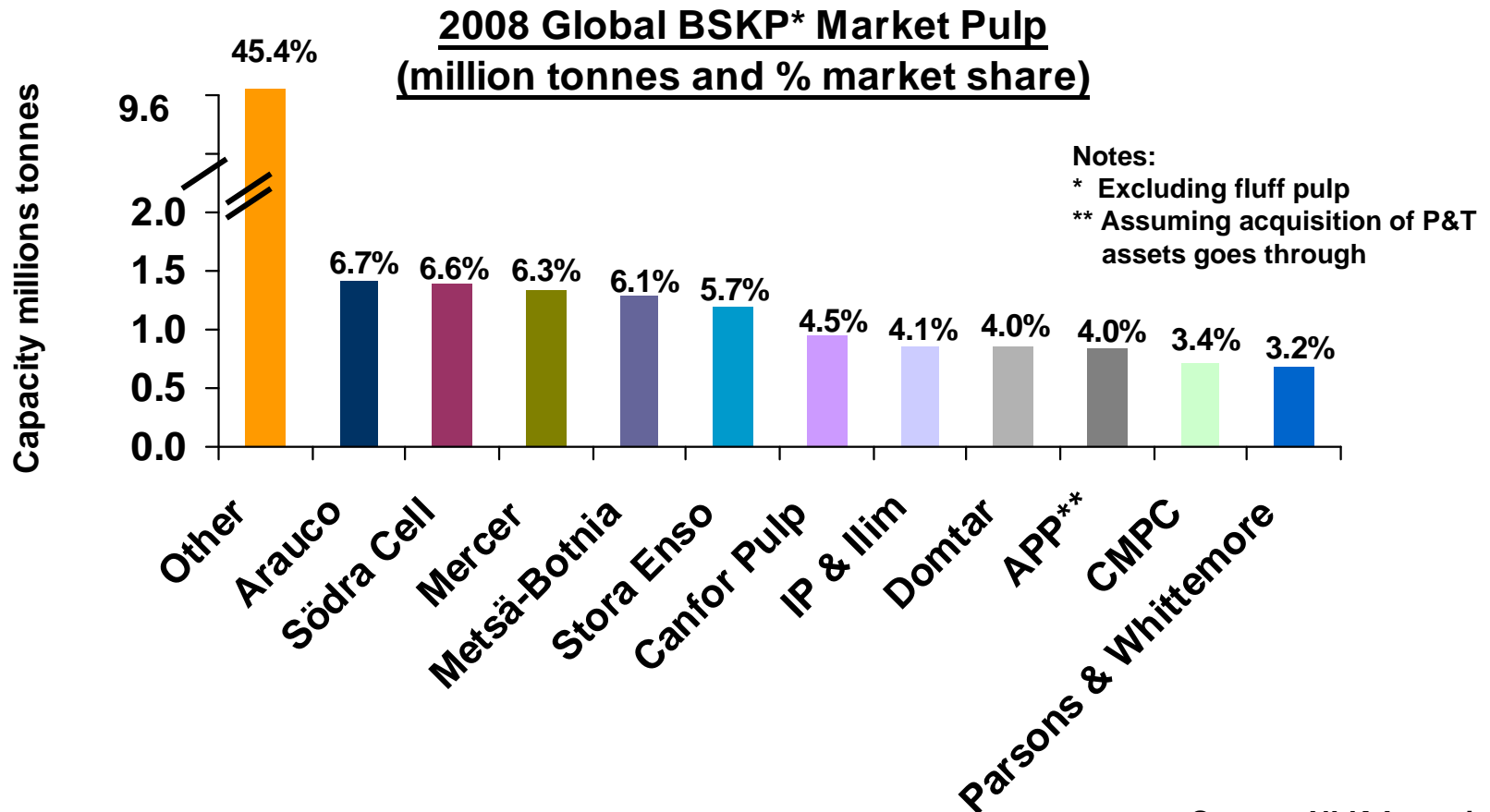
In 1998, global BSKP\* market pulp capacity was 16 million tonnes. The top five producers represent ~ 30% of capacity; another 50 producers represent the rest of the market.



Note: \* Excluding fluff pulp  
Source: Hawkins Wright

# CHEMICAL PULP CAPACITIES

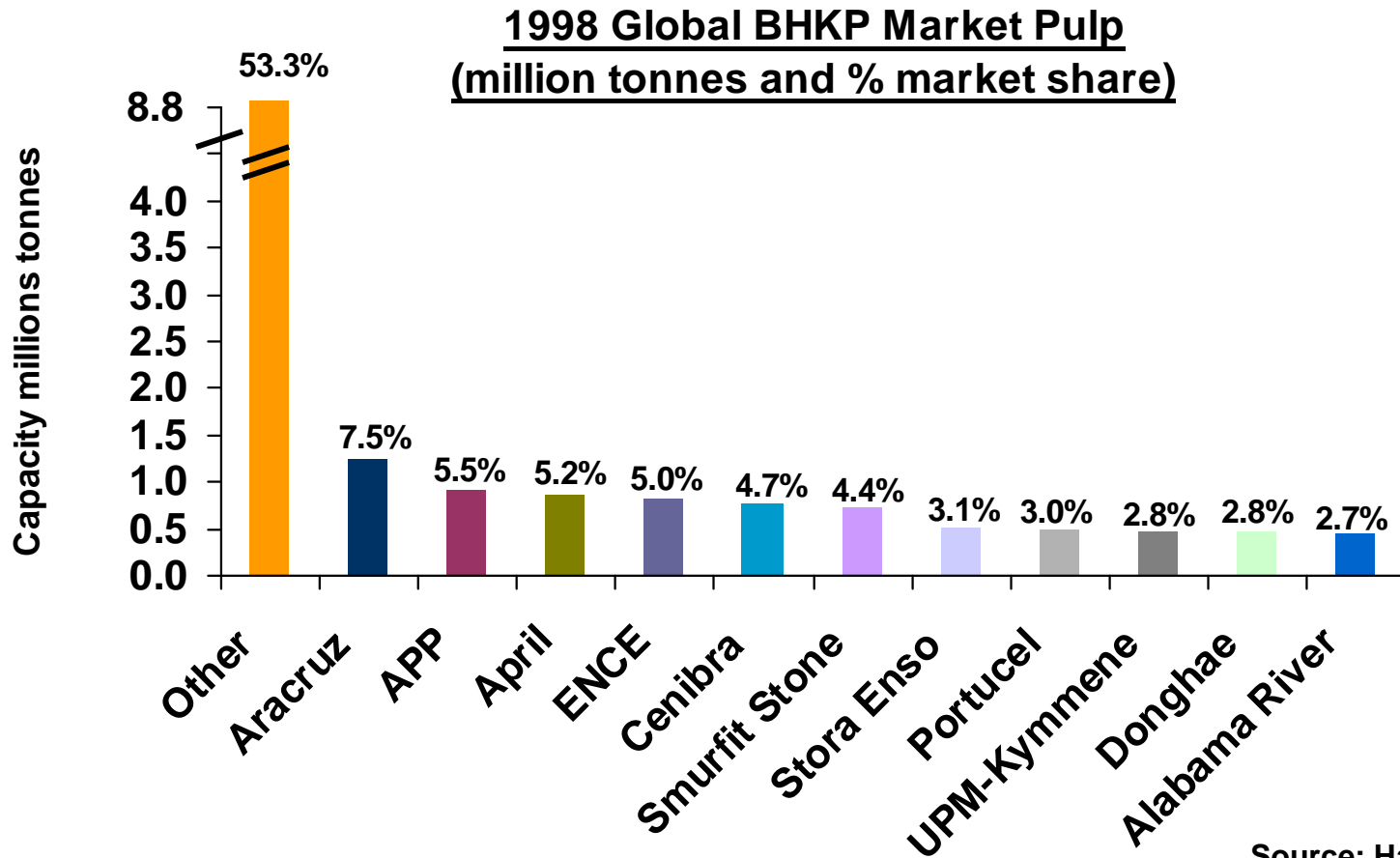
By 2008, global BSKP\* market pulp capacity expanded to 21 million tonnes. The top five producers represent ~ 31% of capacity; another 52 producers represent the rest of the market.



Source: NLK Associates

# CHEMICAL PULP CAPACITIES

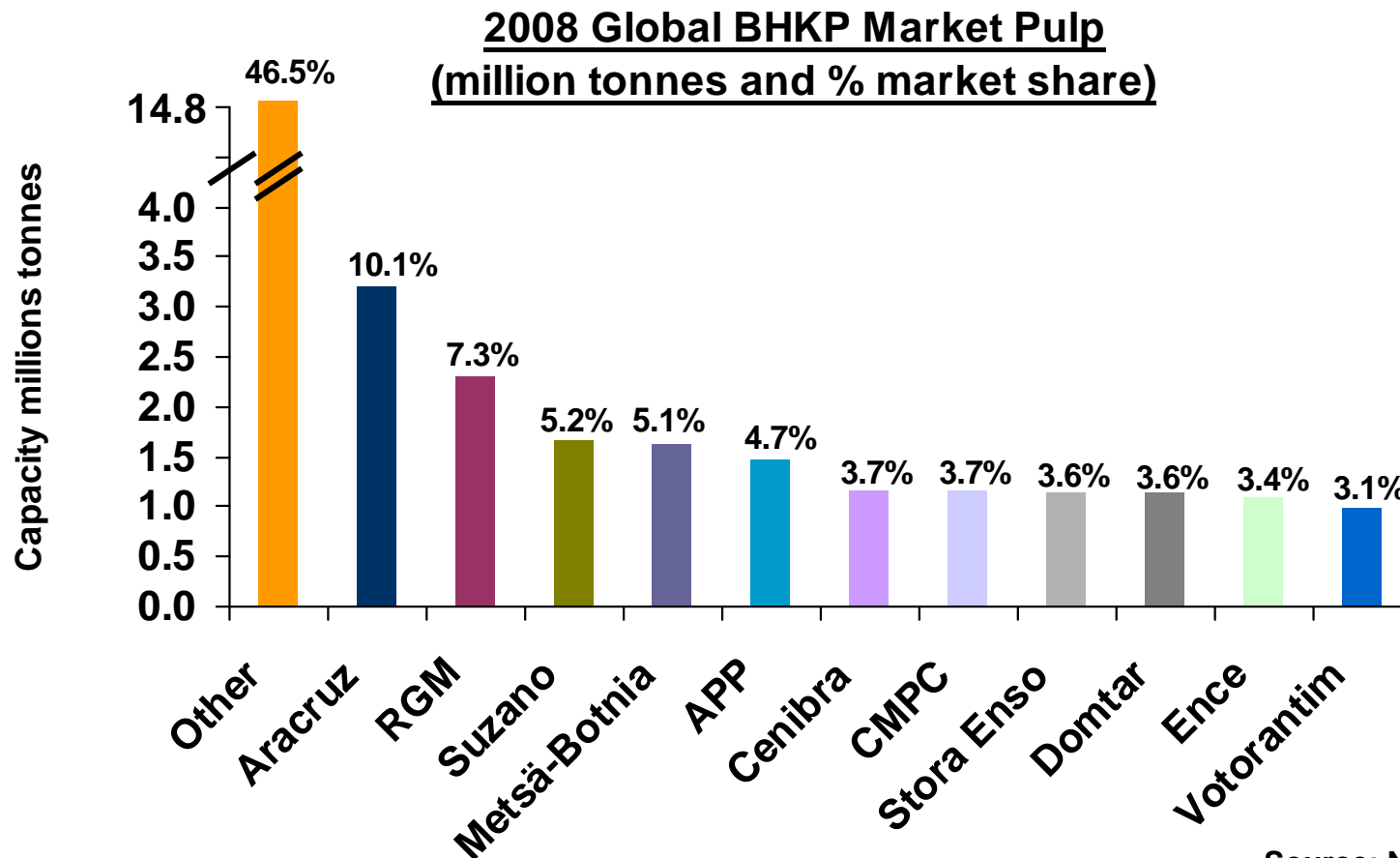
In 1998, global BHKP market pulp capacity was 17 million tonnes. The top five producers represent ~ 28% of capacity; another 52 producers represent the rest of the market.



Source: Hawkins Wright

# CHEMICAL PULP CAPACITIES

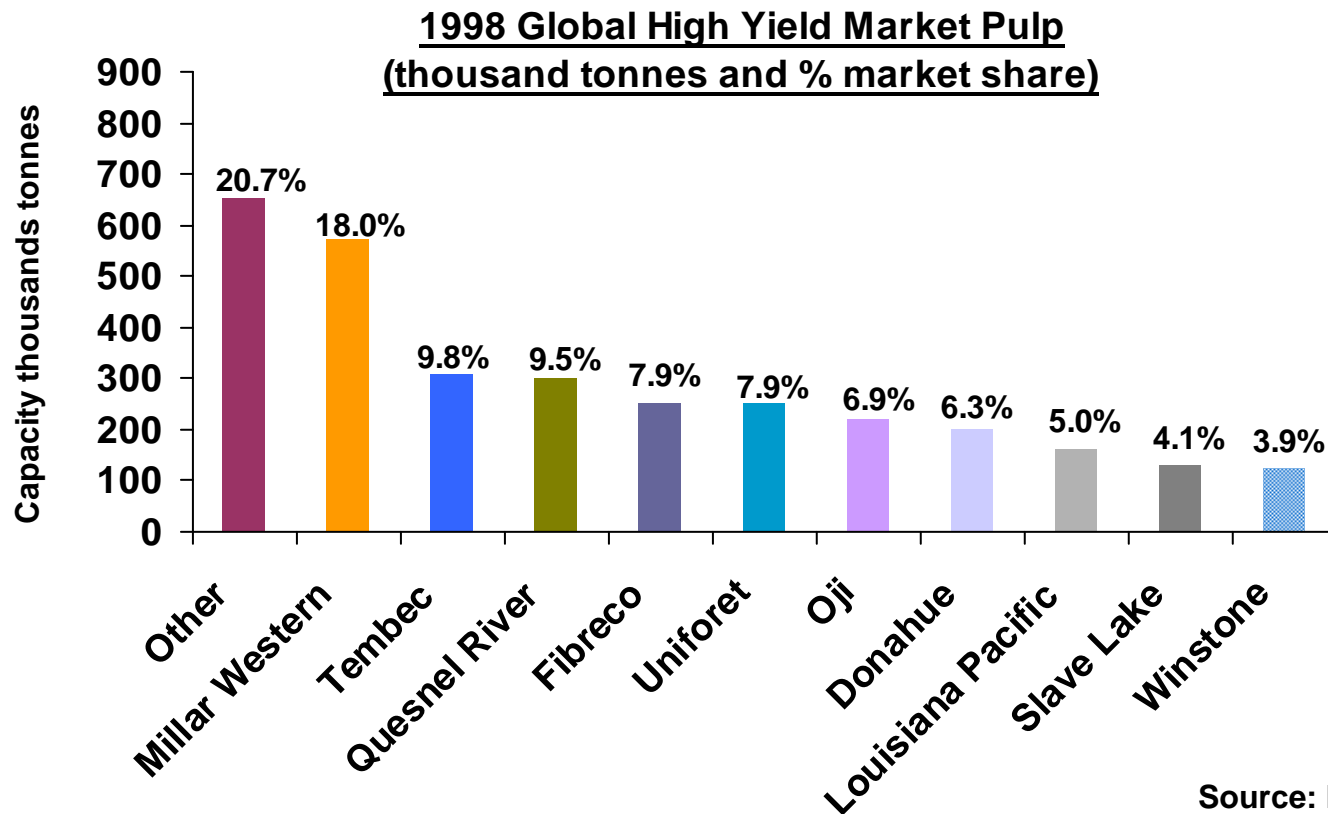
By 2008, global BHKP market pulp capacity expanded to 32 million tonnes. The top five producers represent ~ 32% of capacity; another 62 producers represent the rest of the market.



Source: NLK Associates

# HIGH YIELD PULP CAPACITIES

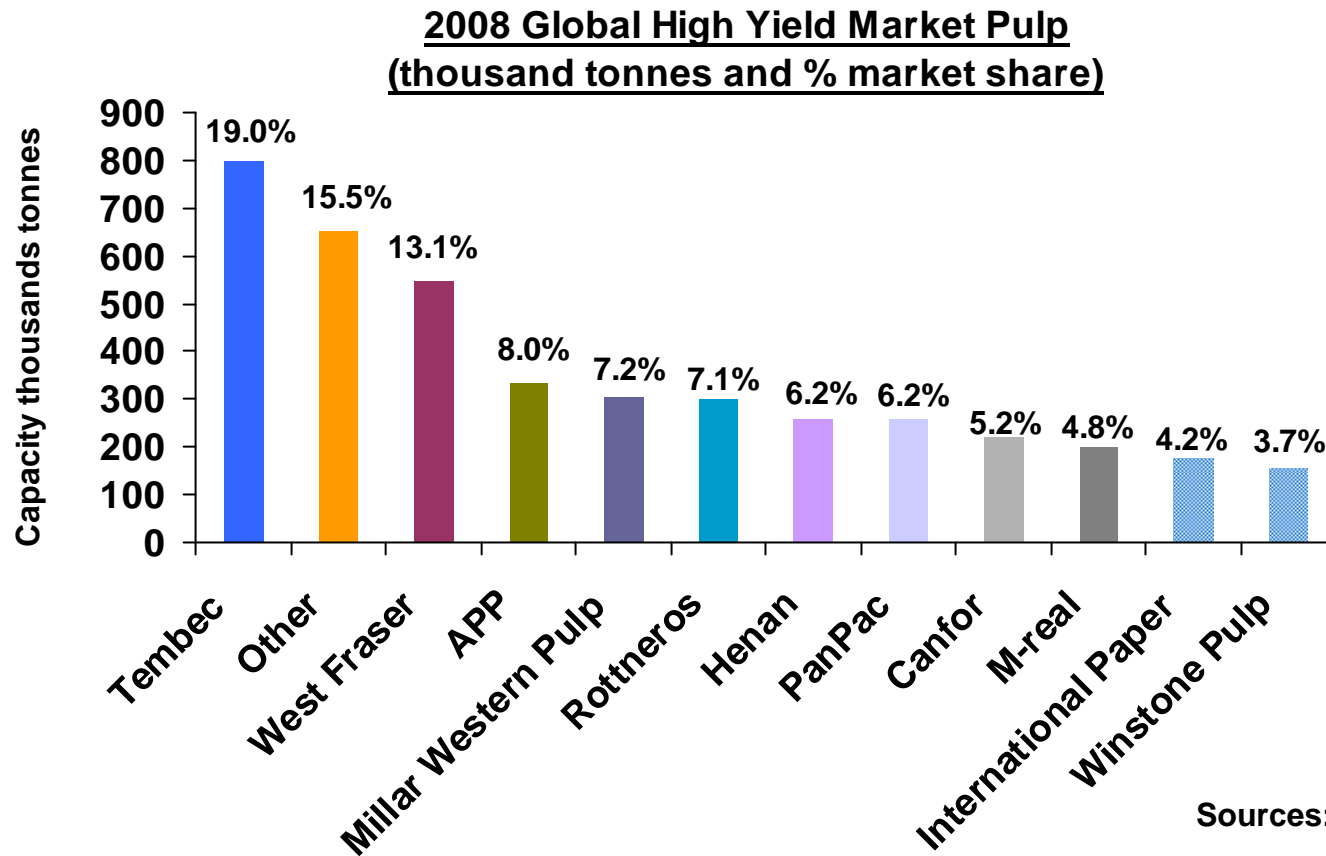
In 1998, high yield market pulp capacity was 3 million tonnes. The top five producers represent ~ 53% of capacity; another 16 producers represent the rest of the market.



Source: Hawkins Wright

# HIGH YIELD PULP CAPACITIES

By 2008, high yield market pulp capacity expanded to 4.2 million tonnes. The top five producers represent ~ 54% of capacity; another 18 producers represent the rest of the market.

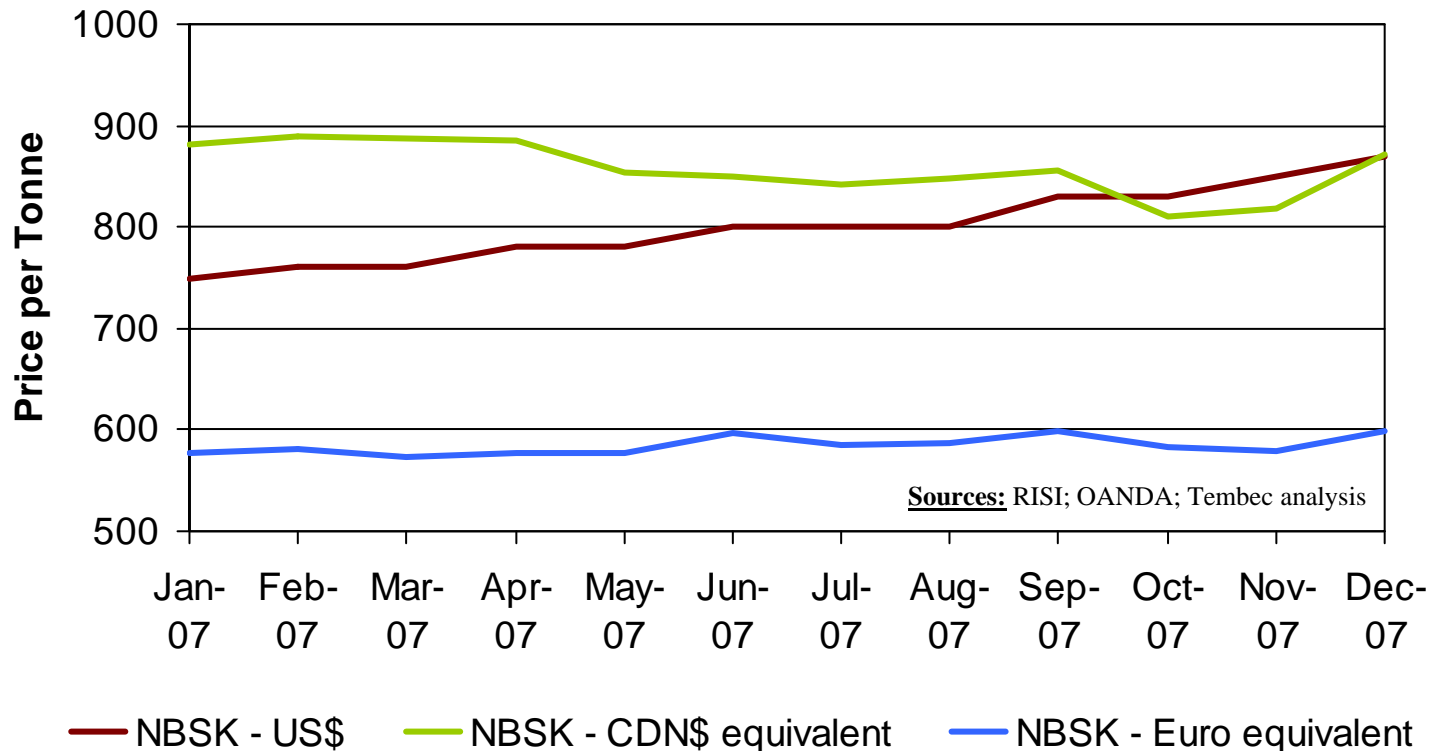


Sources: NLK Associates;  
PPPC

Pulp prices should lead to a financial turnaround for pulp producers, right?

**US dollar denominated pulp pricing continued on an upward climb during 2007; the same cannot be said when the pulp pricing is converted to other currencies**

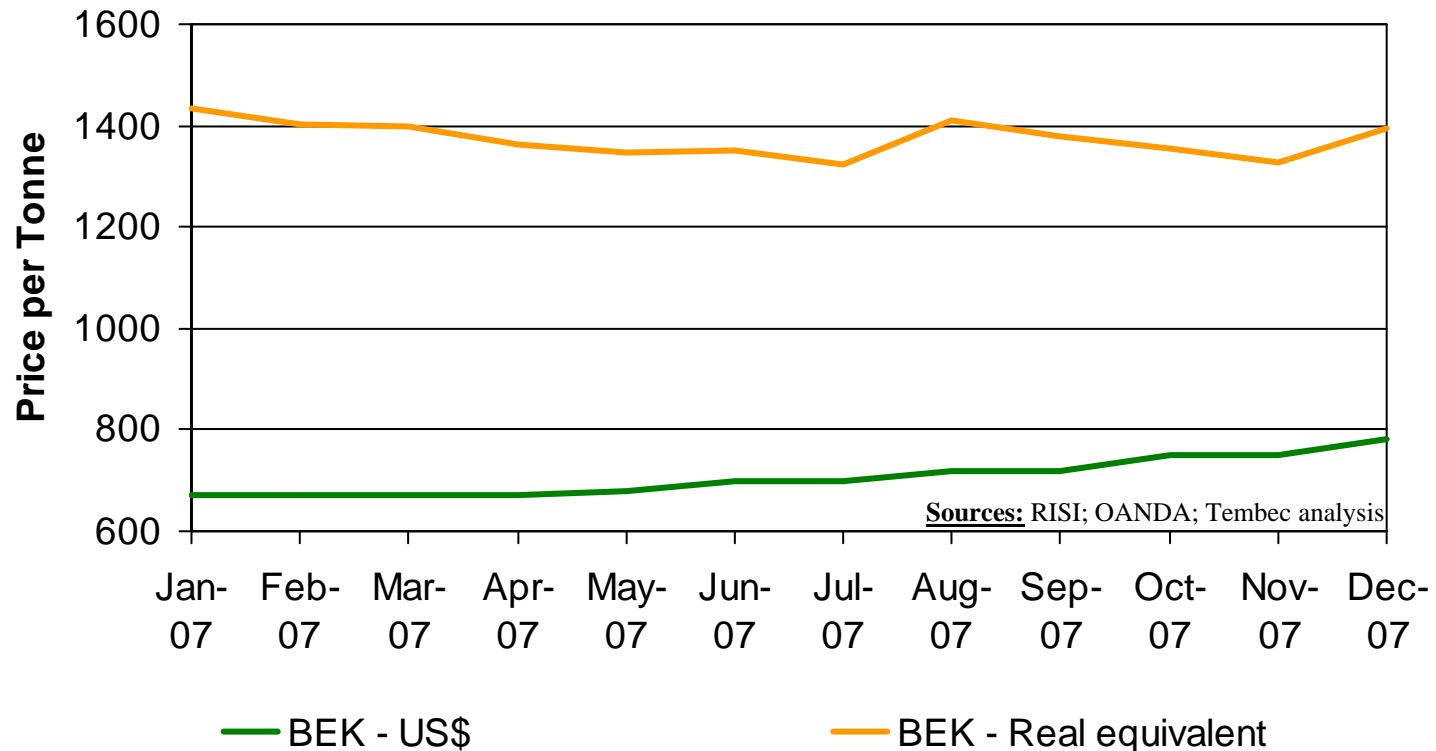
**Historical NBSK Prices**  
**(delivered to Northern Europe)**



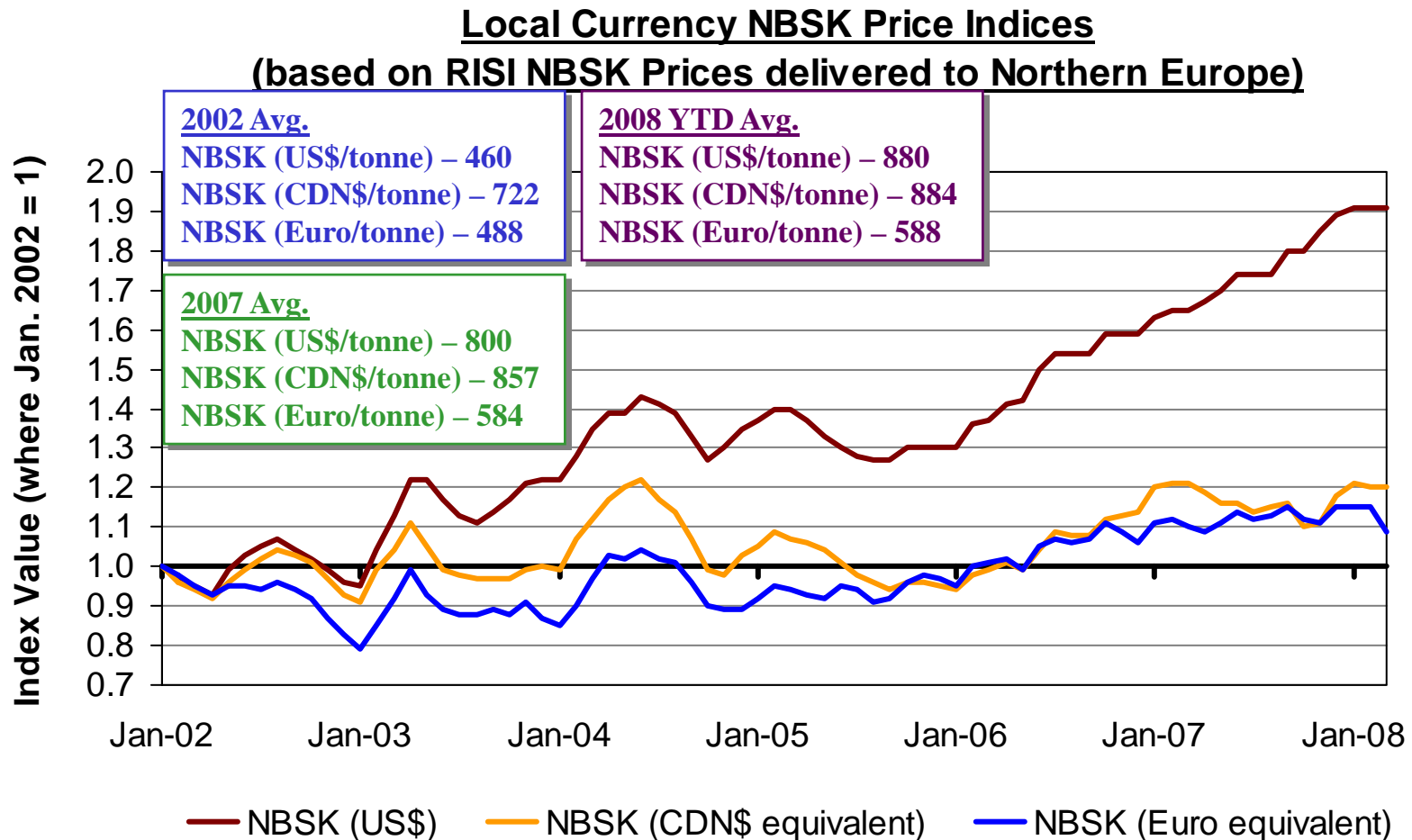
**US dollar denominated pulp pricing continued on an upward climb during 2007; the same cannot be said when the pulp pricing is converted to other currencies**

---

**Historical BEK Prices**  
**(delivered to Northern Europe)**

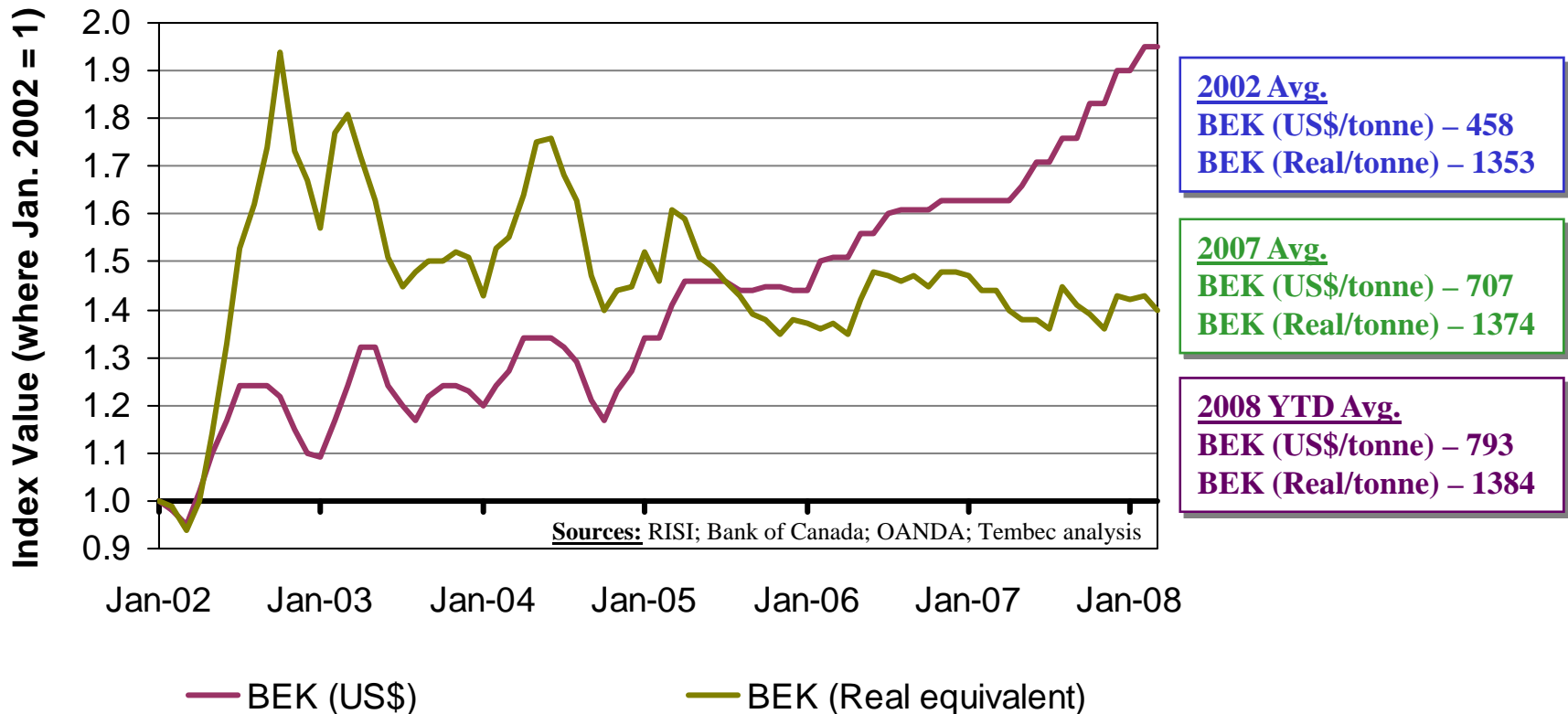


When compared from January 2002, the price appreciation of pulp in both the Canadian and Euro currencies has not kept pace with that in \$ U.S. dollars due to dramatic FX rate changes



When compared from January 2002, the price of pulp in the Real currency has actual declined, a stark contrast to the rise in U.S. dollar denominated pricing

**Local Currency BEK Price Indices**  
**(based on RISI BEK Prices del. to Northern Europe)**



# Unprecedented Inflation

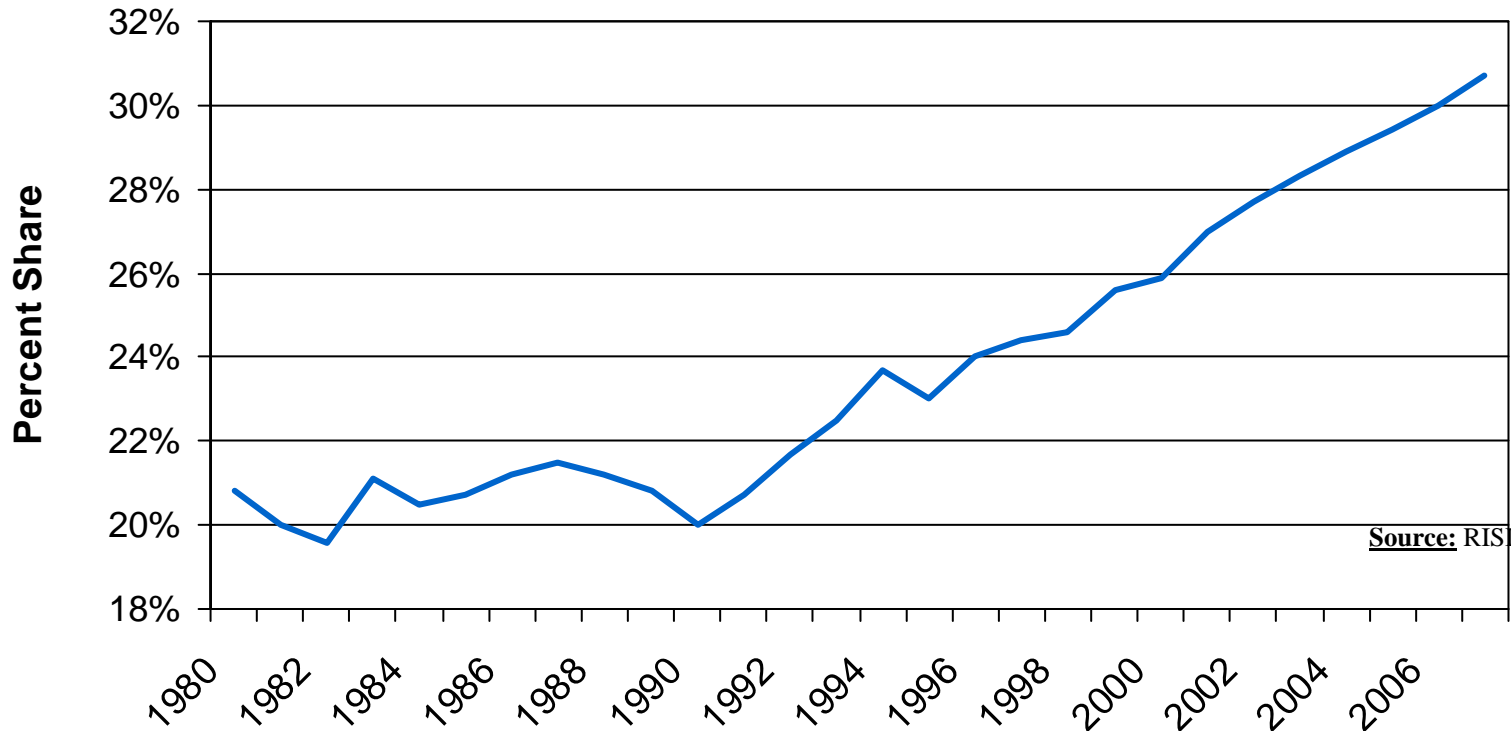
---

- Global increases in fiber costs
- Freight prices increasing due to fuel and ship availability
- Energy prices increasing due to oil, natural gas, biomass
- Global chemical increases

What is the most important trend in the pulp business?

Market pulp's share of world paper grade wood pulp demand has increased significantly since the beginning of the 1990s; this trend is expected to continue

**Market Pulp Share of World Paper Grade Wood Pulp Demand**



# Conclusion

---

1. Foreign exchange and cost increases in production can be expected.
2. Consolidation will continue for the pulp and paper industry.
3. The model for the pulp and paper industry will change to generate acceptable returns. Investors demand it.