



Worldwide Price Forecast Model

(Modelo de predicción de los precios del paperboard (cartoncillos) en el mundo)





Modelo de predicción de los precios del paperboard (Cartoncillos) en el mundo

- ◆ El modelo probó ser el modelo más acertado para predecir los precios de paperboard en el mundo
- ◆ El Modelo es una combinación de
 - ❖ Variables macroeconómicas
 - ❖ Variables de la industria
 - ❖ El comportamiento de los principales actores a nivel mundial
 - ❖ Comportamiento de los clientes
 - ❖ Amenazas de los productos sustitutos
- ◆ Fue desarrollado por Daniel Velásquez





U.S. Paperboard Market Conditions hit Bottom in 1999 and market is recovering

- ◆ SBS backlogs and inventories are reaching 1997 levels
- ◆ SBS production and export shipments improved in 1999 versus 1998
- ◆ Two SBS price increases in 1999
- ◆ Third SBS price increase announced for the first quarter of 2000
- ◆ CRB cost structure has been affected by rebound in OCC prices
- ◆ 1-2 CRB price increase(s) in 1999
- ◆ Another CRB price increase is expected in early 2000
- ◆ Consultants are helping major players manage capacity
- ◆ IP is taking unscheduled downtime





U.S. Paperboard Market Conditions

- ◆ Market conditions show that prices hit bottom in 1999 and the market is recovering
 - ❖ SBS backlogs and inventories are reaching 1997 levels
 - ❖ SBS production and export shipments improved in 1999 versus 1998
 - ❖ It appears that second SBS price increase is sticking
 - ❖ CRB cost structure has been affected by rebound in OCC prices
 - ❖ Consultants are helping major players manage capacity

- ◆ Modest economic growth in the U.S., coupled with economic recoveries in Asia and Europe are leading the improvement in the market
 - ❖ Asian economies are turning around faster than expected
 - ❖ U.S. GDP is expected to grow 3.8% in 1999 and 2.9% in 2000 (RISI)
 - ❖ European GDP is expected to grow 2.0% in 1999 and 2.7% in 2000 (RISI)

- ◆ Industry consolidation is changing the face of the U.S. market and modifying the channels to market

- ◆ Pulp prices are recovering





U.S. Paperboard Market Conditions

- ◆ RISI forecast that paperboard domestic demand will grow solidly during the second half of 2000
 - ❖ Industrial market will recover
 - ❖ Y2K inventory corrections are over

- ◆ IP announced a fourth SBS price increase of \$40/ton
 - ❖ Major players followed: Westvaco, Gulf States, Potlatch and Gilman

- ◆ SBS market is not as strong as it was at the beginning of the year
 - ❖ Price increases will be driven by increases in pulp market prices
 - ❖ Many SBS mills have an opportunity to sell pulp instead of board
 - ☞ Tight SBS supply demand

- ◆ Worldwide economies are driving commodity prices up





U.S. Paperboard Market Conditions

- ◆ CRB cost structure has drastically change with the drop in OCC prices
 - ❖ Recycled fiber represents 20%-30% of CRB cash cost
 - ❖ OCC prices went down from \$118/ton in 2Q00 to \$62/ton in 3Q00
- ◆ Paper companies will continue to bear pressure from Wall Street to maintain earnings
- ◆ Capacity expansion plans are minimal in the next few years
- ◆ Pulp Inventories were below 1.5 million tons for the first time since 1995 without a strike
- ◆ Shipments/capacity ratio is over 96% since July of 1999





U.S. Paperboard Market Threats

- ◆ With the rebound in prices, plastic represents a threat to demand
 - ❖ Higher paper prices incent substitution to plastic
 - ❖ Aggressive marketing from plastic manufactures
 - ❖ Development of new plastic products
 - ❖ Plastic ACGR from 1990 to 1999 was 4.8%

- ◆ There is no switching cost for new product introductions
 - ❖ Plastic and flexible packaging continues to be a major threat for cartonboard demand
 - ❖ The risk increases as the price continues to rise





U.S. Paperboard Market Conditions

Major Risks/Threats

- ◆ Capacity Management is still a challenge when the prices are increasing
- ◆ Future price improvements heavily depend on continued capacity management by board and pulp producers
- ◆ What will happen when the prices improve further is still a question mark
- ◆ Converters and end users with long term agreements are protected from price increases





U.S. Paperboard Market Conditions

Major Risks/Threats

- ◆ Stora-Enzo is making inroads in the U.S. market
 - ❖ Consolidated Paper gives Stora-Enzo a channel to the U.S. market
 - ❖ New unbleached grade CKB was introduced in 1997
 - ❖ At comparable CD stiffness PK/OK is on average heavier than CKB by 10%





Industry consolidation continues and it is modifying the channels to market

- ◆ Smurfit-Stone acquiring St. Lauren Paperboard
- ◆ International Paper acquiring Shorewood paperboard
- ◆ Market rumors are that Chesapeake acquiring A.G.I.
- ◆ Stora-Enzo acquiring Consolidated Paper
- ◆ Grupo Durango (Mexico) acquiring Gilman Paper





Capacity Closures in North America

U.S. Bleached Pulp Mill Closures

(1998-2000, 000 Tonnes)

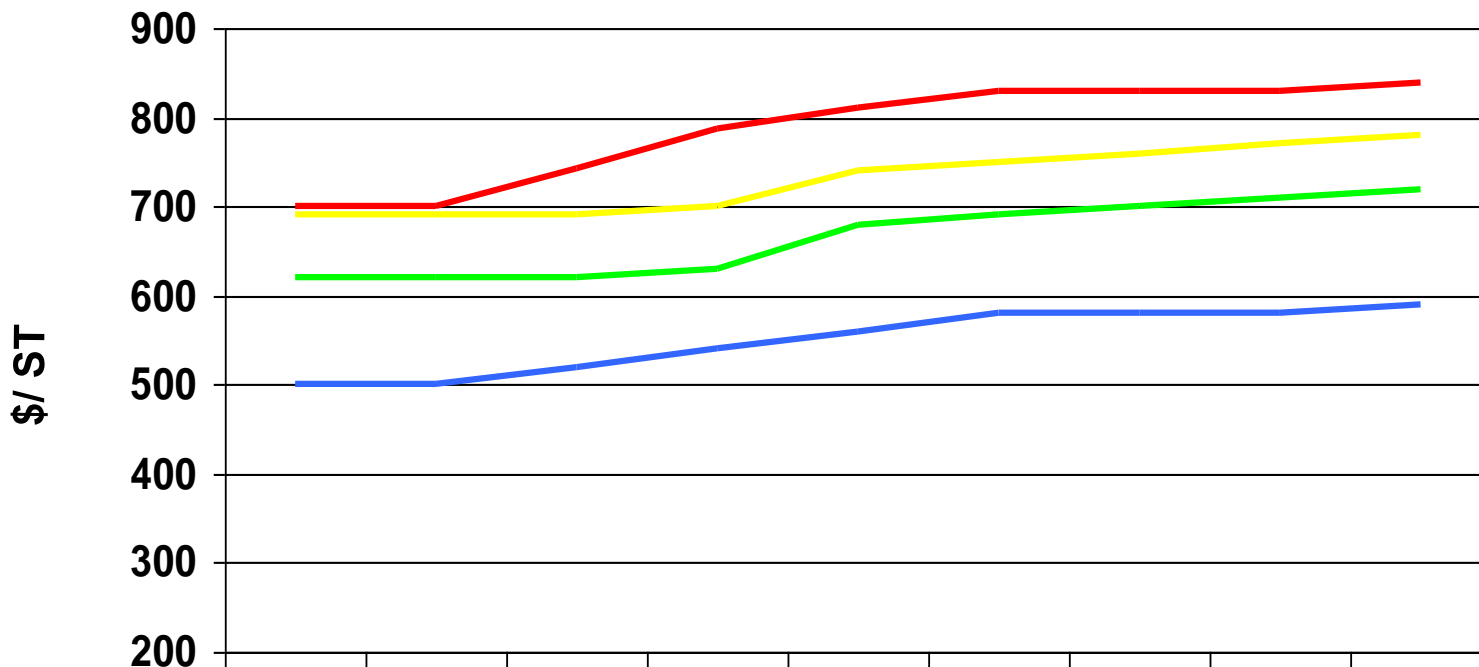
<u>Company</u>	<u>Location</u>	<u>Grade</u>	<u>Size</u>
Abibiti-Consol.	Snowflake, AZ	BSKP	50
Pasadena Paper	Pasadena, TX	BKP	180
Smurfit-Stone	Port Wentworth, GA	BKP	245
Proctor & Gamble	Mehoopany, PA	BIT	100
Kimberly-Clark	Mobile, AL	BKP	560
Sappi Fine Paper	Westbrook, ME	BHKP	125
Int. Paper	Natchez, MS	BHKP	50
U. S. Alliance	Coosa Pines, Al	BHKP	85
Donohue	Sheldon, TX	BSKP	130
Total			1525





U.S. Paperboard Pricing Improved in 1999

RISI Data -- (\$/ ST)



	99-1	99-2	99-3	99-4	00-1	00-2	00-3	00-4	'00-1
20 pt RISI CUK	620	620	620	630	680	690	700	710	720
15 pt RISI SBS	700	700	743	788	810	830	830	830	840
20 pt RISI CCN	500	500	520	540	560	580	580	580	590
20 pt RISI CUK Carrier	690	690	690	700	740	750	760	770	780

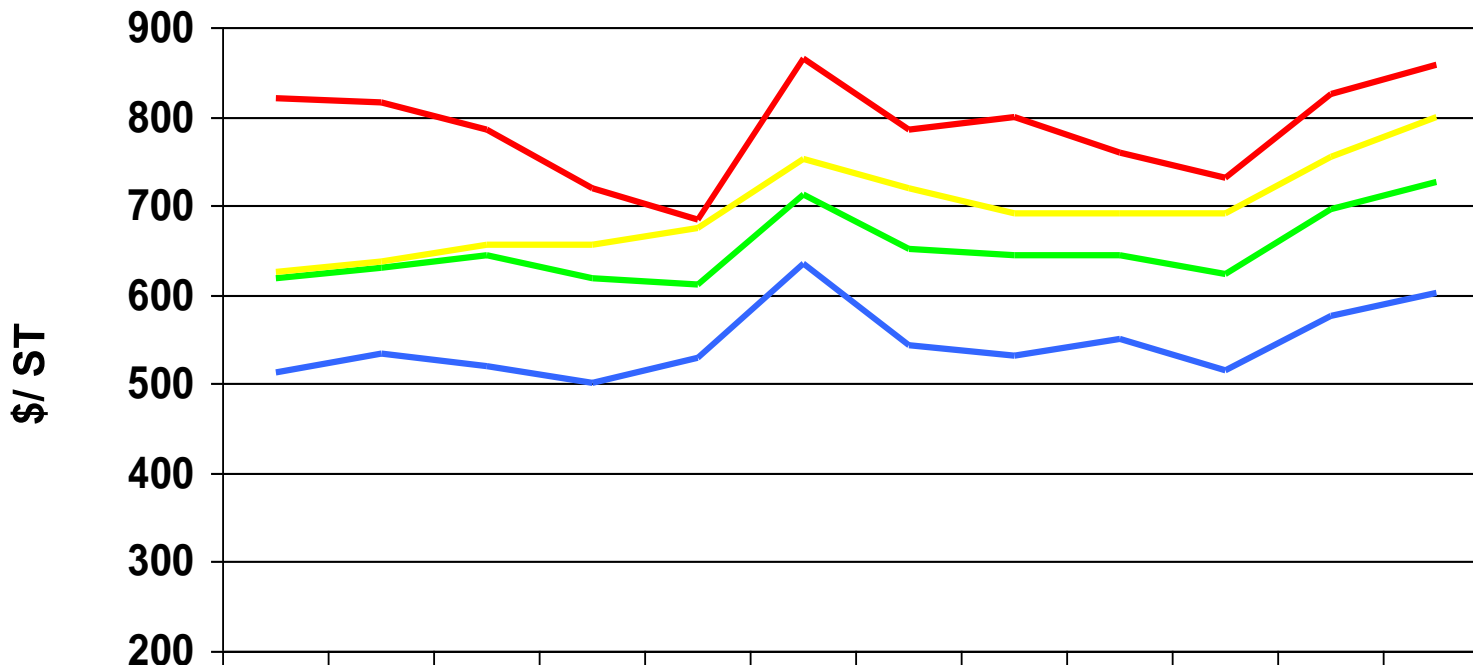
Source: Resource Information Systems, Inc.





U.S. Pricing of Paperboard 1990 - 2001

RISI Data -- (\$/ ST)



	90	91	92	93	94	95	96	97	98	99	'00	'01
20 pt RISI CUK	618	631	643	618	612	713	650	645	645	622	695	727
15 pt RISI SBS	821	815	784	718	685	865	786	800	760	731	825	858
20 pt RISI CCN	513	534	519	500	528	634	542	531	550	515	575	601
20 pt RISI CUK Carrier	625	636	655	655	675	753	720	690	690	692	755	798

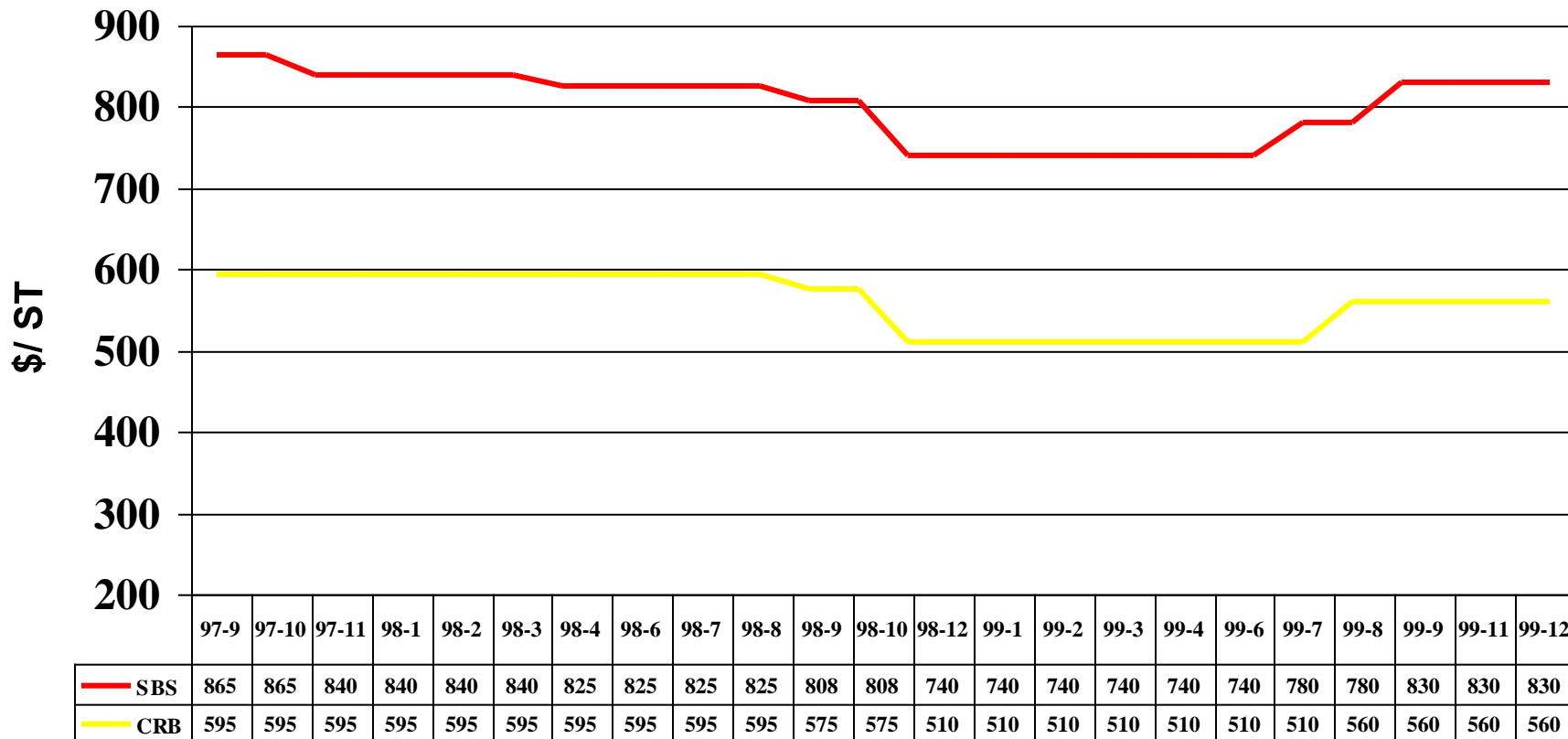
Source: Resource Information Systems, Inc.





U.S. Paperboard Prices are recovering in 1999

P&P Data - (\$/ST)



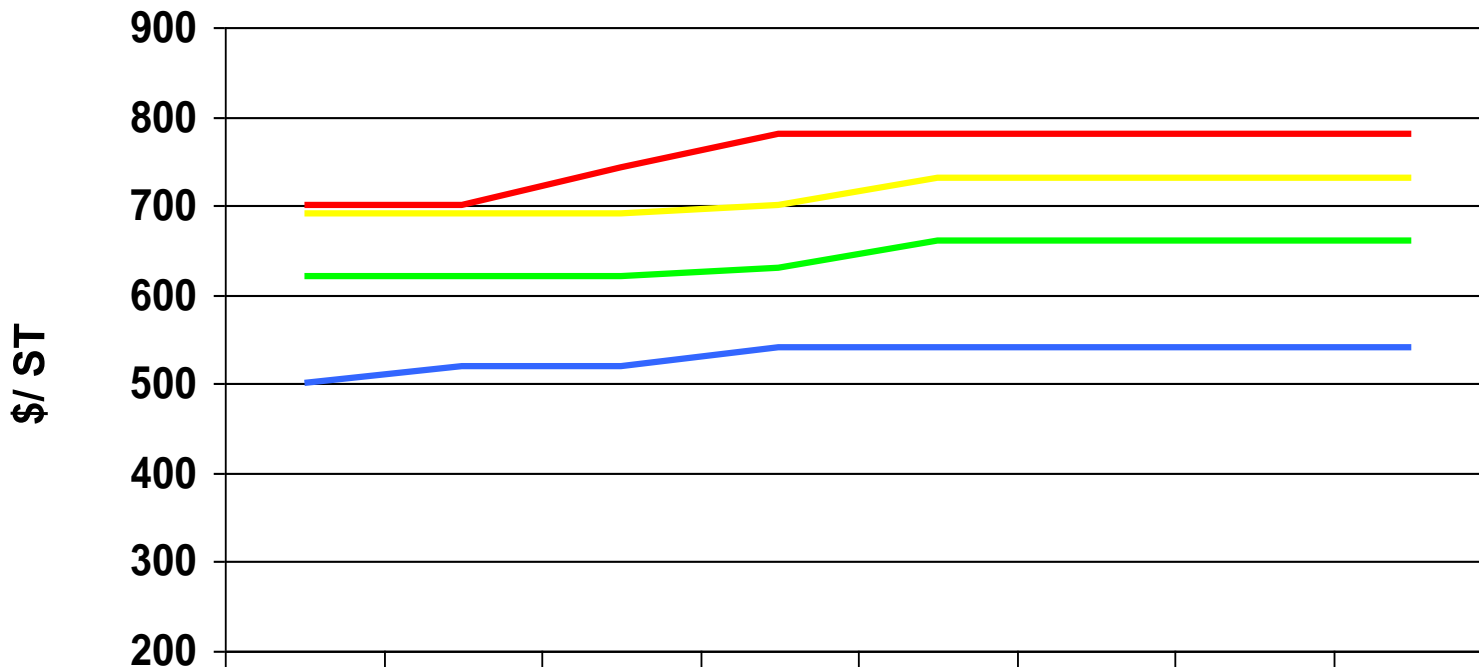
Source: Pulp & Paper Week





U.S. Paperboard Pricing Improved in 1999

RISI Data -- (\$/ ST)



	99-1	99-2	99-3	99-4	00-1	00-2	00-3	00-4
20 pt RISI CUK	620	620	620	630	660	660	660	660
15 pt RISI SBS	700	700	743	780	780	780	780	780
20 pt RISI CCN	500	520	520	540	540	540	540	540
20 pt RISI CUK Carrier	690	690	690	700	730	730	730	730

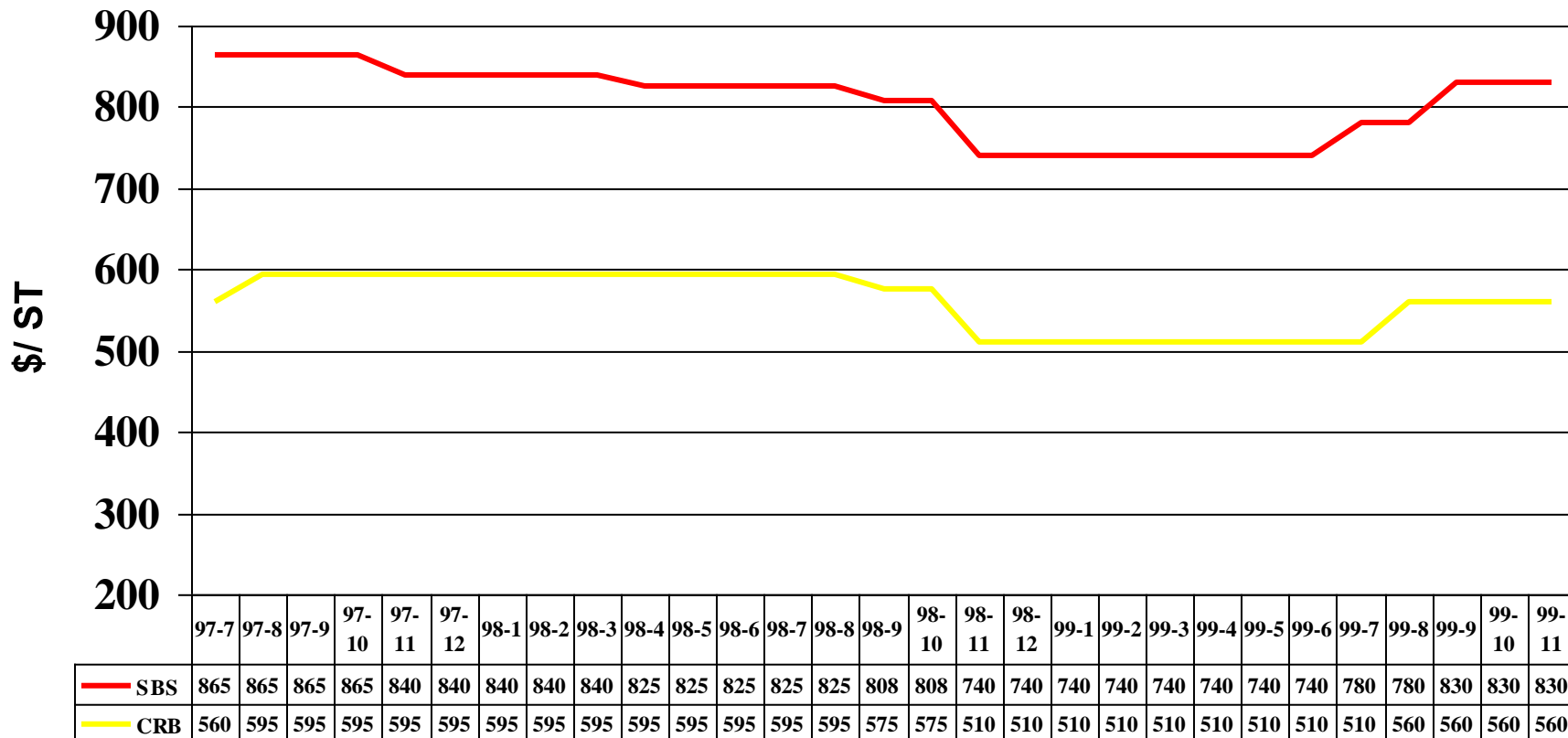
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U.S. Paperboard Prices are recovering in 1999

P&P Data - (\$/ST)



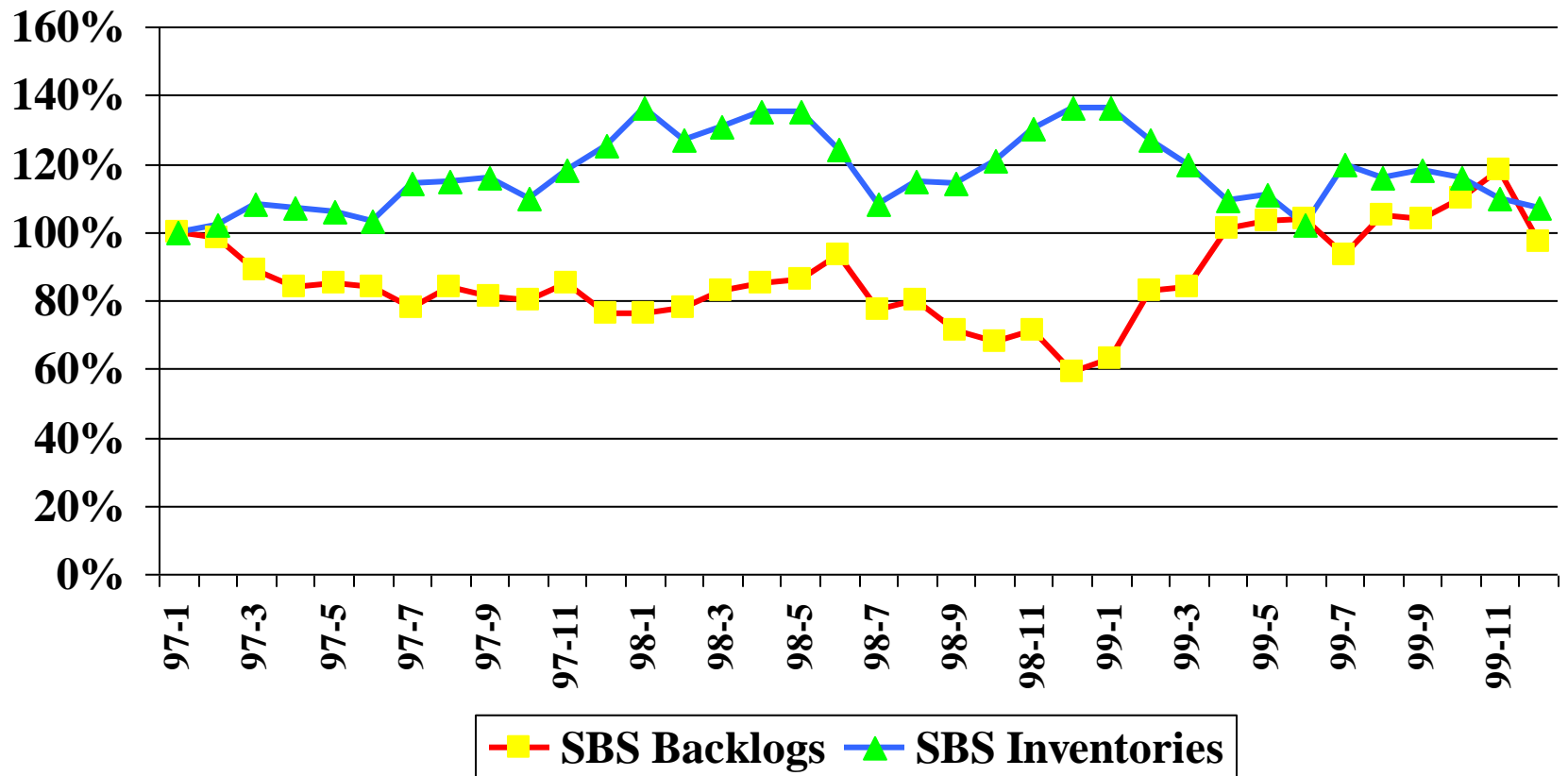
Source: Pulp & Paper Week





Paper industry is recovering in 1999, SBS backlogs and inventories are reaching 1997 levels

(Index = January 1997 = 100%)



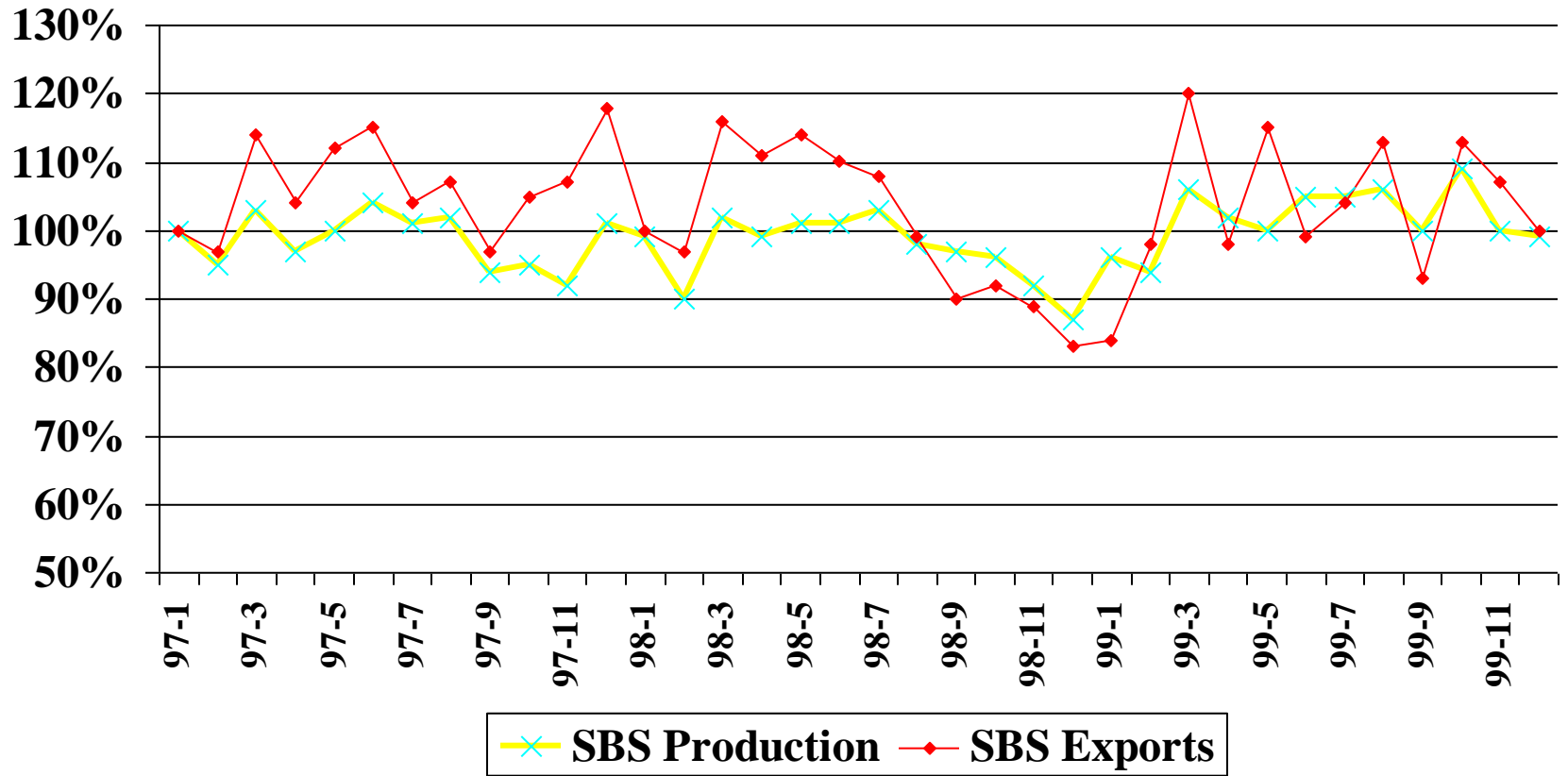
Source: AFPA





SBS export and total production recovered in 1999

(Index = January 1997 = 100%)

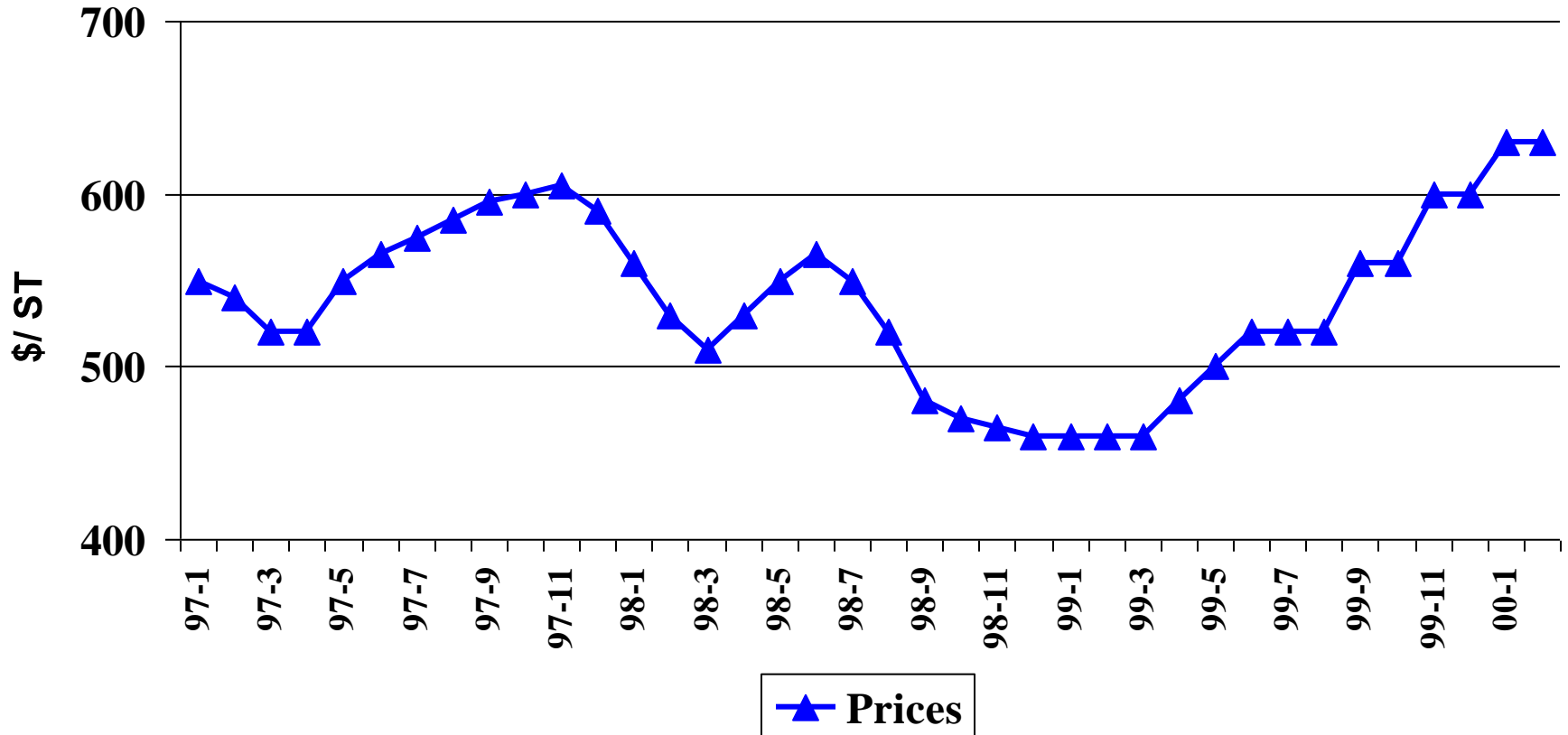


Source: AFPA





Pulp Prices recovered in 1999

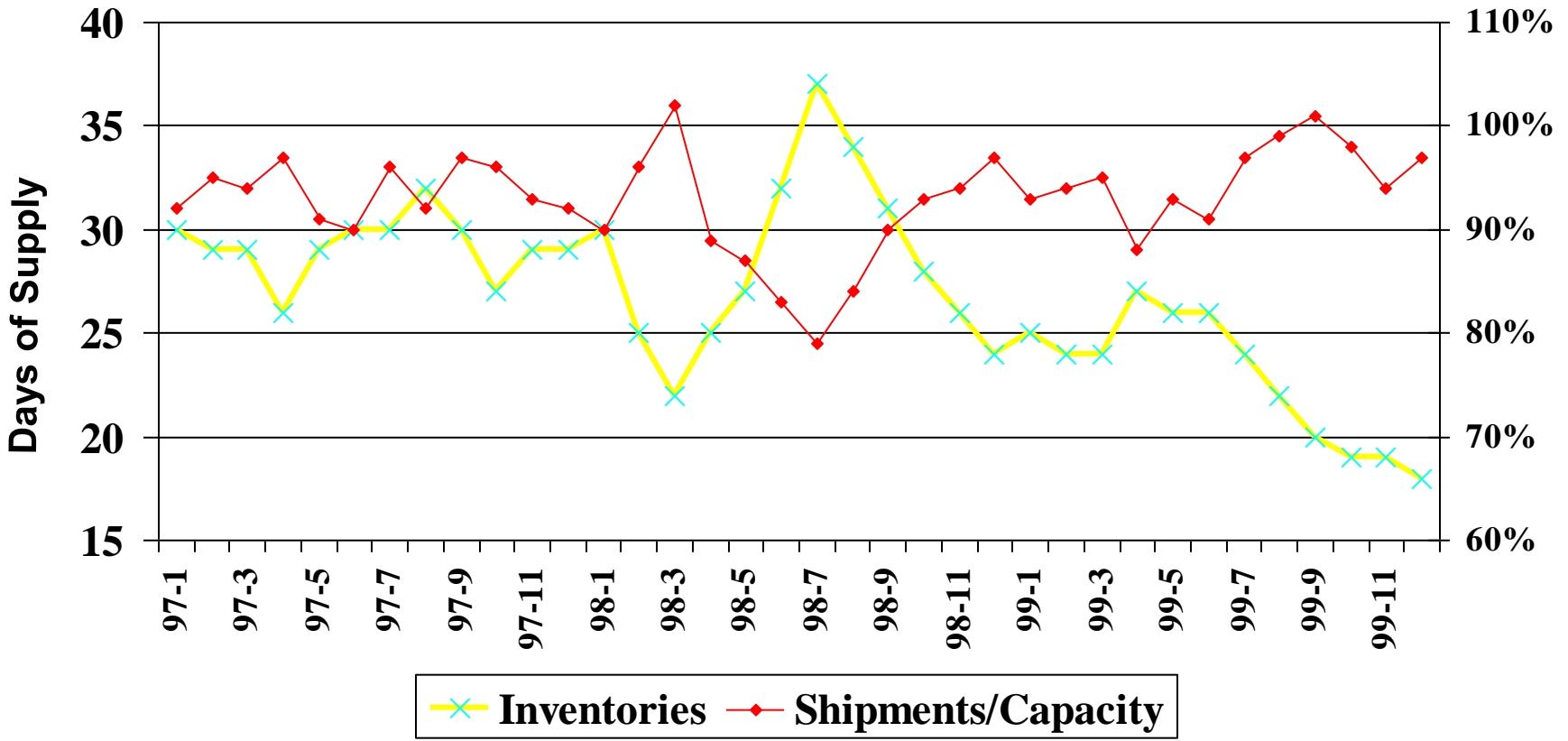


Source: RISI





Pulp Market is recovering in 1999, inventories are in the 1995 levels and shipments/capacity ratio is over 96% since July 99



Source: RISI

