

Equities

4 January 2012 | 24 pages

Paper Clips

What Could Make the Difference? Top 5 Things to Watch in 2012

- [Best Ideas](#)
- [Industry Overview](#)

- **What's on our Radar?** — In this report we highlight 5 key factors that may influence share price performance for the Pulp & Paper sector in 2012. Among the top 5 factors on our 2012 radar, we note that *recent management initiatives* (i.e. cost reduction, deleveraging, consolidation), as well as a *near-term stabilization in pulp prices* may prove to be the key to share price momentum in our coverage universe.
- **Investment Strategy...Prefer Packaging Grades to Pulp in 2012** — Given our outlook for mixed fundamentals, investing in Pulp & Paper in 2012 will require selective stock picking, with most of the *upside to be back-end loaded* (propelled by a recovery in prices). We view Packaging names as better positioned in a slowing economy given recent sector consolidation, improved balance sheets, and less pricing volatility. *We prefer exposure to Klabin and Packaging Corp.*
- **1) Pulp Prices...A 1H12 Rebound?** — Following a 20% correction in pulp prices during 2H11, improved demand related to customer restocking may trigger a rebound in prices – supply discipline/capacity mgmt could accelerate the rebound. *We forecast a 10% or \$80/mt rebound in BEKP through 2Q12.* However, the sustainability of a recovery remains in question given planned 2013 capacity additions of 3mmt.
- **2) China Demand Activity...Double Digit Growth?** — In order for double digit growth in Chinese pulp imports to continue we need to see: 1) an improvement in domestic paper markets and 2) further displacement of non-wood pulp capacity. Our current forecast of 6% growth in Chinese pulp imports is mainly attributable to restocking and fiber substitution, and not directly linked to better underlying demand. Our concerns on Chinese paper overcapacity persist following the addition of 6.5mmt in 2010-11.
- **3) US Containerboard Consolidation...Quick Implementation of Discipline?** — US containerboard prices held flat throughout 2011 while other grades fell 5-25% in 2H. We view 2012 as the year producers realize the benefits of consolidation through more aggressive supply management and pricing. While we continue to forecast minor price erosion in 1Q, we expect producers to push a price increase following the seasonal inventory drawdown period from February to June.
- **4) How Bad Will European Demand Be, and Will They Shut Capacity?** — Strong European imports tightened the global market in 2011, especially boosting North American exporters. A 2012 Eurozone recession should depress demand and encourage European producers to export more aggressively. We look for the shutdown of 1.4mmt of high cost paper & packaging capacity to keep the market in balance.
- **5) LatAm Mgmt Initiatives...Enough to Ease Leverage Concerns?** — While recent cost initiatives should begin to translate into better margins, our key focus on mgmt initiatives will be leverage improvements. We expect further assets sales in 2012 from Fibria and Suzano, yet the *possibility of a capital increase remains* if divestments are unsuccessful – Suzano has the greatest capital need in our view (~US\$1.7 billion).

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What's Inside: In this monthly thought piece we provide analysis related to our theme of the month as well as several tables and graphs of monthly sector data

See Appendix A-1 for Analyst Certification, Important Disclosures and non-US research analyst disclosures.

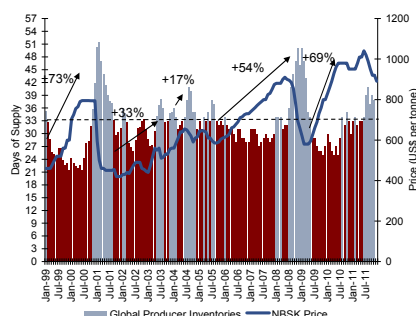
What's on our 2012 Radar?

Below we highlight key factors that may influence share price performance for the Pulp & Paper sector in 2012.

1 – Pulp Price Outlook

We expect a mixed outlook for pulp in 2012 resulting in a 5-8% Y/Y decline in the annual average pulp price (see figure 2). However, we highlight that the risk to our forecasts is to the upside if market discipline emerges. We expect BEKP pulp prices to rebound by 10% in 1H 2012 given improved demand activity, yet forecast a pull back as we approach year-end as the market begins to anticipate 2013 pulp capacity additions in Brazil (adding 3 million tonnes, 5% of global market pulp).

Figure 1. Pulp Inventories vs. Pulp Px



Source: PPPC, Citi Investment Research and Analysis

What to Watch? Aside from an improvement in global growth, the industry needs to improve **supply discipline and capacity management** in order for pulp prices to return to a positive trajectory. We note that the recent strength in the USD has kept high cost mills producing, delaying the potential decisions of capacity shutdowns – hence we will continue to closely monitor the movements in FX rates. *If prices manage to see a sustainable rebound, pulp exposed names such as Fibria, Suzano, and Domtar would see the strongest share price reaction.*

The **pace of declining producer inventories** will also be key to watch as it signals shifts in short-term supply/demand environment. The historical average has been near 33 days of supply. As illustrated in figure 1, when inventories are below the 33 day mark, positive momentum in pulp prices seems to be supported. The most recent data in November showed inventories at 38 days; we expect a further reduction to materialize in the upcoming December data. This would signal a bottom to the recent downtrend in pulp prices.

Figure 2. Pulp Price Forecasts

AVERAGE PULP PRICES	2011A	1Q '12E	2Q '12E	3Q '12E	4Q '12E	2012E	2013E	2014E	Normalized
Eucalyptus Pulp (US\$/tonne)*	813	753	800	780	745	770	700	655	680
y-o-y growth	-4%	-11%	-9%	-4%	5%	-5%	-9%	-6%	
Softwood Pulp - NBSK (US\$/ tonne)*	968	873	920	900	865	890	790	745	760
y-o-y growth	3%	-9%	-10%	-9%	-4%	-8%	-11%	-6%	
<i>Hardwood/Softwood Spread</i>	<i>(154)</i>	<i>(120)</i>	<i>(120)</i>	<i>(120)</i>	<i>(120)</i>	<i>(120)</i>	<i>(90)</i>	<i>(90)</i>	<i>(80)</i>
YEAR-END PRICES	DEC/11	na	na	na	na	DEC/12	DEC/13	DEC/14	
Eucalyptus Pulp (US\$/tonne)*	730	na	na	na	na	745	640	655	
Softwood Pulp - NBSK (US\$/ tonne)*	930	na	na	na	na	865	730	745	

*delivered to Europe / Normalized Prices are based on 10-year average

Source: Citi Investment Research and Analysis

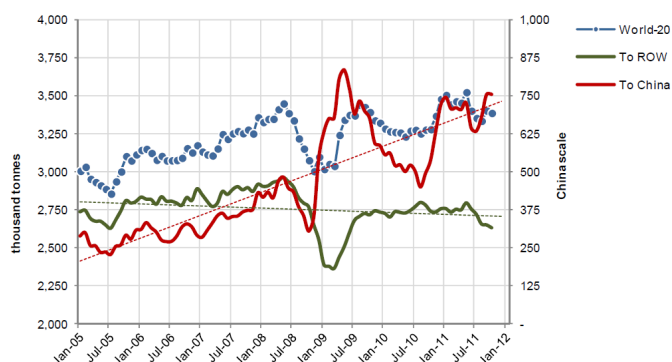
2 – China Pulp Demand

As illustrated in figure 5, China has driven almost all of the aggregate growth in pulp demand since 2009, while volumes to the rest of the world have been flat-to-down. Hence, a rebound in China's buying activity would trigger an improvement in global pulp fundamentals – positive for Fibria, Domtar, Suzano, CMPC, Coppec.

During 2011, pulp shipments to China from the top 20 pulp producing countries (80% of global capacity) increased ~15% Y/Y to 8 million tonnes. Chinese demand in late 2010 / early 2011 was heavily driven by dissolving pulp substitution and new paper capacity – phenomenon we don't expect to repeat in 2012. We highlight that Chinese paper markets are now severely oversupplied following 6.5 million tonnes of capacity adds during 2010-11.

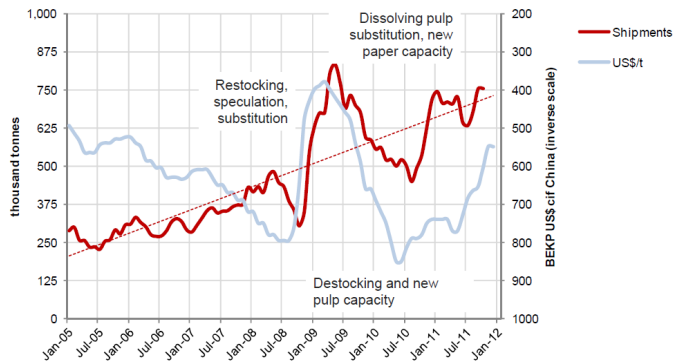
What to Watch? Improvements in **domestic paper demand** could help prices stabilize and allow for increase utilization rates – positive for pulp consumption. Additionally, further **displacement of non-wood pulp capacity** would encourage increased imports of higher quality pulp (i.e. BEKP, NBSK). We believe some 2 million tonnes of non-wood production could come offline in the coming years as new BEKP production hits the market.

Figure 3. Chinese Demand Drives Global Demand



Source: Citi Investment Research and Analysis, PPPC, Hawkins Wright

Figure 4. Chinese Demand is Price Sensitive

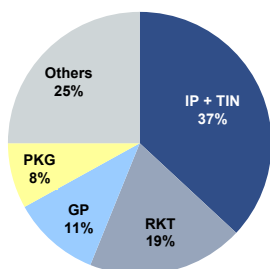


Source: Citi Investment Research and Analysis, PPPC, Hawkins Wright

3 – North American Containerboard

2011 saw two blockbuster consolidation deals in containerboard (RockTenn's \$3.5B acquisition of Smurfit-Stone and IP's \$4.3B agreement to buy Temple-Inland) as well as smaller M&A deals (KapStone-USC, Boise-Tharco, Boise-Hexacomb). We view 2012 as the year North American producers realize the benefits of consolidation through more aggressive supply management and pricing, and we reiterate our buy ratings on PKG and IP.

Figure 5. NAM Containerboard Market Share



Source: CIRA, Company Reports

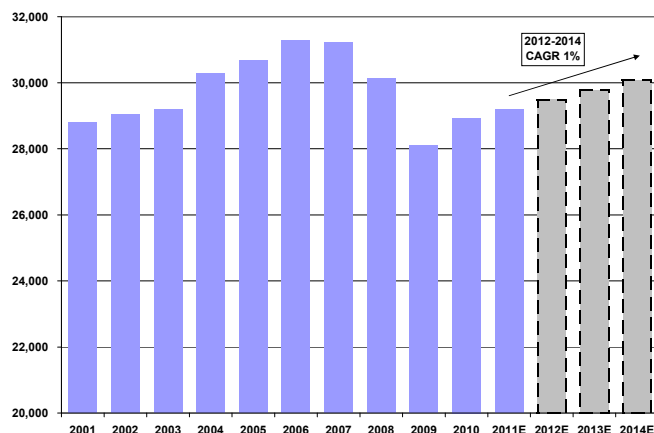
What to Watch? **Regulatory approval of the IP-TIN deal** in January should allow for more aggressive supply management in 1Q, keeping inventories in balance and offsetting any potential softness in box shipments. We forecast 1% containerboard consumption growth in 2012 (in-line with 2011's 1% growth level) given modestly recovering US non-durables production. The **typical inventory drawdown period from February to June should set the path to a 3Q price increase**, in our view. Our estimates are based on a \$60/ton (9%) price hike to be implemented in 3Q. We see four requirements for a successful price hike: 1) industry inventories should follow a typical drawdown pattern to fall below 4.0 weeks of supply by summer; 2) the US manufacturing sector must continue to post positive growth (ISM readings > 50); 3) industry operating rates should remain in the mid-90% range; and 4) OCC should remain roughly at or above current ~\$120/ton levels.

While we expect a 2H 2012 price increase in containerboard, we do expect some **minor 1Q price erosion** based on export market weakness and falling OCC prices. US linerboard prices have held flat since April 2010, while other grades of pulp & paper have seen significant downward pressure since summer 2011 (uncoated freesheet -3% since July, NSBK -13%, OCC -32%). Accordingly, we model a \$30/ton (5%) decline in linerboard prices in 1Q as containerboard "catches up" with the weakness seen in other grades.

A potential risk to our positive view on containerboard is greenfield capacity. Echoing Norampac's 2011 announcement of a 540kt recycled-based machine scheduled to come online in 2013, our supply/demand model accounts for a similar-

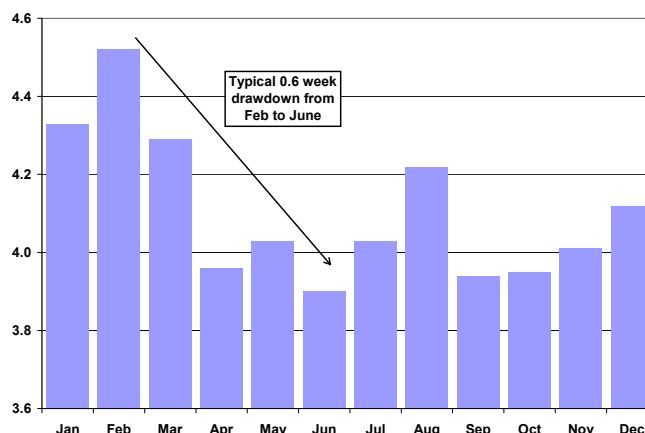
sized machine announcement (~500kt) from an independent producer such as Pratt. Capacity announcements in addition to this and the 1% "creep" capacity typically seen in the industry could cause us to revise our positive view.

Figure 6. US Containerboard Consumption ('000 tons)



Source: Citi Investment Research and Analysis, FBA, AF&PA, RISI

Figure 7. Inventory Seasonality, 2002-2011 (avg. weeks of supply)



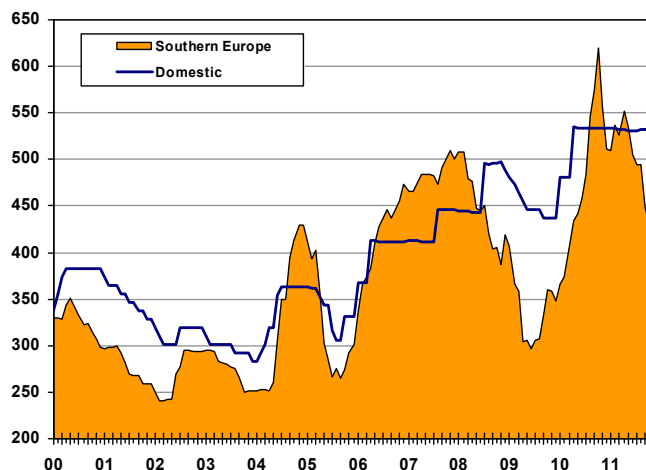
Source: Citi Investment Research and Analysis, FBA, AF&PA, RISI

4 – European Demand & Capacity Shutdowns

European imports of paper & packaging were relatively strong in 2011, tightening the global market and boosting North American and Latin American producers. European containerboard demand (+3%) was driven largely by converter inventory restocking, providing opportunities for US kraftliner exporters. European uncoated freesheet volumes (-5%) declined more steeply than in North America (-3%), but a weak dollar in 1H helped boost North American exporters (shipments to W. Europe +33% Y/Y). With Citi economists forecasting a mild Eurozone recession in 2012 (GDP -1.2%), European demand decline is a key risk for the sector in 2012. We currently forecast Y/Y declines in European containerboard demand (-1%) and uncoated freesheet (-5%); volume declines in excess of this could cause us to become more negative on the sector.

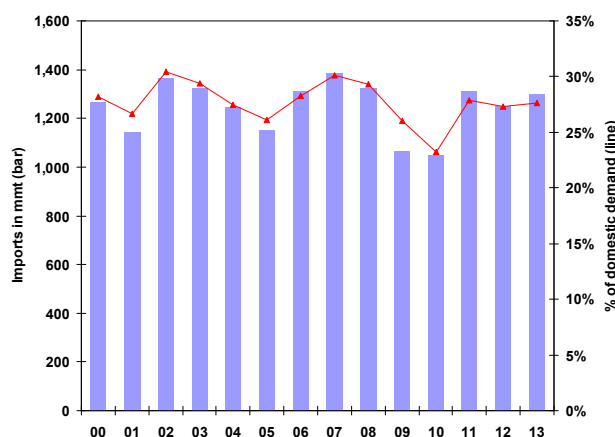
What to Watch? European producers will need to **remove high cost capacity** to balance their systems and stem the price erosion seen in 2H 2011. Accordingly, we are looking for the permanent closure of 600k tonnes of recycled containerboard capacity (~3%) and 800k tonnes of uncoated freesheet capacity (~8%) in Europe in 2012-13. In addition, investors will look for a **stabilization of import volumes and prices in 1Q** after sharp declines seen in 4Q 2011. Kraftliner export prices to Europe have fallen 24% since July while US prices have remained flat; we expect a stabilization of European prices with bottoming OCC and weaker import pressure. Overall, we expect Europe to maintain kraftliner imports of ~1.2mmt (or 27% of demand) in 2012, which is consistent with its 10-year average. We expect European pulp demand to reach 17.2mmt in 2012, which is roughly flat with 2011 and consistent with the 10-year average. Stronger demand from Eastern European markets and tissue producers should offset the continued weakness in printing & writing paper and slower Southern European economies.

Figure 8. Kraftliner Prices, Net of Transport & Discounts (\$/ton)



Source: Citi Investment Research and Analysis, RISI

Figure 9. West European Kraftliner Imports & Share of Demand



Source: Citi Investment Research and Analysis, RISI

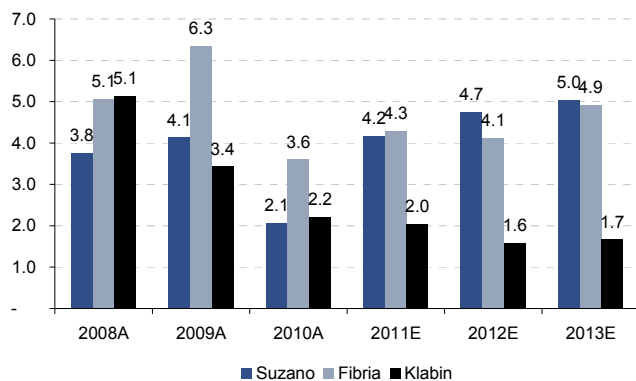
5 – LatAm Mgmt Initiatives

Over the past year, LatAm mgmt teams have been focused on implementing initiatives that would improve costs, and reduce leverage. While we expect cost improvements to materialize in the coming quarters (positive for margins), much remains to be done regarding an improvement in leverage (targeting below 3.5x Net Debt/EBITDA).

What to Watch? Profitability should expand in the coming quarters given initiatives related to better forestry mgmt and procurement, as well as a positive impact from a weaker BRL – we forecast an average EBITDA margin expansion of 250bps in 2012. **Asset sales** should continue in 2012 as both Fibria and Suzano look to source capital. Fibria maintains its Losango forestry assets for sale (we place a price tag of R\$510 million on its 100k/43k hectares of land/forestry). As for Suzano, our analysis suggests that Suzano may need to sell US\$1.7 billion in assets (forfeiting +20% of its EBITDA) in order to keep leverage within comfortable levels (< 3.5x) during its investment cycle; potential asset sales include 1) 18% stake in Capim Branco power plant (R\$305m), 2) spare land/ forestry in Sao Paulo (R\$405m), 3) paper assets – we would list the smaller units Embu and Rio Verde as first in line (R\$230m), and 2) a stake in future pulp projects – a 10% stake in 2013 Maranhão pulp project = near R\$515m.

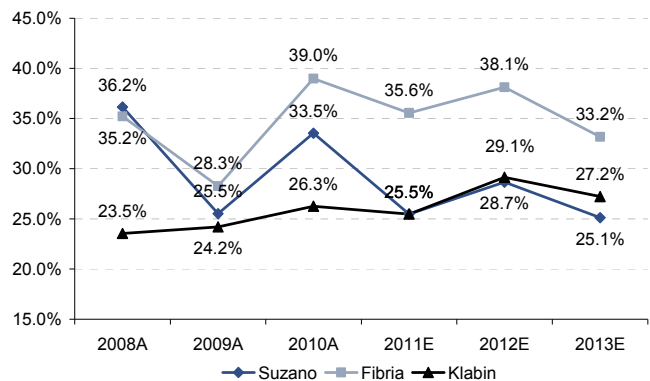
If the mgmt teams of Suzano and Fibria are successful in completing assets sales at attractive valuations we would expect a positive reaction in the shares as growth projects would once again be feasible. However, given the size of capital that would need to be sourced (Suzano ~US\$1.7b, Fibria ~US\$1b) in the current weak macro environment (clearly not a sellers market), the *potential for an equity issuance remains active*.

Figure 10. Leverage (Net Debt/ EBITDA)



Source: Companies reports and Citi Investment Research and Analysis

Figure 11. EBITDA Margin Outlook



Source: Companies reports and Citi Investment Research and Analysis

Figure 12. Global Pulp & Paper Valuation Table

3-Jan-12	Main Product	Reuters ticker	Rec	Currency	Current Price	Target Price	ETR	Mkt Cap (US\$m)	P/E(x)			EV/EBITDA (x)			Net Debt/EBITDA		P/BV	Div Yield	FCF Yield	ROIC
									2011A	2012E	2013E	2011A	2012E	2013E	2011A	2012E	2011A	2012E	2011A	2012E
Latin America ¹																				
Empresas CMPC	Pulp/Tissue	CAR.SN	2	CLP	1,910	1,830	-4%	8,106	17.0	15.1	17.7	10.1	9.5	10.4	2.8	2.6	1.0	0.5%	1.3%	6%
Empresas Copec	Diversified	COP.SN	1	CLP	6,779	7,500	13%	16,996	15.5	14.3	16.6	11.5	11.0	11.8	2.2	2.4	1.5	2.3%	-0.1%	9%
Fibria	Mkt Pulp	FBR.N	2H	USD	8.07	8.90	10%	3,777	nm	15.9	74.9	7.4	6.4	8.0	4.0	3.3	0.5	0.0%	5.2%	2%
Klabin SA	Pkg	KLB.N4.SA	1	BRL	8.02	8.00	1%	3,939	27.2	9.5	14.6	9.7	8.0	8.6	2.0	1.6	1.4	1.3%	7.8%	2%
Suzano Papel	Pulp/Paper	SUZB5.SA	2H	BRL	7.07	9.00	29%	1,545	11.4	6.2	51.2	6.6	6.8	7.3	4.3	4.9	0.3	2.4%	-73.8%	3%
Masisa ¹⁰	Wood Prd	MSS.SN	2	CLP	47.55	47.00	0%	639	10.8	6.9	6.3	3.5	2.5	2.1	2.9	2.0	0.4	1.4%	29.5%	5%
Duralex ¹⁰	Wood Prd	DTEX3.SA	1	BRL	9.08	15.00	68%	2,670	11.7	8.2	7.2	6.8	5.2	4.5	1.3	1.0	1.3	2.6%	2.6%	12%
Sum/Average	37,671								15.6	10.9	26.9	7.9	7.1	7.5	2.8	2.5	0.9	1.5%	-3.9%	6%
North America ²																				
Buckeye Technologies	Mkt Pulp	BKI.n	NR	USD	34.37	NR	NR	1,352	15.4	11.7	11.0	7.3	5.9	5.2	0.3	0.2	na	na	na	na
International Paper ⁶	Diversified	IP.n	1	USD	29.77	33.00	14%	12,879	9.7	10.8	10.0	4.9	4.6	4.2	1.5	1.2	1.7	3.5%	12.7%	9%
Kimberly-Clark	Tissue	KMB.n	2	USD	73.57	73.00	3%	27,613	15.1	14.0	12.9	8.1	8.2	7.9	1.5	1.5	4.2	4.1%	6.4%	18%
Louisiana-Pacific	Wood Prd	LPX.n	NR	USD	8.17	NR	NR	1,113	na	na	53.8	nm	nm	7.3	nm	3.5	na	na	na	na
MeadWestvaco	Pkg	MWV.n	NR	USD	30.43	NR	NR	5,196	15.3	15.0	13.5	6.4	6.5	6.1	1.5	1.6	na	na	na	na
Packaging Corp ⁶	Pkg	PKG.n	1	USD	25.19	29.00	18%	2,514	16.0	13.6	12.6	7.3	6.3	5.9	1.5	1.0	2.6	3.2%	11.1%	11%
Plum Creek Timber	Wood	PCL.n	1	USD	36.77	41.00	16%	5,954	30.7	26.0	21.2	17.4	16.0	13.9	4.0	3.6	4.5	4.6%	5.6%	8%
Rayonier	Mkt Pulp	RYN.n	NR	USD	44.48	NR	NR	5,419	21.0	20.5	17.5	12.0	11.2	na	1.0	1.1	na	na	na	na
Temple-Inland ⁶	Pkg	TIN.n	2H	USD	31.70	32.00	3%	3,424	37.9	28.3	20.3	10.0	8.5	7.4	1.4	1.0	3.2	1.6%	6.9%	4%
Weyerhaeuser	Wood Prd	WY.n	2	USD	19.08	20.00	8%	10,295	72.1	34.0	20.3	11.1	10.1	8.0	3.3	2.8	2.2	3.1%	5.6%	7%
Domtar Corp ⁶	Pulp&Paper	UFS.n	2	USD	82.82	83.00	2%	3,358	7.7	11.0	11.8	3.4	4.1	4.4	0.3	0.3	1.1	1.7%	13.4%	9%
Sum/Average	79,464								23.6	17.7	15.1	8.5	7.9	7.0	1.7	1.6	2.8	3%	8.8%	9%
Europe ³																				
Billerud	Pkg	BILL.ST	NR	SEK	59.00	NR	NR	896	8.2	12.0	11.9	3.6	4.5	4.4	(0.1)	(0.2)	na	na	na	na
Holmen	Paper	HOLMb.ST	NR	SEK	199.90	NR	NR	1,800	12.9	14.3	12.9	5.6	5.7	5.1	1.8	1.8	na	na	na	na
M-Real	Paper	MRLBV.HE	NR	EUR	1.47	NR	NR	555	na	11.2	7.8	6.3	5.5	4.5	4.3	3.6	na	na	na	na
Smurfit Kappa	Pkg	SKG.I	1	EUR	4.85	10.50	116%	1,380	4.8	5.3	4.7	3.9	4.0	3.7	2.8	2.8	na	9.5%	20.5%	10%
Stora Enso	Paper	STERV.HE	NR	EUR	4.95	NR	NR	3,916	7.6	8.5	7.6	4.1	4.2	3.8	1.9	1.8	na	na	na	na
Svenska Cellulosa	Tis/Pkg	SCAb.ST	NR	SEK	104.70	NR	NR	9,233	12.5	11.0	10.4	6.6	6.0	5.5	2.3	2.1	na	na	na	na
UPM-Kymmene	Paper	UPM1V.HE	NR	EUR	9.02	NR	NR	6,119	9.6	10.7	8.4	6.0	5.3	4.5	2.7	2.2	na	na	na	na
Mondi Plc	Pkg/Paper	MNDI.L	1	GBP	4.80	7.40	60%	2,731	9.3	8.3	7.8	4.5	4.1	3.8	1.2	0.7	0.8	6.1%	17.8%	3%
Sum/Average	27,398								9.9	10.2	9.0	5.5	5.2	4.7	2.4	2.0	0.8	8%	19%	6%
Asia																				
Nine Dragons Paper ⁷	Pkg	2689.HK	1H	HKD	4.90	8.40	74%	2,941	8.9	9.3	6.9	9.6	8.8	7.2	5.3	5.3	0.9	2.5%	-17.6%	7%
Lee & Man Paper ⁷	Pkg	2314.HK	1H	HKD	2.63	3.90	52%	1,588	6.7	9.3	7.0	6.8	9.1	6.8	2.5	3.6	1.0	3.3%	-8.8%	7%
Hengan	Tissue	1044.HK	1	HKD	75.55	78.00	5%	11,954	34.9	26.6	21.4	nm	18.9	15.1	nm	nm	na	2.5%	2.8%	27%
Vinda	Tissue	3331.HK	1	HKD	10.12	11.50	15%	1,222	22.4	13.8	11.1	14.8	9.8	8.0	1.6	1.1	na	1.9%	1.5%	27%
China Sunshine	Pkg/Paper	2002.HK	NR	HKD	1	NR	na	86	4.6	4.0	3.5	5.0	4.4	4.4	3.7	3.2	na	na	na	n/a
Sum/Average	27,384								14.6	11.4	10.0	9.1	10.2	8.3	3.9	4.2	0.9	2.6%	-5.5%	17%
Other Regions																				
Mondi Pkg Paper Swiecie ³	NA	CELA.WA	2	PLN	58.50	71.00	34%	846	7.7	9.0	9.3	5.2	5.9	5.9	0.1	nm	1.6	13.0%	15.5%	18%
Sappi ⁵	Fine Paper	SAPJ.J	2	USD	23.75	25.00	5%	1,516	na	7.3	12.5	4.3	3.6	4.2	2.8	2.2	0.9	0.0%	24.6%	0%
Sum/Average	2,362								7.7	8.1	10.9	4.8	4.8	5.1	1.5	2.2	1.3	6.5%	20.1%	9%
Total Average	174,280								18.1	13.9	15.9	7.9	7.5	6.9	2.4	2.3	1.8	3.5%	5.6%	9%

¹ Companies Covered by CIR Analyst Juan Tavaréz. ² Company figures are derived from IBES. ³ Mondi Pkg Paper Swiecie is covered by CIR analyst Rafal Wiatr. ⁴ Covered by CIR analyst Julian Bu. ⁵ Covered by CIR analyst Tassin Meyer.

⁶ Covered by CIR analyst Anthony Pettinari. ⁷ Covered by CIR analyst Eric Lau. ⁸ Consensus sourced from IBES. ⁹ Europe Companies are consensus figures sourced from IBES. ¹⁰ Covered by CIR analyst Luis Vallarino. KMB is covered by CIR analyst Wendy Nicholson.

Source: Citi Investment Research and Analysis

Figure 13. Investment Thesis

Company	Ticker	Product(s)	Country	Rating	Investment Thesis
Latam Pulp & Paper Coverage					
Suzano	SUZB5.SA	Pulp/Paper	Brazil	2H	Limited downside, yet leverage concerns creates an overhang in the stock
Fibria	FBR	Pulp/Paper	Brazil	2H	Further pulp cycle pressure limited, yet leverage concerns remains high
Klabin	KLBN4.SA	Packaging	Brazil	1	Exposure to stable packaging fundamentals; Revived growth Prospects
Empresas CMPC	CAR.SN	Pulp/Paper	Chile	2	Fair valuation; Strong earnings growth, Positive growth initiatives priced in
Empresas Copec	COP.SN	Mkt Pulp	Chile	1	Positive sustainable growth with diversified cash generation from fuel distribution
US Pulp & Paper Coverage					
International Paper	IP	Paper/Pkg	USA	1	TIN accretion, BRICs exposure and containerboard price upside
Packaging Corp	PKG	Packaging	USA	1	2012 cash return story with Energy Projects completed; containerboard pure-play
Domtar Corp	UFS	Pulp/Paper	Canada	2	Pulp market stabilizing, but long-term topline challenge remains
Temple-Inland	TIN	Packaging	USA	2H	Little risk to IP deal; regulatory approval expected in 1Q

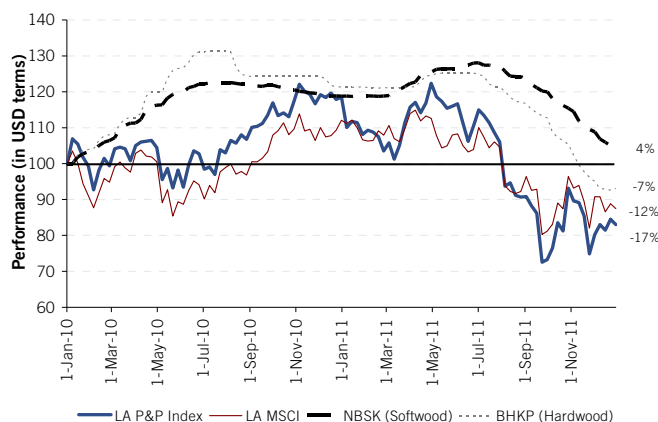
Source: Citi Investment Research and Analysis

Figure 14. LatAm Pulp & Paper Share Price Performance

Company	Rating	Price	Target	Expected	Market Cap (US\$ mln)	Performance (in USD)				Daily Liq. (US\$ mln)
		3-Jan-12	Price	Total Return		1 month	6 months	1 year	YTD	
Fibria	2H	US\$8.2	US\$8.9	8.5%	3,838	8%	-38%	-49%	6%	23.2
Suzano Papel	2H	R\$ 7.07	R\$ 9.0	29.4%	1,579	-3%	-47%	-57%	7%	8.9
Klabin	1	R\$ 8.02	R\$ 8.0	1.0%	4,026	9%	17%	23%	2%	8.8
Empresas CMPC	2	CLP 1,920	CLP 1,830	-4.1%	8,238	6%	-30%	-30%	2%	4.2
Empresas Copec	1	CLP 6,790	CLP 7,500	12.6%	17,213	2%	-30%	-33%	-1%	8.8

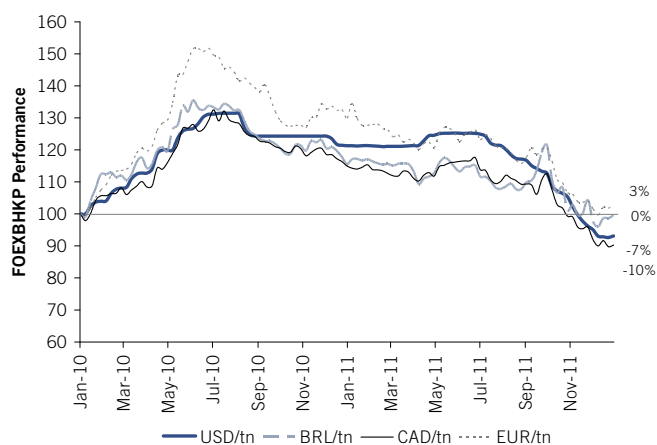
Source: Citi Investment Research and Analysis

Figure 15. Performance (since Jan/10) LA P&P Index, LA MSCI, Pulp Prices



Source: Citi Investment Research and Analysis

Figure 16. Hardwood Pulp Prices (in various currencies) , since Dec/10



Source: Citi Investment Research and Analysis

P&P Sector Performance

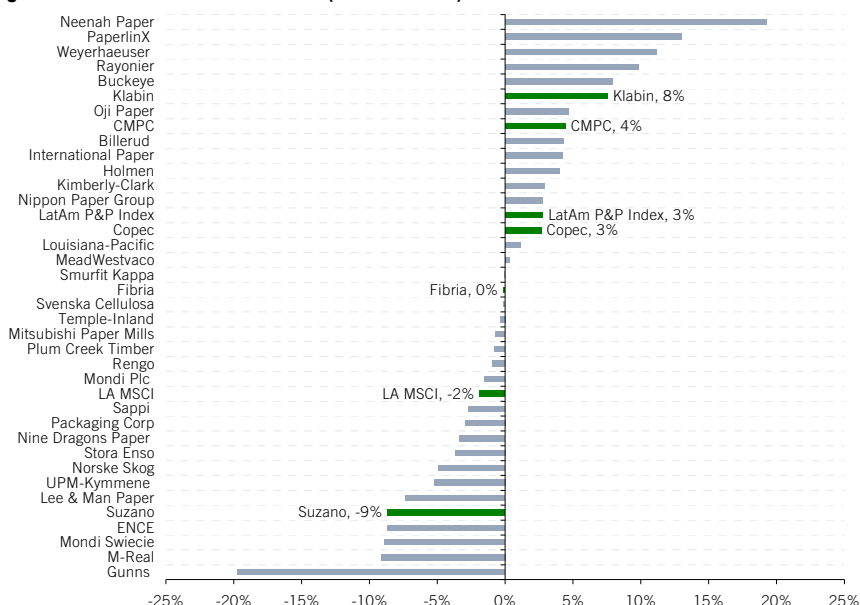
2011 Performance: Latam P&P stocks had a weak performance due to 1) a weakening macro environment, 2) a sharp drop in pulp prices since mid of 2011 (-26%), and 3) increased leverage concerns. However, companies with exposure to domestic packaging segment outperformed its peers with exposure to pulp. In 2011, Klabin was up 22% vs. Suzano -59%, Fibria -51%, CMPC -31% and Copec -31%.

Catalysts for Jan/12: We expect positive momentum for the pulp stocks as indication of a strong pulp shipment could result in a reduction in Dec/11 producers' global pulp inventories. Additionally, we are seen indications that the down trend in pulp prices has reached to an end.

December Performance

Within the Global Sector, Neenah-Paper was the winner (up 19%), while Gunns underperformed (down 20%).

Figure 17. Share Price Performance (in USD terms) – December

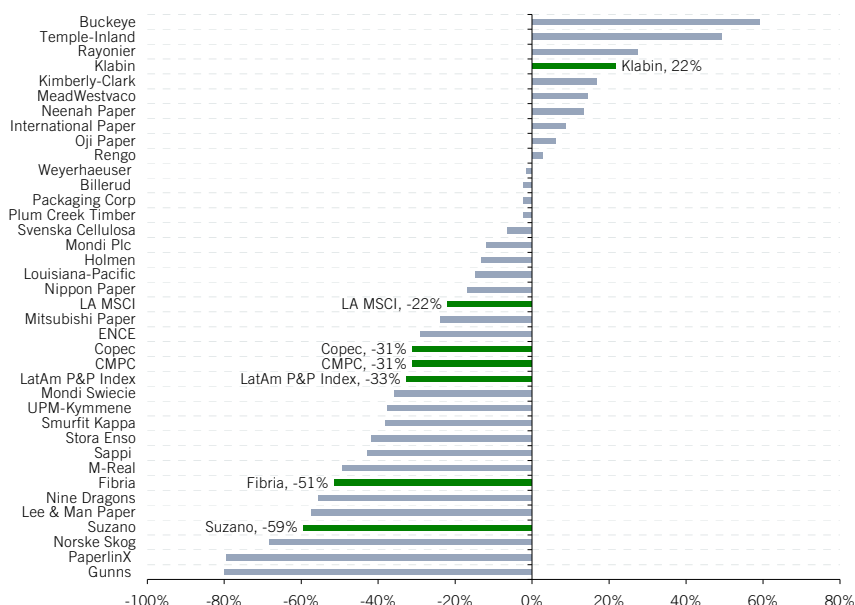


Source: Citi Investment Research and Analysis

2011 Year Performance

Despite the negative performance in our Latam P&P coverage, Klabin was the exception (up 22%). Among the stocks at negative territory, Brazilian Pulp stocks Suzano (down 59%) and Fibria (down 51%) had the worst performance vs. its Chilean peers CMPC (down 31%) and Copec (down 31%).

Figure 18. Share Price Performance – 2011

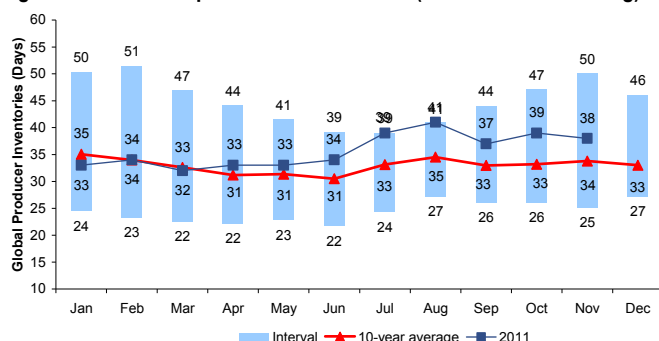


Source: Citi Investment Research and Analysis

Industry Fundamentals

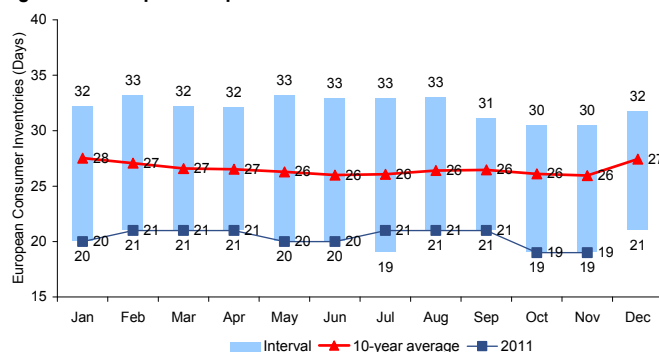
- **Producer Inventories** – According to PPPC, November pulp producer inventories declined to 38 days vs. 39 days in Oct and 33 days last year. Hardwood inventories fell 4 days to 41 days (still well above the 37-day historical avg), while Softwood remained flat at 34 days (above the 29-day hist. avg).
- **A Look Ahead** – Over the past 10 years, producer inventories have declined by one day in December. Our recent conversations with industry sources suggest that robust shipment activity has continued in December. In our view, further correction in producer inventories should help ease the recent pricing pressure as we enter in 2012.
- **Operating Rates** – Shipment activity increased in November (+10% M/M), mainly driven by a rebound in China, enough to trigger a recover in the shipment-to-capacity ratio to historical average (92%).

Figure 19. Global Pulp Producer Inventories (2011 vs. Historical Avg)



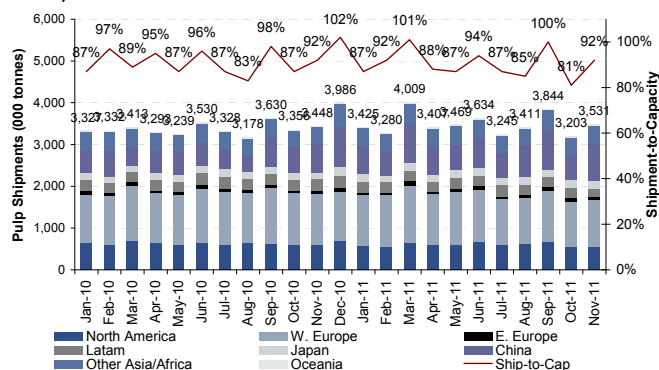
Source: PPPC and Citi Investment Research and Analysis

Figure 21. European Pulp Consumer Inventories



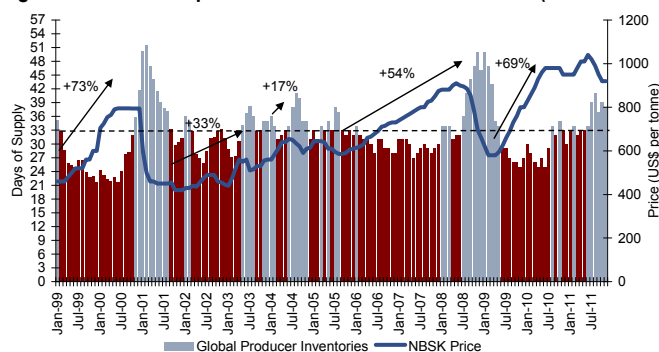
Source: Utipulp and Citi Investment Research and Analysis

Figure 23. World-20 Pulp Shipments vs. Shipment/Capacity (Since Jan/10)



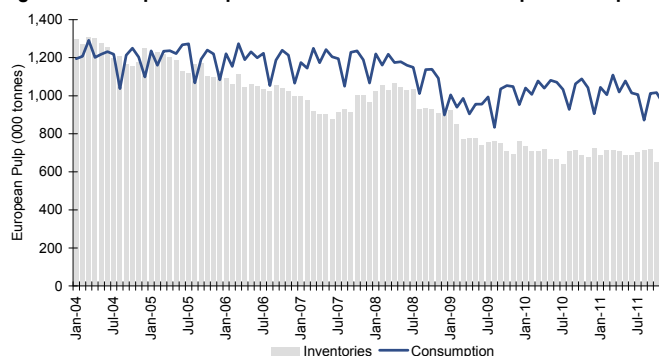
Source: PPPC and Citi Investment Research and Analysis

Figure 20. Global Pulp Producer Inventories vs. NBSK Px (Since Jan/99)



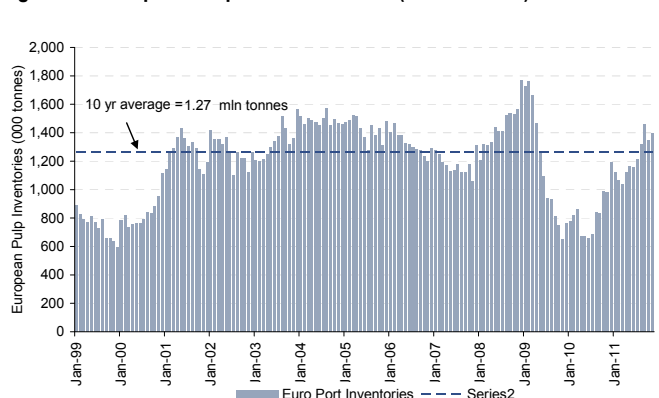
Source: PPPC and Citi Investment Research and Analysis

Figure 22. European Pulp Consumer Inventories vs. Pulp Consumption



Source: Utipulp and Citi Investment Research and Analysis

Figure 24. European Pulp Port Inventories (Since Jan/99)



Source: Europulp and Citi Investment Research and Analysis

Pulp Prices

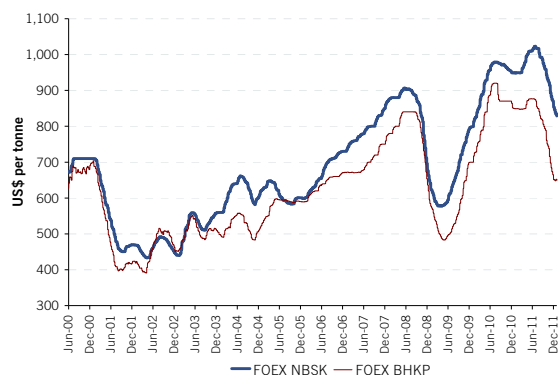
- **Pulp Price down** – While pulp prices have reached peak levels during 2011, since the mid of 2011 prices have trended down resulting in a negative performance for both fibers. NSBK was down 12.6% y-o-y closing the year at US\$834/tonne and BHKP was down 23.2% y-o-y at US\$ 652/tonne. In December, hardwood producers announced a price increase of \$50/tonne. However, FOEX spot price indicates that price increase hasn't been accepted by customers.

Figure 25. FOEX Pulp Price Index Performance

Pulp Price - FOEX PIX Indices	Bloomberg Index Code	Units	Price 30-Dec-11	1 month	6 months	YTD	1 year
NBSK (Softwood) - to Europe		FOEXNBSK					
in USD		USD/tonne	834	-4.1%	-18.5%	-12.1%	-12.1%
in Euro		EUR/tonne	644	-0.5%	-8.7%	-9.2%	-9.9%
In BRL		BRL/tonne	1,553	-1.2%	-2.8%	-1.4%	-1.4%
BHKP (Hardwood) - to Europe		FOEXBHKP					
in USD		USD/tonne	652	-2.0%	-25.4%	-23.2%	-23.2%
in Euro		EUR/tonne	503	1.8%	-16.5%	-20.7%	-21.3%
In BRL		BRL/tonne	1,215	1.0%	-11.1%	-13.8%	-13.8%
Hardwood/Softwood Spread		USD/tonne	(182)	(195)	(179)	(119)	(149)
NBSK (Softwood) - to USA	FOEXUSNB	USD/tonne	890	-3.3%	-14.0%	-8.1%	-8.1%
BHKP (Hardwood) - to China	FOEXCUS	USD/tonne	563	-1.8%	-24.6%	-24.3%	-24.3%

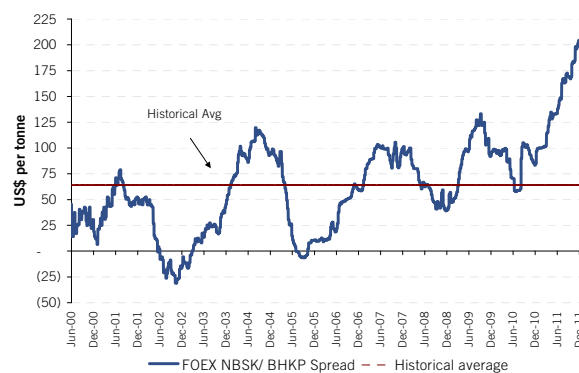
Source: FOEX and Citi Investment Research and Analysis

Figure 26. Pulp Prices (FOEX NBSK vs. FOEX BHKP)



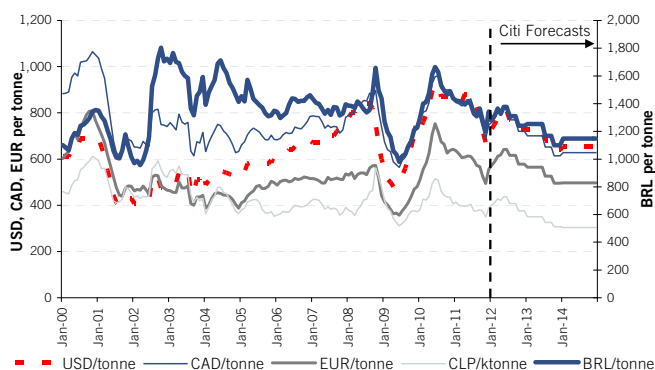
Source: FOEX and Citi Investment Research and Analysis

Figure 27. Spread - NBSK vs. BHKP



Source: FOEX and Citi Investment Research and Analysis

Figure 28. Hardwood Pulp (BEKP) in various currencies



Source: FOEX and Citi Investment Research and Analysis

Figure 29. Pulp List Prices

BEKP Pulp List Prices												New Price
Region	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11
North America	900	900	900	930	930	930	900	880	880	880	880	750
Europe	850	850	850	880	880	880	850	820	820	820	820	730
China	750	750	750	780	780	780	730	730	730	730	730	580
NBSK Pulp List Prices												New Price
Region	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11
North America	960	960	990	990	1,020	1,040	1,020	990	970	950	920	920
Europe	950	950	980	980	1,010	1,040	1,020	990	950	920	860	860
China	850	860	890	890	920	920	850	850	830	830	690	690

Source: Citi Investment Research and Analysis

Paper Prices

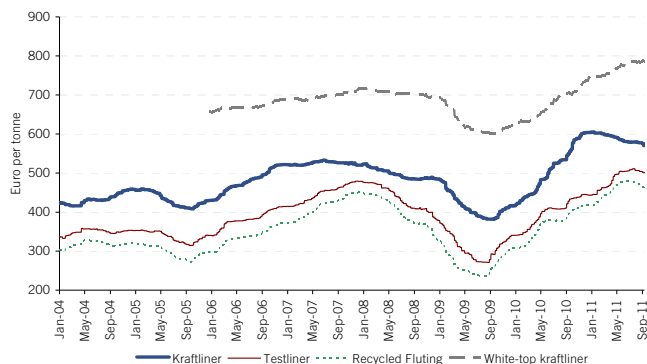
- **Paper Price:** In 2011, highlight goes to Kraftliner and OCC prices that declined by 11-12% y-o-y ending the year at €535/ton and €110/ton, respectively. However, both grades are still above historical levels and during 2011 packaging paper had the most favorable fundamentals as demand kept healthy and raw material demand remained high.

Figure 30. FOEX Paper & Packaging Index Performance

Paper & Packaging Prices	Bloomberg Index Code	Units	Price 30-Dec-11	1 month	Performance 6 months	YTD	1 year
Paper Prices - FOEX PIX Indices							
Lightweight Coated (LWC) - Europe	FOEXLWC	EUR/tonne	705	0.7%	2.6%	8.0%	8.0%
Coated Woodfree - Europe	FOEXCTD	EUR/tonne	717	0.4%	-0.1%	0.0%	0.0%
A4 B-grade Copy paper - Europe	FOEXA4BC	EUR/tonne	869	-0.8%	-0.6%	0.5%	0.5%
Newsprint - Europe	FOEXSTD	EUR/long ton	513	0.5%	2.6%	22.1%	22.1%
Newsprint - US	FOEXUSNP	USD/tonne	624	0.0%	0.0%	-0.3%	-0.3%
Packaging Paper Prices - FOEX PIX Indices							
Kraftliner - Europe	FOEXKFT	EUR/tonne	535	-2.9%	-7.8%	-11.4%	-11.4%
White-top Kraftliner - Europe	FOEXWKFT	EUR/tonne	773	-1.1%	-1.1%	3.6%	3.6%
Testliner - Europe	FOEXTST	EUR/tonne	441	-3.6%	-12.7%	-0.6%	-0.6%
Testliner 3 - Europe	FOEXTST3	EUR/long ton	408	-4.3%	-16.9%	-5.5%	-5.5%
Recycled Fluting - Europe	FOEXRBF	EUR/tonne	394	-5.2%	-17.8%	-6.0%	-6.0%
Recovered Paper: OCC - Europe	FOEXOCC	EUR/tonne	110	-8.0%	-29.8%	-11.6%	-11.6%

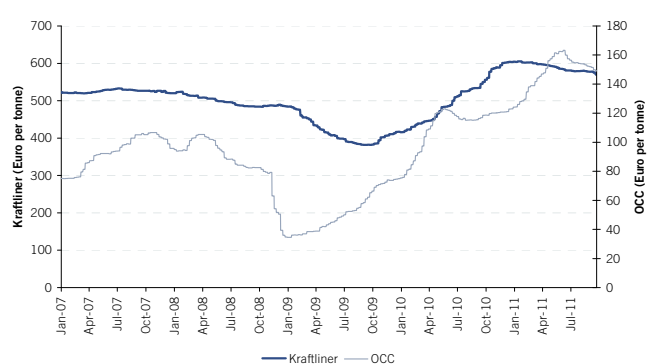
Source: FOEX and Citi Investment Research and Analysis

Figure 31. Paper Prices (Since Jan '03) – FOEX Index



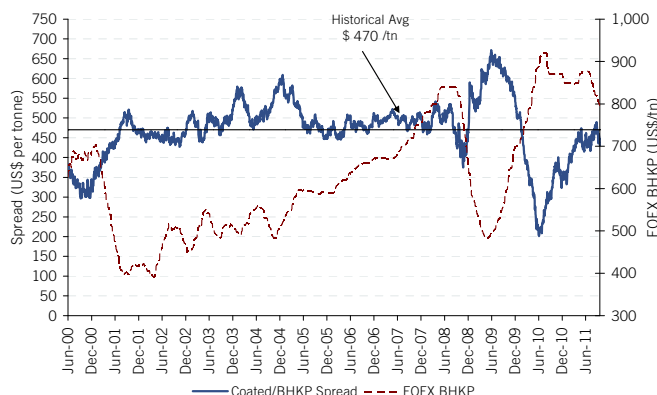
Source: FOEX and Citi Investment Research and Analysis

Figure 32. Packaging Paper Prices (since Jan '04)



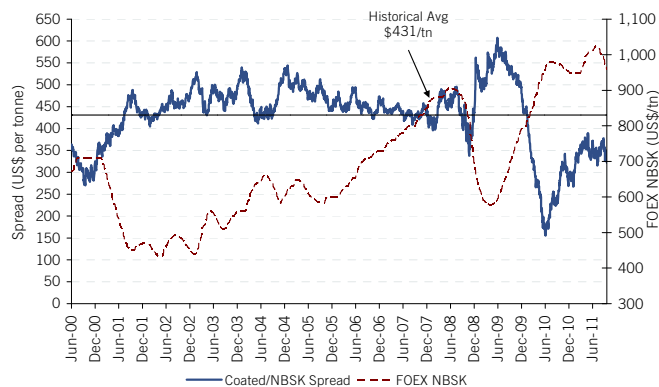
Source: FOEX and Citi Investment Research and Analysis

Figure 33. Coated Paper/BHKP Spread vs. BHKP Price (Since Jun '00)



Source: FOEX and Citi Investment Research and Analysis

Figure 34. Coated Paper/NBSK Spread vs. NBSK Price (since Jun '00)

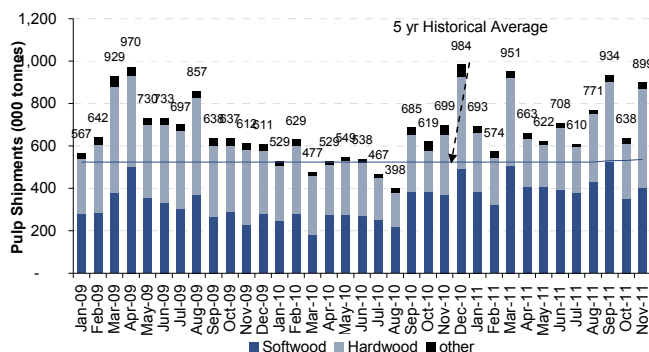


Source: FOEX and Citi Investment Research and Analysis

China Activity

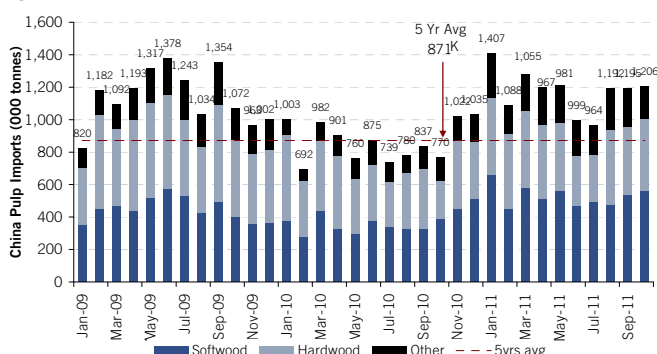
- **Pulp Shipments to China:** In November, China shipments increased 41% m-o-m to 899k tonnes with most of the increase due to higher hardwood shipments up 77% m-o-m. Chinese buying activity picked up due to continued price cuts.
- **BR Pulp Export to China:** Despite the strong global shipment to China, Brazil's pulp exports to China fell 22% M/M in Nov/11 following the strong activity seen last month; customers (mainly traders looking to avg. lower cost inventory) seem to have paused on further restocking and remain comfortable managing inventories out on sea.

Figure 35. Pulp Shipments to China (Since Jan/09)



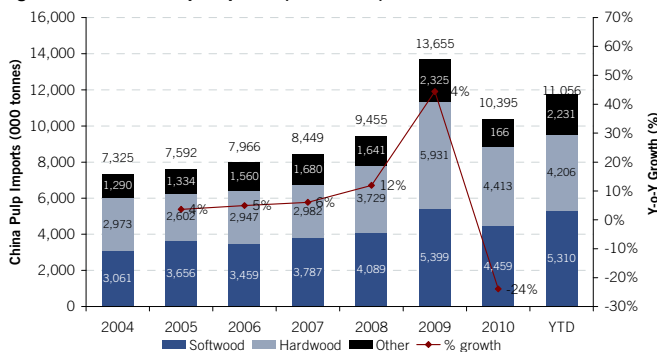
Source: PPPC, Citi Investment Research and Analysis

Figure 37. China Pulp Imports (Since Jan/09)



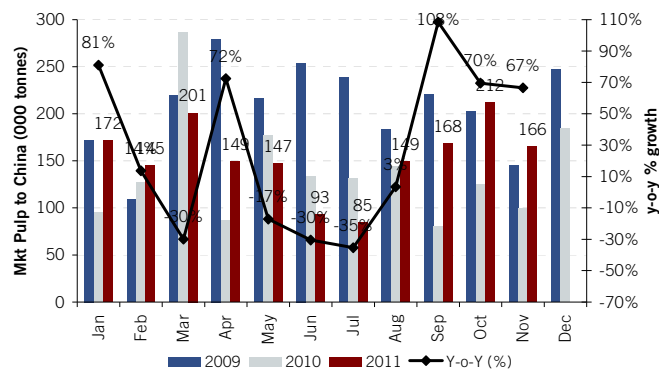
Source: RISI, Citi Investment Research and Analysis

Figure 39. China Pulp Imports (2004-YTD)



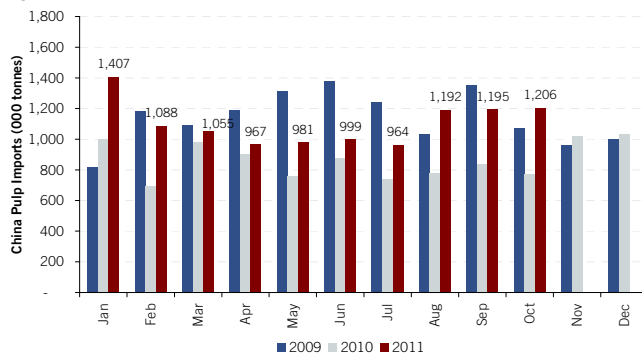
Source: RISI, Citi Investment Research and Analysis

Figure 36. Brazil Pulp Exports to China – (Since Jan/09)



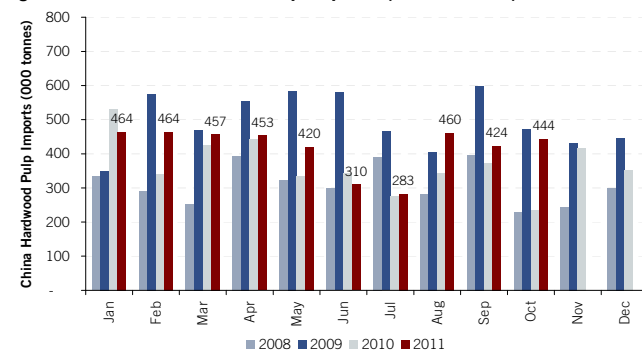
Source: MDIC/ SECEX, Citi Investment Research and Analysis

Figure 38. China Pulp Imports (Since Jan/09)



Source: RISI, Citi Investment Research and Analysis, Bloomberg

Figure 40. China Hardwood Pulp Imports (Since Jan/08)

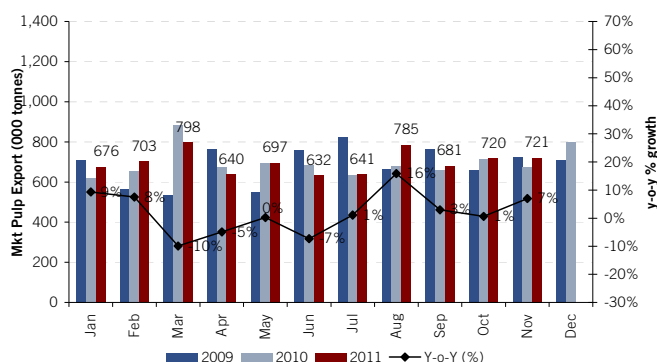


Source: RISI, Citi Investment Research and Analysis

Brazil Trade Activity

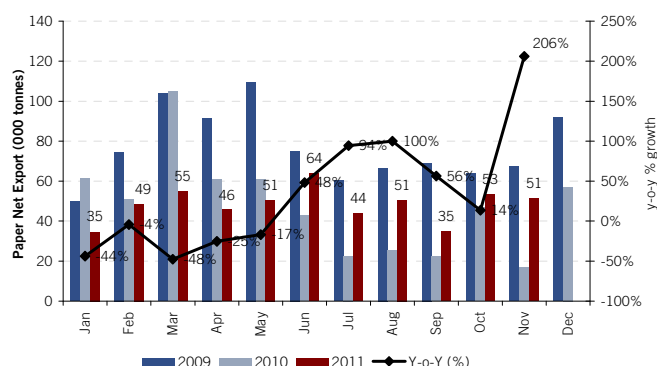
- **Mixed Regional Pulp Activity:** During November, Brazilian pulp exports of 721k tonnes were mostly flat m-o-m, yet up 7% y-o-y. Three key takeaways: 1) Brazilian pulp export prices continue to trend down – avg. fob price fell 4% (~\$25/mt), 2) China eases stock rebuild, yet US rebounds to normalized levels, and 3) Current volume over price strategy may help reduce producer inventories - pulp exports 3% above monthly avg.
- **Less Imports Pressure in Paper:** In November, net paper exports were down 3% m-o-m, but up strongly at 206% y-o-y mostly due to lower imports of paper. Coated paper imports decreased 43% y-o-y as a result of a weaker BRL as well as the measures taken to deter the illegal imports of tax-exempt paper.

Figure 41. Brazilian Pulp Exports- Monthly (2009-11)



Source: SECEX/MDIC and Citi Investment Research and Analysis

Figure 42. Brazilian Paper Net Exports- Monthly (2009-11)



Source: SECEX/MDIC and Citi Investment Research and Analysis

Figure 43. Brazilian Pulp & Paper Trade – Monthly

BRAZIL PULP EXPORTS		Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11
Total Exports (000 tonnes)		674	800	676	703	798	640	697	632	641	785	681	720	721
Y-o-Y Growth		-6.9%	12.8%	9.3%	7.5%	-9.9%	-4.9%	0.2%	-7.3%	1.1%	15.9%	3.0%	0.6%	7.0%
Europe		343	411	289	342	331	340	419	284	387	359	342	305	303
US		174	108	111	149	153	124	103	182	110	207	101	114	165
China		100	184	172	145	201	149	147	93	85	149	168	212	166
Asia (ex China)		51	93	90	60	109	23	23	59	50	57	60	86	73
to Other Regions		6	3	14	6	4	3	6	14	8	13	10	2	14
Export Mix														
Europe		51%	51%	43%	49%	41%	53%	60%	45%	60%	46%	50%	42%	42%
US		26%	14%	16%	21%	19%	19%	15%	29%	17%	26%	15%	16%	23%
China		15%	23%	25%	21%	25%	23%	21%	15%	13%	19%	25%	30%	23%
Asia (ex China)		8%	12%	13%	9%	14%	4%	3%	9%	8%	7%	9%	12%	10%
to Other Regions		1%	0%	2%	1%	1%	1%	1%	2%	1%	2%	1%	0%	2%
Exports/Capacity		81%	96%	82%	85%	96%	77%	84%	76%	77%	95%	82%	87%	87%
PAPER/ PAPERBOARD NET EXPORTS		Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11
Total Net Exports (000 tonnes)		17	57	35	49	55	46	51	64	44	51	35	53	51
Y-o-Y Growth		-75%	-38%	-44%	-4%	-48%	-25%	-17%	48%	94%	100%	56%	14%	206%
Coated		-32	-30	-32	-30	-39	-29	-22	-24	-21	-25	-23	-15	-17
Uncoated		69	74	57	52	74	67	73	82	63	72	59	56	57
Kraftliner		20	23	30	25	25	27	20	23	16	16	22	24	20
Other		-40	-11	-21	0	-5	-19	-21	-17	-14	-13	-23	-12	-9
Imports		150	120	138	120	135	138	122	122	113	122	132	109	103
Coated		36	34	36	33	43	32	24	28	25	27	27	19	20
Uncoated		20	18	17	20	17	21	17	15	18	18	25	18	15
Kraftliner		0	0	0	0	0	0	0	1	0	1	1	0	1
Other		94	68	85	67	74	85	81	78	69	75	79	72	67
Exports		167	178	172	168	190	183	173	186	157	172	167	162	155
Coated		3	5	4	3	4	3	2	4	4	2	4	3	3
Uncoated		88	92	74	72	91	87	90	97	81	90	85	74	72
Kraftliner		20	23	30	26	25	28	20	24	17	17	22	25	21
Other		54	57	64	67	69	66	60	61	55	62	56	60	58

Source: SECEX/MDIC and Citi Investment Research and Analysis

Summary — We extend our relative call on PKG as a Most Preferred stock and UFS as a Least Preferred stock relative to our fundamental analyst coverage for the next 3 Months. Our last call was made on 06 Oct 2011.

Rationale — We are maintaining our view that containerboard producers such as PKG present better upside opportunity than pulp-exposed producers such as UFS.

Packaging Corp of America

(PKG.N; US\$25.00; 1)

Catalyst and Thesis — We are positive on PKG given its low cost containerboard assets, strong balance sheet, and company-specific catalysts such as the completion of mill energy projects. PKG should further benefit from containerboard consolidation following the completion of the IP-TIN deal.

Domtar Corp

(UFS.N; US\$84.37; 2)

Catalyst and Thesis — We are cautious on pulp-exposed names such as UFS. Our forecast for a pulp downcycle in 2013-14 remains intact as a 10% increase in global capacity should loosen supply/demand. In addition to this pressure, secular decline in uncoated freesheet demand may accelerate over the next 2-3 years.

Below we provide links to recent research reports written by CIRA analysts over the past month.

[China Paper Sector - Earnings Risk Swings From Downside to Upside; Upgrade Lee & Man to Buy](#)

[Printing & Writing Paper Update - November Shipments Beat Expectations, but Prices Remain Seasonally Soft](#)

[Brazil Pulp & Paper Trade – Nov/11 - Pulp Exports Remain Above Trend, Yet Price Pressure Continues](#)

[Containerboard Update - Box Shipments Rise 1% in November, but Weak Export Markets & Falling OCC Pressuring Prices](#)

[Global Pulp Market Insights - Another Volatile Year Ahead; Takeaways from Our Call with Hawkins Wright](#)

[Global Pulp Activity - Evidence of a Price Bottom? LatAm Producers Move Large Volumes in November](#)

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Notes

Notes

Appendix A-1

Analyst Certification

The research analyst(s) primarily responsible for the preparation and content of this research report are named in bold text in the author block at the front of the product except for those sections where an analyst's name appears in bold alongside content which is attributable to that analyst. Each of these analyst(s) certify, with respect to the section(s) of the report for which they are responsible, that the views expressed therein accurately reflect their personal views about each issuer and security referenced and were prepared in an independent manner, including with respect to Citigroup Global Markets Inc and its affiliates. No part of the research analyst's compensation was, is, or will be, directly or indirectly, related to the specific recommendation(s) or view(s) expressed by that research analyst in this report.

IMPORTANT DISCLOSURES

Packaging Corp of America (PKG)

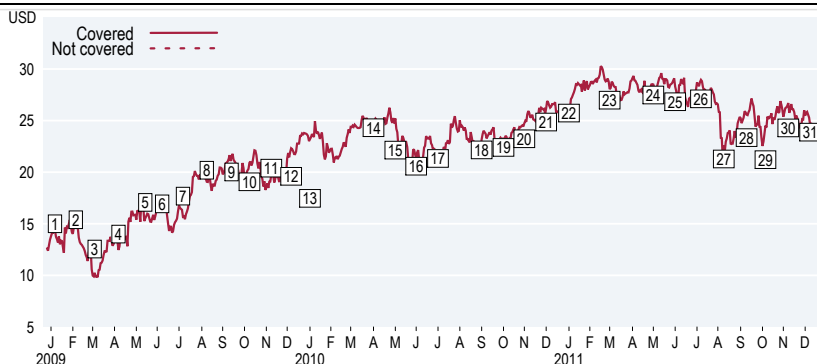
Rating History

Global Quantitative Research

World Radar Screen

Analyst: Chris Montagu

Covered since May 23 2009



Date	Rating	Target Price	Closing Price
1 7-Jan-09	*8	-	14.37
2 5-Feb-09	*4	-	14.65
3 4-Mar-09	*3	-	10.25
4 7-Apr-09	*9	-	12.46
5 14-May-09	*5	-	15.52
6 8-Jun-09	*10	-	16.65
7 7-Jul-09	*9	-	15.67
8 10-Aug-09	*4	-	19.07
9 14-Sep-09	*10	-	21.53
10 8-Oct-09	*6	-	20.92
11 9-Nov-09	*4	-	19.77

* Indicates change

Date	Rating	Target Price	Closing Price
12 7-Dec-09	*7	-	22.32
13 1-Jan-10	*4	-	23.01
14 1-Apr-10	*8	-	24.77
15 1-May-10	*1	-	24.73
16 1-Jun-10	*3	-	21.27
17 1-Jul-10	*1	-	22.08
18 1-Sep-10	*4	-	23.18
19 1-Oct-10	*6	-	23.33
20 1-Nov-10	*1	-	24.74
21 1-Dec-10	*7	-	26.18
22 1-Jan-11	*2	-	25.84

Date	Rating	Target Price	Closing Price
23 1-Mar-11	*5	-	28.05
24 1-May-11	*2	-	28.53
25 1-Jun-11	*4	-	28.30
26 7-Jul-11	*2	-	28.95
27 9-Aug-11	*7	-	22.58
28 9-Sep-11	*5	-	25.57
29 6-Oct-11	*8	-	24.52
30 8-Nov-11	*9	-	26.70
31 8-Dec-11	*7	-	24.58

Rating/target price changes above reflect Eastern Standard Time

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Data current as of 31 Dec 2011	12 Month Rating			Relative Rating		
	Buy	Hold	Sell	Buy	Hold	Sell
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<i>% of companies in each rating category that are investment banking clients</i>	45%	41%	40%	49%	43%	41%
Citi Investment Research & Analysis Quantitative World Radar Screen Model Coverage	30%	40%	30%			
<i>% of companies in each rating category that are investment banking clients</i>	22%	24%	21%			
Citi Investment Research & Analysis Quantitative Decision Tree Model Coverage	52%	0%	48%			
<i>% of companies in each rating category that are investment banking clients</i>	54%	0%	44%			
Citi Investment Research & Analysis Asia Quantitative Radar Screen Model Coverage	20%	60%	20%			
<i>% of companies in each rating category that are investment banking clients</i>	21%	22%	20%			
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