

## Brazil: Paper & Forest Products

### Momentum building for pulp prices; Suzano and Fibria up to Buy

#### Strong momentum building for pulp prices on supply constraints

We see potential for pulp prices to enjoy continuing strong momentum for the next few years, leading pulp stocks to re-rate. The core of our bullish call on pulp, since June 2009, has been that supply constraints should keep the market tight even with conservative forecasts for demand recovery. We therefore upgrade Fibria and Suzano to Buy from Neutral. We believe This dynamic should maintain the industry's ship-to-cap ratio at high levels. Exogenous events such as the Chilean earthquake and Finnish port strike postpone the inventory rebuild process and tighten global pulp supply-demand further. We forecast a global market pulp deficit of 1.8 mn tons during 2010E-12E. We see the BEKP price rising from the current level of US\$790/ton to US\$950/ton by year-end 2010E and US\$990/ton by year-end 2011E. As a result, we raise EPS estimates (and target prices): 2011E EBITDA increases by 50% for Fibria and 85% for Suzano.

#### Fibria and Suzano both upgraded and added to LatAm Focus List

Among the commodities we follow, iron ore and pulp enjoy the tightest global supply-demand outlook over the next year or two, in our view. However, investors seem to have low exposure to the pulp sector. We see pulp stocks as having stronger ST momentum than iron ore or steel stocks. Pulp stocks are currently trading at a discount to mid-cycle 2010E EV/EBITDA and the market seems to be underestimating the pulp price cycle. Suzano is our new top pick among LatAm natural resources stocks followed by Fibria and Vale (Buy, price \$30.87).

#### Pulp outlook to drive results and support Fibria deleveraging

We believe Pulp stocks should react positively to announcements of additional pulp price increases. Operating results to be reported in the coming quarters could also show the effect of tight global supply-demand. Net debt still represents 39% of Fibria's EV, which should allow the stock to appreciate without significant multiple expansion. We estimate that Fibria's cash balance that added to 2010-11E FCF represents 176% of debt due in the period, suggesting that the company's high leverage is manageable.

#### Key risk to our view is weaker-than-expected pulp demand

Risks include weaker-than-expected Chinese pulp demand, a rapid restart of idle mills in Canada and Europe, and Brazilian currency appreciation.

#### FIBRIA (FIBR3.SA/FBR): UP TO BUY (FROM NEUTRAL)

Key data	Current			
Price (R\$)	37.05			
12 month price target (R\$)	63.90			
FBR Price (\$)	21.40			
FBR 12 month price target (\$)	34.50			
Market cap (R\$ mn)	17,337.0			
	12/09	12/10E	12/11E	12/12E
EPS (R\$) New	1.44	0.64	2.53	4.17
EPS (R\$) Old	2.12	2.15	1.96	--
FBR EPS (R\$) New	1.44	0.64	2.53	4.17
FBR EPS (R\$) Old	2.12	2.15	1.96	--
P/E (X)	25.7	58.2	14.6	8.9
FBR P/E (X)	26.2	59.2	14.9	9.0
	12/09	3/10E	6/10E	9/10E
EPS (R\$)	(0.32)	(0.23)	0.65	(0.29)
FBR EPS (R\$)	(0.32)	(0.23)	0.65	(0.29)

#### SUZANO (SUZB5.SA): UP TO BUY (FROM NEUTRAL)

Key data	Current			
Price (R\$)	21.60			
12 month price target (R\$)	36.50			
Market cap (R\$ mn)	6,763.4			
	12/09	12/10E	12/11E	12/12E
Revenue (R\$ mn) New	3,952.7	4,595.2	5,562.7	5,978.2
Revenue (R\$ mn) Old	3,807.3	3,643.9	4,012.9	--
EPS (R\$) New	2.87	2.35	3.98	4.57
EPS (R\$) Old	3.58	1.54	1.15	--
P/E (X)	7.5	9.2	5.4	4.7
EV/EBITDA (X)	8.5	5.7	4.1	4.3
ROE (%)	21.6	15.6	22.6	21.1
	12/09	3/10E	6/10E	9/10E
EPS (R\$)	0.45	0.34	0.96	0.28

#### EUCALYPTUS AVERAGE LIST PRICES FOR PULP DELIVERED IN EUROPE (US\$/TON)

	Avg. CIF Europe			
	New	YoY	Old	Δ
2007	710	10.1%	710	0.0%
2008	785	10.6%	785	0.0%
2009	568	-27.7%	568	0.0%
2010	874	54.0%	785	11.4%
2011	980	12.1%	808	21.4%
2012	963	-1.7%	857	12.5%
LT	690	-28.4%	690	0.0%

Source: Goldman Sachs Research estimates

Marcelo Aguiar  
+55(11)3371-0771 | marcelo.aguiar@gs.com Goldman Sachs Brasil Bco Múlt S.A.  
Pedro Grimaldi  
+55(11)3371-0743 | pedro.grimaldi@gs.com Goldman Sachs Brasil Bco Múlt S.A.

The Goldman Sachs Group, Inc. does and seeks to do business with companies covered in its research reports. As a result, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision. For Reg AC certification, see the end of the text. Other important disclosures follow the Reg AC certification, or go to [www.gs.com/research/hedge.html](http://www.gs.com/research/hedge.html). Analysts employed by non-US affiliates are not registered/qualified as research analysts with FINRA in the U.S.

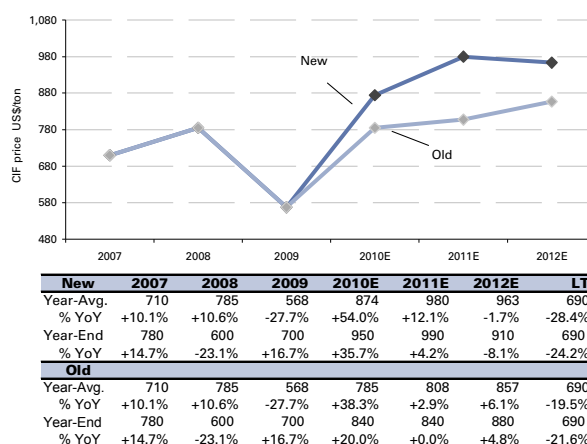
## Strong momentum building for pulp prices on supply constraints; Buy Suzano and Fibria

In our view, pulp prices are at an early stage of a potential “super-cycle” which is not reflected in current stock prices. In addition, our checks indicate that investors still have low exposure to pulp stocks. We upgrade Fibria and Suzano to Buy and recommend that investors overweight both stocks. We believe pulp stocks present the most appealing investment case, high potential upside, and lowest multiples in our LatAm natural resources universe. Suzano is our new top pick among Latam Natural Resources stocks based on its significant discount to Fibria.

In our view, Fibria could capture most of the flow from global investors that want to increase exposure to the sector, despite Fibria’s current premium to Suzano of 46% based on 2011E EV/EBITDA. Fibria has higher exposure to pulp (95% EBITDA vs. 70% for Suzano), a single class of stock with listed ADRs, and a more profitable growth pipeline.

Global market pulp supply-demand has been very tight since September 2009 and is getting tighter with recent developments in Chile and Finland that could remove 14% of supply for the next couple months. We expect the global market pulp sector to remain tight for longer as (1) paper demand is recovering from trough levels in developed markets (US and Europe); (2) significant new paper machine capacity is expected to start up in China during 2010-2012, and (3) there is a lack of new market pulp capacity coming on stream until 2013. We raise our year-end 2010 and 2011 eucalyptus pulp price (BEKP) forecasts to US\$950/ton and US\$990/ton from US\$840/ton (Exhibit 1).

**Exhibit 1: Forecasts for eucalyptus pulp price (BEKP) delivered in Europe**  
Average prices (US\$/ton), unless otherwise stated



Source: Goldman Sachs Research estimates.

There are not many alternatives to Fibria for investors to gain exposure to the pulp cycle. It is the largest and most liquid pulp stock globally. In our view, both Fibria and Suzano are inexpensive based on 2011E EV/EBITDA with respective discounts of 33% and 43% to their historical averages of 9.0X and 7.3X. We view both stocks as attractive based on DCF methodology as Fibria trades at 56% of DCF value and Suzano at 54%.

Exhibit 2 is a summary of Goldman Sachs’ global pulp and paper valuation comps. Important to note that Brazilian pulp and paper companies have been trading through the past few years at a premium to international peers on the back of strong growth outlook and higher profitability. Fibria and Suzano look inexpensive based on 2011E EV/EBITDA,

trading in line, and at 34% discount to global average, respectively. In our view, the positive scenario for pulp prices will lead the valuation gap to widen.

## Exhibit 2: Global pulp and forest products valuation comps

Share values as of March 15, 2010

Ticker	Rating	12-month price target	Potential upside / downside	Stock price	EV/EBITDA		P/E		Div Yield		Net debt /		FCF yield	
					2010E	2011E	2010E	2011E	2010E	2011E	2010E	2011E	2010E	2011E
Fibria	FBR	Buy	34.50	61%	21.40	8.9 x	6.0 x	58.4 x	14.7 x	0.0%	0.0%	3.0 x	1.8 x	-7.4%
	FIBR3.SA	Buy	R\$63.90	72%	R\$37.20	8.9 x	6.0 x	58.4 x	14.7 x	0.0%	0.0%	3.0 x	1.8 x	-7.4%
Suzano	SUZB5.SA	Buy	R\$36.50	70%	R\$21.45	5.6 x	4.1 x	9.1 x	5.4 x	5.9%	0.0%	2.0 x	0.0 x	19.3%
<b>Latam Average</b>				<b>68%</b>	<b>7.8 x</b>	<b>5.4 x</b>	<b>42.0 x</b>	<b>11.6 x</b>	<b>2.0%</b>	<b>0.0%</b>	<b>2.6 x</b>	<b>1.2 x</b>	<b>1.5%</b>	<b>-1.4%</b>
<b>Europe Average</b>				<b>39%</b>	<b>9.2 x</b>	<b>6.5 x</b>	<b>14.6 x</b>	<b>11.7 x</b>	<b>2.6%</b>	<b>3.1%</b>	<b>4.0 x</b>	<b>2.7 x</b>	<b>-6.9%</b>	<b>-2.3%</b>
<b>North America Average</b>				<b>10%</b>	<b>6.0 x</b>	<b>5.4 x</b>	<b>20.4 x</b>	<b>16.7 x</b>	<b>1.9%</b>	<b>2.1%</b>	<b>1.4 x</b>	<b>1.1 x</b>	<b>8.2%</b>	<b>7.1%</b>
<b>Global Average</b>				<b>35%</b>	<b>8.4 x</b>	<b>6.2 x</b>	<b>22.6 x</b>	<b>13.9 x</b>	<b>2.3%</b>	<b>2.5%</b>	<b>3.2 x</b>	<b>2.3 x</b>	<b>-2.0%</b>	<b>0.1%</b>

Source: Goldman Sachs Research estimates.

Exhibit 3 shows that our new estimates for Fibria and Suzano are well above market consensus, which in our view underestimates the upside potential for pulp prices.

## Exhibit 3: GS vs. consensus

Fibria	GS	Consensus	Delta	Suzano	GS	Consensus	Delta
<b>Revenues (R\$)</b>				<b>Revenues (R\$)</b>			
2010E	8,174	7,085	15.4%	2010E	4,595	4,194	9.6%
2011E	9,834	7,478	31.5%	2011E	5,563	4,274	30.1%
2012E	10,272	7,585	35.4%	2012E	5,978	4,588	30.3%
<b>EPS (R\$)</b>				<b>EPS (R\$)</b>			
2010E	0.64	1.78	-64.3%	2010E	2.35	1.68	39.3%
2011E	2.53	2.12	19.2%	2011E	3.98	1.98	101.6%
2012E	4.17	1.99	109.6%	2012E	4.57	2.10	117.2%
<b>EBITDA (R\$)</b>				<b>EBITDA (R\$)</b>			
2010E	3,098	2,870	8.0%	2010E	1,757	1,392	26.2%
2011E	4,255	3,096	37.4%	2011E	2,414	1,486	62.4%
2012E	4,474	3,176	40.9%	2012E	2,664	1,591	67.5%

Source: Bloomberg, Goldman Sachs Research estimates.

## Six factors pointing to a potential pulp price “super-cycle”

We estimate that hardwood pulp prices could be close to the US\$1,000 per ton mark by 2011, finally matching the peak achieved back in 1995 again. We believe prices should remain at a high level until significant pulp capacity starts up, which is only expected from 2013 onwards. In our view, the pulp supply-demand outlook will be so tight that pulp prices should drive paper prices and not the opposite. We forecast that the global pulp sector will be in a deficit of 1.8 mn tons in 2010-12, requiring the restart of old and high-cost pulp mills that are currently idle.

### (1) Lack of pulp capacity additions in 2010-2012

The recent financial crisis combined with several years of underinvestment/low returns in the global pulp sector has resulted in very limited new capacity coming onstream. The pulp consultancy Hawkins Wright estimates that 2.2 mn tons will start up during 2010-2012,

which represents growth of 1.4% pa and only 4.3% of 2009 global market pulp capacity. Note that there is no pulp mill/machine expected to start up in South America, the region with the strongest growth in the last 10 years and the lowest cash production cost globally.

Based on our analysis, additional market pulp demand in the period could be 4.0 mn tons, if we assume that global market pulp demand grows at 0.75X global real GDP (3.8% pa). This is conservative since global market pulp demand has grown at 0.88X global GDP since 2000.

As a result, we expect the global pulp market could therefore be in a deficit of 1.8mn tons in 2010E-2012E (4.7% of 2009E global apparent demand). This would keep the global shipment to capacity ratio at a sustainable level above 90% for a long period, giving strong pricing power to pulp producers.

#### Exhibit 4: Expected pulp capacity expansions in 2010-2012

Capacities in ktons per year

Company	Project	Country	Capacity	Pulp grade	Start up date
Altri	Celbi & Celtejo	Portugal	140	BHKP	2010
UPM-Kymmene	Fray Bentos	Uruguay	30	BHKP	2010
ENCE	Navia	Spain	120	BHKP	2010
Portucel	Setubal	Portugal	(165)	BHKP	2010
Rottneros	Miranda		0	BHKP	2010
Suzano	Mucuri	Brazil	0	BHKP	2010
Fibria	Jacarei, Tres Lagoas	Brazil	600	BHKP	2010
CMPC	Santa Fe	Chile	120	BHKP	2010
Lee & Man, Phoenix, Mondi, Faruki	-	-	30	BHKP	2010
APP, APRIL, PT Tel	-	Indonesia, China, Vietnam	550	BHKP	2010
Donghae	-	Korea	15	BHKP	2010
Stora, Botnia and Sodra	-	Nordic	(90)	BHKP	2010
Tembec	-	Europe	(30)	BHKP	2010
AV Nackawic, Smurfit, Pictou, P&W	-	Canada, USA	(50)	BHKP	2010
CMPC	Santa Fe	Chile	30	BHKP	2011
APP, APRIL, PT Tel	-	Indonesia, China, Vietnam	330	BHKP	2011
Donghae	-	Korea	(165)	BHKP	2011
Arauco	Valdivia, Itata	Chile	60	BHKP	2012
CMPC	Santa Fe	Chile	200	BHKP	2012
APP, APRIL, PT Tel	-	Indonesia, China, Vietnam	40	BHKP	2012
Donghae	-	Korea	(95)	BHKP	2012
Mackenzie, Marathon, Elk falls, Harmac, Crofton, Pictou	-	Canada	(25)	BSKP	2010
IP, Smurfit-stone, Domtar, Boise, P&W	-	USA	80	BSKP	2010
Stora, Botnia, Sodra, Rottneros	-	Nordic	40	BSKP	2010
Pols and Tembec	-	Europe	45	BSKP	2010
Hunan Tiger	-	China	10	BSKP	2010
IP, Smurfit-stone, Domtar, Boise, P&W	-	USA	270	BSKP	2011
Stora, Botnia, Sodra, Rottneros	-	Nordic	10	BSKP	2011
Stora, Botnia and Sodra	-	Nordic	10	BSKP	2012
CMPC, Arauco	-	Chile	120	BSKP	2012
<b>TOTAL</b>			<b>2,230</b>		

Source: Hawkins Wright and Goldman Sachs Research.

## (2) Amount of idle pulp capacity will not be enough to bring global pulp market into balance

Currently, there are nine pulp mills that remain idle, of which 1.1mtpa are white kraft pulp (softwood or hardwood pulp) as shown in Exhibit 5. Even if all this capacity restarts, it would not be enough to cover the expected deficit of 1.8 mn tons during 2010-2012. In addition, for some of these mills to restart, new funding could be needed and they would have to restore their wood supply, which could be very challenging, in our view.

**Exhibit 5: List of idle pulp mills**

Pulp mills that remain idle represent 2.7% of global market pulp capacity (in ktons)

Company	Mill	Country	Capacity	Grade	Start up date
Fraser Papers	Thurso	Canada	125	BHKP	Q2-2009
M-Real	Alizay	France	70	BHKP	Q2-2009
Catalyst	Crofton	Canada	90	BSKP	Q1-2009
Buchanan	Terrace Bay	Canada	380	BSKP	Q1-2009
Tembec	Chetwynd	Canada	220	BCTMP	Q1-2009
Buchanan	Terrace Bay	Canada	125	BHKP	Q4-2008
Baikalsky	Lake Baikal	Russia	100	UKP	Q4-2008
Baikalsky	Lake Baikal	Russia	120	BSKP	Q4-2008
Kertas Nusantara	Mangkajang	Indonesia	150	BHKP	Q4-2008
<b>Total</b>			<b>1,380</b>		

Source: Hawkins Wright.

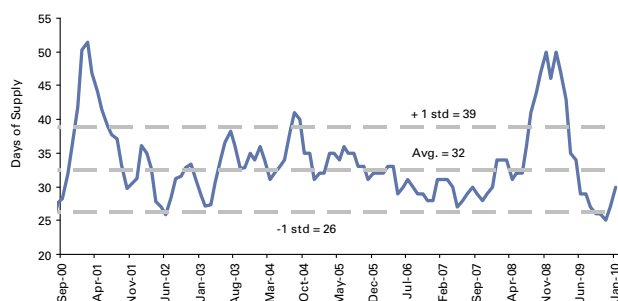
**(3) Global inventories are very low across the whole supply chain**

Global pulp inventories are well below their normalized levels even after considering that pulp shipments to North America and Europe remain low as paper demand in these regions is rebounding slowly from its trough after the global financial crisis. Our industry contacts in China state that pulp inventories are close to normalized levels. We estimate that overproduction of 0.9 mn tons would be needed to bring all these inventories back to normalized levels.

Exhibits 6-9 show global producers' inventories (PPPC), European port inventories (Europulp), and consumers' inventories in Europe (Utulp).

**Exhibit 6: Global pulp inventories at 30 days of supply**

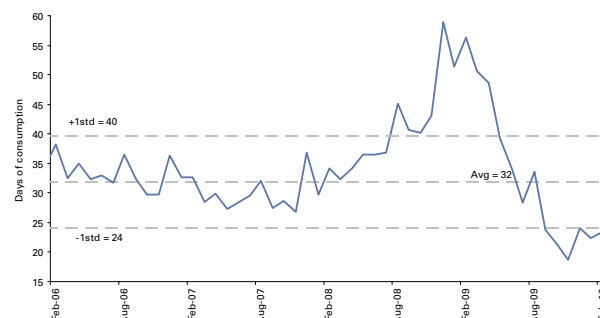
Global pulp inventories in days of supply



Source: PPPC.

**Exhibit 7: European producers' pulp inventories at 24 days in February**

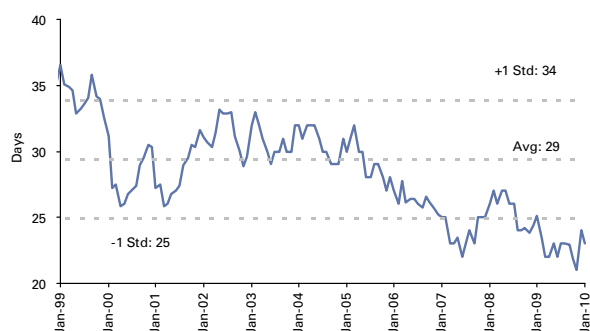
Global pulp inventories in days of consumption



Source: Europulp.

**Exhibit 8: Pulp inventories of European consumers at 23 days of supply**

Global pulp inventories in days of supply



Source: Utipulp.

**Exhibit 9: Required additional supply of 904 ktons of pulp to restore normalized levels of inventories**

Inventories	Current (days) - as of Jan '10	Normalized (days)	Required over supply (ktons)
Producers	30	32	344
European ports	22	32	332
European consumers	23	29	228
Total	-	-	904

Source: PPPC, Europulp, Utipulp.

**(4) New paper machines starting up in China during 2010-2011 should add significant capacity**

RISI forecasts that around 4.5 mtpa of new uncoated, coated and tissue machines will start-up in China during 2010-11. This additional paper capacity could increase Chinese pulp demand by 3.3 mn tons. This outlook increases our confidence in the long-term global pulp supply-demand balance and could lead the sector to be tighter than expected mainly in 2011-12. There is low visibility regarding pulp supply for Chinese paper machines, but as most are new machines, they will most likely require high quality fiber, which is not produced in China.

**Exhibit 10: Chinese expected additional paper capacity**

Capacities in ktons/year

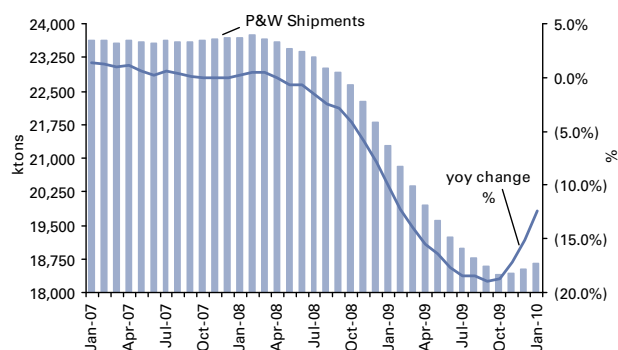
Grade	Capacity in 2009	Capacity Addition		Capacity in 2011
		2010	2011	
Coated	7,063	758	1,820	9,641
Uncoated	14,547	1,092	151	15,789
Tissue	5,947	450	286	6,683
<b>Total</b>	<b>27,557</b>	<b>2,300</b>	<b>2,256</b>	<b>32,113</b>

Source: RISI.

**(5) Paper demand bottomed in US and Europe**

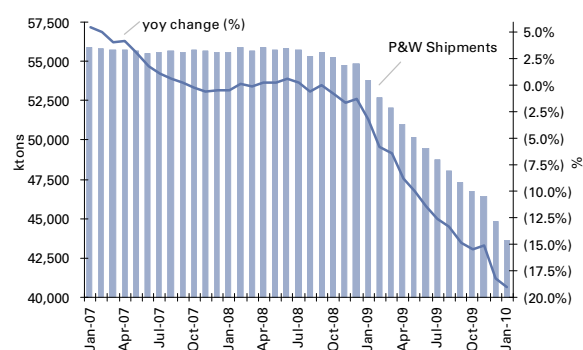
China is the main growth market for pulp, but Europe and US remain the largest markets and represented 35% and 18% of 2009 pulp demand, respectively. Exhibits 11-12 show that fine paper shipments in US and Europe already bottomed and are slowly recovering after a decrease of 21% and 22% from peak pre-crisis levels. Our Goldman Sachs Paper and Forest product equity analyst Rick Skidmore forecasts US fine paper (coated and uncoated paper) demand to increase 0.4%pa in 2010-2012 and Goldman Sachs Paper and Packaging equity analyst Eshan Toorabally expects Europe fine paper demand to increase 4.6% pa. Tissue, another important driver for pulp demand, should continue to perform well in US and Europe. The return of traditional clients will reduce pulp availability for China, which should help push up prices globally.

**Exhibit 11: North American fine paper demand**  
Monthly North American P&W paper demand



Source: AFPA.

**Exhibit 12: European fine paper demand**  
Monthly European P&W paper demand



Source: Cepiprint, Cepifine.

## (6) Exogenous events should continue to reduce pulp supply

In recent years, a series of events have impacted pulp supply, notably storms in Sweden, a warm winter in Canada, floods in southern United States, and paper workers' strike in Finland. Such events are unpredictable but have been happening more frequently in recent years and have a more significant impact when supply-demand is very tight, in our view.

The most recent events are the Chilean earthquake and Finnish stevedores strike, which have removed 7.3 mn tons per year of capacity or 14% of global pulp market supply in the short term. Chile represents 15% of China pulp imports and there is currently no supply available to substitute Chile exports.

Chilean pulp mills declared force majeure on their operations and are currently assessing the impact of the earthquake on their mills. Pulp mills are very complex industrial facilities. For instance, new mills tend to take 12-18 months to ramp up and there are only a couple of producers globally that could lead the evaluation process. Ramp-up is therefore likely to take more than two months. The status of infrastructure affecting pulp mills and ports such as roads, railways, water supply and energy is also unclear post the earthquake.

We estimate that global pulp producers' inventories could fall to 27 days if Chilean pulp mills take four months to return progressively to a normalized production level. Exhibit 13 lists the pulp mills that are currently idle due to the earthquake.

**Exhibit 13: Currently idle pulp mills in Chile**  
Capacities in ktons/year

Mill	Grade	Market Capacity
Arauco Lincanten	Softwood	115
	Hardwood	40
Arauco Constitucion	Unbleached kraft	360
Arauco Nueva Aldea	Softwood	430
	Hardwood	430
Arauco Arauco	Softwood	515
	Hardwood	285
Arauco Valdivia	Softwood	390
	Hardwood	160
CMPC Santa Fe	Hardwood	1,060
CMPC Pacifico	Softwood	510
CMPC Laja	Softwood	250
<b>Total</b>		<b>4,545</b>

Source: RISI.

## Weaker-than-expected pulp demand is the key risk

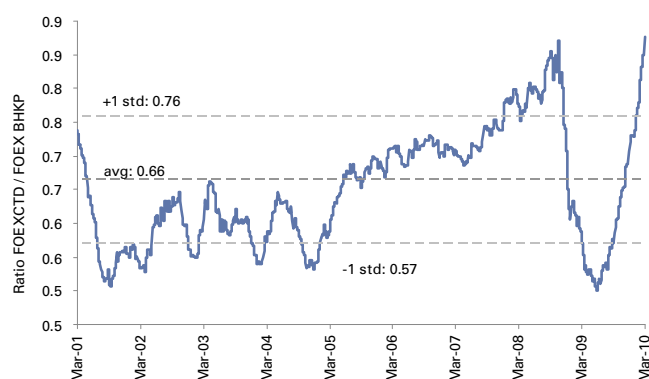
In our opinion, global pulp demand constitutes the key risk to our call as visibility is very clear on the supply side. Pulp prices should reach a level in 2011 that would lead most inefficient non-integrated paper machines to shut down in Europe/US and could point to the peak of the cycle.

We do not believe the recent sharp increase in pulp prices will have a significant impact on paper production in US and Europe in the short term despite the historically high pulp to paper price ratios as seen in Exhibits 14-15.

In our view, paper producers will first try to pass through the impact of higher pulp prices to customers before they shut down some of their paper machines considering that:

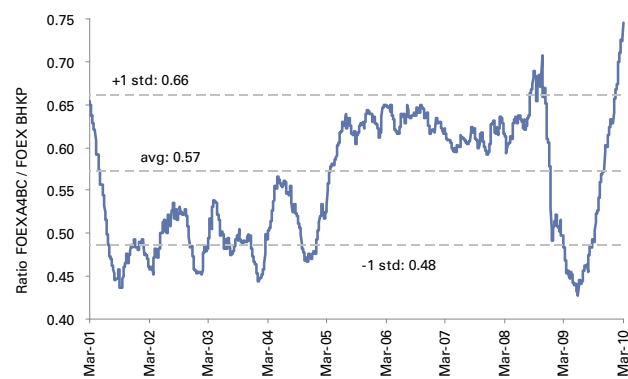
- US and European fine paper demand is recovering from a trough level which is 21% and 22% below the pre-crisis level; and
- Paper producers are implementing paper price increase (two European producers have announced a 15% increase for uncoated paper from April 15).

**Exhibit 14: BHKP-to-coated paper price ratio**



Source: Bloomberg.

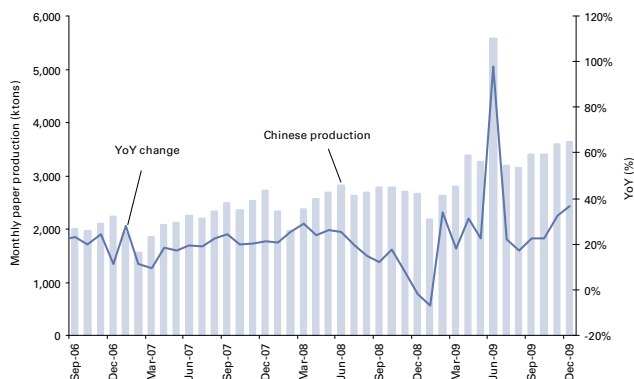
**Exhibit 15: BHKP-to-uncoated paper price ratio**



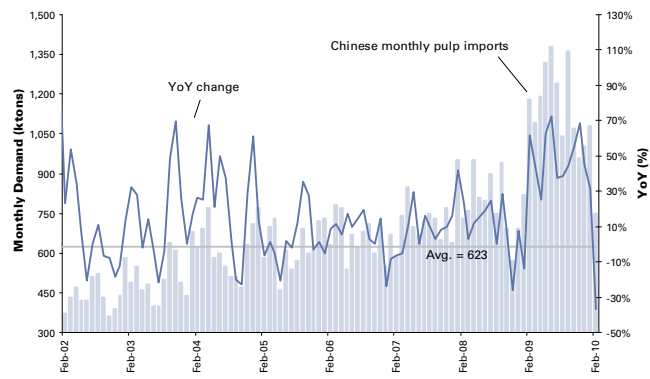
Source: Bloomberg.

Another important variable, in our view, would be Chinese paper demand performance as it currently represents 21% of the global market pulp demand and paper production has been increasing rapidly as could be seen in Exhibit 16. A risk would be that sharp pulp price increase could postpone the start up of some paper machines in China. We do not believe much on this scenario taking into consideration recent experiences of the Chinese steel sector which kept expanding through the past few years despite very low profitability and returns.



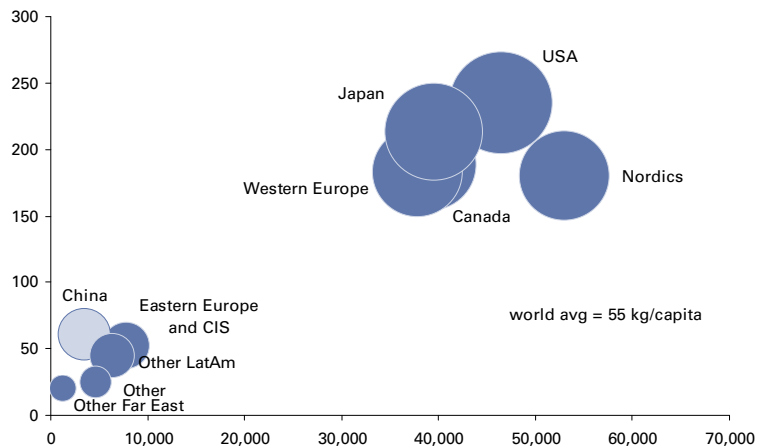
**Exhibit 16: Chinese paper production growing 36% yoy in December 2009**

Source: Bloomberg.

**Exhibit 17: 2009: highest-ever China monthly pulp imports**

Source: Bloomberg.

Chinese paper consumption remains low at 61 kg per capita (see Exhibit 18). The combination of very strong economic development in the past few years, added to fast urbanization and wealth generation are the drivers for faster increase in paper consumption per capita in the following years.

**Exhibit 18: Paper consumption per capita**  
In kg/year/capita

Source: RISI, IMF and Goldman Sachs Research estimates.

# Fibria: Highly leveraged to pulp cycle; upgrade to Buy

## Source of opportunity

In our view, the Brazilian pulp and paper sector currently offers the greatest potential upside in our LatAm natural resources universe. Stocks are trading at inexpensive valuation multiples on a relative basis and at a discount to their historical pattern. We therefore Fibria to Buy from Neutral.

We forecast pulp price strength through 2013 will be very beneficial for Fibria, which continues to have high leverage, with year-end 2009 net debt representing 39% of EV and a debt-to-total capital ratio of 0.5X. Strong FCF generation should allow the stock to appreciate without EV/EBITDA multiples expanding significantly; 2010-12E FCF is equivalent to 47% of current market cap. It should also allow Fibria to renegotiate its debt balance through 2010 by lowering capital costs. In our opinion, investors should not be worried by Fibria's debt repayments as cash balance plus 2010E FCF represents 144% of the company's short term debt, and the cash balance plus 2010-12E FCF represents 233% of debt due in 2010-2012.

## Catalyst

We believe newsflow will continue to be incrementally positive to pulp stocks mainly from global pulp inventories, shipment-to-capacity ratios, additional price increases and quarterly earnings. Our recent interactions with investors have highlighted that they remain poorly allocated in the sector.

## Valuation

Our 12-month target prices increase to R\$63.90 for FIBR3.SA and US\$34.5 for FBR (from R\$40.9 and US\$24.1) on higher pulp price forecasts. These continue to be based on a blend of DCF value (70%) and a 2010E EV/EBITDA multiple of 9.0X (30%).

Our 2010E EPS decreases to R\$0.64 from R\$2.15 as a result of the impact of weaker forecast BRL on dollar-denominated debt and the incorporation of goodwill amortization expense in our estimates. Our 2011E EPS increases to R\$2.53 from R\$1.96 on higher goodwill amortization expenses. We introduce a 2012E EPS forecast of R\$4.17.

Our sensitivity analysis suggests that Fibria is pricing pulp at US\$770/ton in 2011, which we think is unlikely to happen. The stock currently trades at inexpensive 2010E/2011E EV/EBITDA multiples of 8.9X and 6.0X compared with 9.0X historically. The stock is trading at only 56% of DCF value of US\$38/ADR (R\$70/sh) when pulp prices are strengthening.

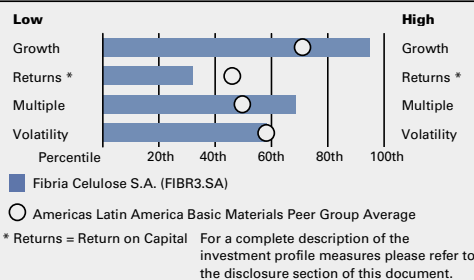
In our view, Fibria has the most appealing LT growth pipeline in our LatAm natural resources universe, as it is the only company that can grow production capacity by 42% entirely through brownfield projects. In our model, we consider (1) duplication of Veracel production capacity adding new 0.75mtpa, and (2) a new 1.5mtpa pulp line at the Horizonte mill.

## Risks

The main risks to our view and target price are: (1) lower-than-expected paper demand in developed markets and China, (2) BRL appreciation, (3) lower-than-expected pulp prices, and (4) higher production costs.

## Investment List Membership Americas Buy List

### Investment Profile

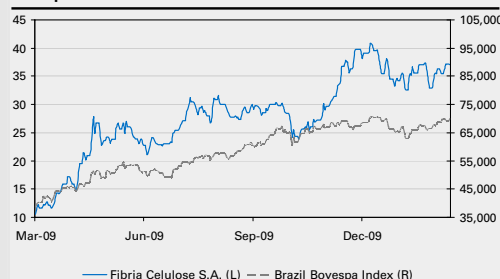


Key data	Current
Price (R\$)	37.05
12 month price target (R\$)	63.90
Market cap (R\$ mn)	17,337.0

	12/09	12/10E	12/11E	12/12E
Revenue (R\$ mn) New	4,363.4	8,173.7	9,833.9	10,271.7
Revenue (R\$ mn) Old	4,254.3	7,042.7	7,651.7	--
EPS (R\$) New	1.44	0.64	2.53	4.17
EPS (R\$) Old	2.12	2.15	1.96	--
P/E (X)	25.7	58.2	14.6	8.9
EV/EBITDA (X)	19.2	8.9	6.0	5.2
ROE (%)	8.2	2.9	10.7	15.4

	12/09	3/10E	6/10E	9/10E
EPS (R\$)	(0.32)	(0.23)	0.65	(0.29)

### Price performance chart



Share price performance (%)	3 month	6 month	12 month
Absolute	(1.2)	25.2	250.8
Rel. to Brazil Bovespa Index	(3.0)	8.1	93.7

Source: Company data, Goldman Sachs Research estimates, FactSet. Price as of 3/16/2010 close.

# Suzano: Inexpensive way to invest in pulp sector; upgrade to Buy

## Source of opportunity

We upgrade Suzano to Buy from Neutral on the back of our bullish view on the pulp price cycle and select the stock as our top pick in LatAm Natural Resources. Suzano should continue to be viewed more as a pulp stock than a paper stock, despite the paper segment representing 51% of 2010E net revenues. This is because the company's strong growth pipeline is mostly in the pulp segment.

In our view, Suzano's international paper peers could face a significant operating margin squeeze, leading them to curb capacity in order to increase paper prices. This scenario is very beneficial to Suzano, whose paper production is vertically integrated into pulp. As a result, this should be able to increase domestic paper prices further during 2010-11 and increase export paper shipments.

## Catalyst

We expect short-term news flow on both pulp and domestic paper markets to maintain positive momentum for the stock.

Strong pulp prices in 2010-2012 will be important for Suzano to fund its heavy capex program of R\$10.5 bn in 2010-15 when the company expects to increase pulp production capacity from 1,740 mtpa to 4,340 mtpa. We expect the company to generate FCF of R\$795 mn in 2010-12, equivalent to 12% of the current market cap.

## Valuation

Our 12-month target price increases to R\$36.50 (from R\$20.90) on higher pulp price forecasts and implies 68% potential upside. Our target price continues to be based on a blend of DCF value (70%) and a 2010E EV/EBITDA multiple of 6.9X (30%). Our 2010E and 2011E EPS increase to R\$2.35 and R\$3.98 from R\$1.54 and R\$1.15 respectively, primarily on higher pulp price forecasts. We introduce a 2012E EPS forecast of R\$4.57.

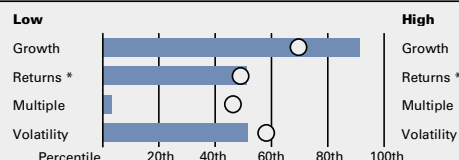
Suzano's stock looks inexpensive based on 5.6X 2010E EV/EBITDA and 54% of DCF value of R\$40. It is currently trading at a 37% discount to Fibria's 2010E EV/EBITDA, which should attract value investors until visibility on 2011 pulp price cycle improves. Unlike Fibria, Suzano does not have liquid ADRs and management has shown no intention to seek a US listing.

## Risks

The main risks to our view and target price are lower-than-forecasted paper prices in the domestic market and pulp export prices, lower paper demand in Brazil, a stronger Brazilian currency, and higher production costs.

## Investment List Membership Americas Buy List

### Investment Profile



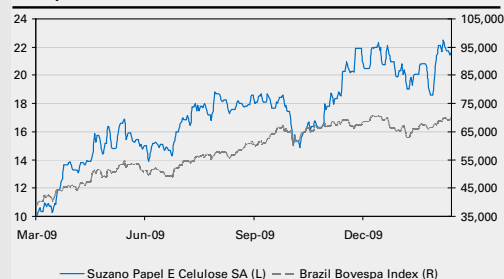
\* Returns = Return on Capital For a complete description of the investment profile measures please refer to the disclosure section of this document.

Key data	Current
Price (R\$)	21.60
12 month price target (R\$)	36.50
Market cap (R\$ mn)	6,763.4

	12/09	12/10E	12/11E	12/12E
Revenue (R\$ mn) New	3,952.7	4,595.2	5,562.7	5,978.2
Revenue (R\$ mn) Old	3,807.3	3,643.9	4,012.9	--
EPS (R\$) New	2.87	2.35	3.98	4.57
EPS (R\$) Old	3.58	1.54	1.15	--
P/E (X)	7.5	9.2	5.4	4.7
EV/EBITDA (X)	8.5	5.7	4.1	4.3
ROE (%)	21.6	15.6	22.6	21.1

	12/09	3/10E	6/10E	9/10E
EPS (R\$)	0.45	0.34	0.96	0.28

### Price performance chart



Share price performance (%)	3 month	6 month	12 month
Absolute	5.5	21.1	114.7
Rel. to Brazil Bovespa Index	3.5	4.6	18.5

Source: Company data, Goldman Sachs Research estimates, FactSet. Price as of 3/16/2010 close.

## Fibria and Suzano: Estimate changes and sensitivity analysis

### Exhibit 19: Fibria: New vs. old estimates

In R\$ mn, unless otherwise stated

	2010			2011		
	new	old	Δ (%)	new	old	Δ (%)
Shipments ('000 tons)	5,142	5,717	-10.1%	5,222	5,797	-9.9%
Pulp ('000 tons)	4,762	5,337	-10.8%	4,839	5,414	-10.6%
Paper ('000 tons)	380	380	+0.0%	383	383	+0.0%
Revenues	8,174	7,043	+16.1%	9,834	7,652	+28.5%
Revenues/ton	1,590	1,232	+29.0%	1,883	1,320	+42.7%
Pulp	1,482	1,103	+34.3%	1,767	1,200	+47.2%
Paper	2,942	3,041	-3.2%	3,351	3,015	+11.1%
COGS/ton	1,082	793	+36.4%	1,141	887	+28.7%
Gross margin (%)	32%	36%	-370.3 bp	39%	33%	+658.5 bp
EBITDA	3,098	2,865	+8.1%	4,255	2,842	+49.7%
EBITDA margin (%)	38%	41%	-278.3 bp	43%	37%	+612.4 bp
Net Income	298	1,005	-70.4%	1,183	917	+29.0%
EPS (R\$)	0.64	2.15	-70.4%	2.53	1.96	+29.0%

Source: Company data, Goldman Sachs Research estimates.

### Exhibit 20: Suzano: New vs. old estimates

In R\$ mn, unless otherwise stated

Suzano	2010			2011		
	new	old	Δ (%)	new	old	Δ (%)
Shipments ('000 tons)	2,830	2,822	+0.3%	2,865	2,865	+0.0%
Pulp ('000 tons)	1,740	1,740	+0.0%	1,740	1,740	+0.0%
Paper ('000 tons)	1,090	1,082	+0.8%	1,125	1,125	+0.0%
Revenues	4,595	3,644	+26.1%	5,563	4,013	+38.6%
Revenues/ton	1,624	1,291	+25.7%	1,942	1,401	+38.6%
Pulp	1,299	944	+37.7%	1,618	1,065	+51.8%
Paper	2,142	1,851	+15.7%	2,443	1,919	+27.3%
COGS/ton	1,027	924	+11.1%	1,115	985	+13.3%
Gross margin (%)	37%	28%	+830.2 bp	43%	30%	+1285.1 bp
EBITDA	1,757	1,132	+55.2%	2,414	1,305	+85.0%
EBITDA margin (%)	38%	31%	+716.3 bp	43%	33%	+1087.4 bp
Net Income	718	471	+52.3%	1,219	354	+244.5%
EPS (R\$)	2.35	1.54	+52.6%	3.98	1.15	+245.2%

Source: Company data, Goldman Sachs Research estimates.

Exhibits 21 and 22 set out the sensitivity of Fibria's and Suzano's 2010E EPS, EBITDA, P/E, and EV/EBITDA to different scenarios for Brazilian currency and pulp prices.

**Exhibit 21: Fibria: Sensitivity of 2010E EPS, EBITDA, P/E and EV/EBITDA to FX rate and pulp prices****EPS (R\$)**

		2010 avg. pulp price (US\$/ton)							
		696	753	811	868	926	984	1,041	1,099
2010 avg. R\$/US\$	1.53	-0.10	0.05	0.20	0.35	0.49	0.64	0.79	0.94
	1.61	-0.02	0.13	0.29	0.44	0.60	0.75	0.91	1.07
	1.70	0.05	0.21	0.38	0.54	0.70	0.87	1.03	1.19
	1.79	0.12	0.29	0.46	0.64	0.81	0.98	1.15	1.33
	1.88	0.19	0.37	0.55	0.73	0.91	1.09	1.27	1.45
	1.97	0.25	0.44	0.63	0.82	1.01	1.20	1.39	1.58
	2.07	0.31	0.51	0.71	0.91	1.11	1.31	1.51	1.71
	2.17	0.38	0.59	0.80	1.01	1.21	1.42	1.63	1.84

**EBITDA (R\$ mn)**

		2010 avg. pulp price (US\$/ton)							
		696	753	811	868	926	984	1,041	1,099
2010 avg. R\$/US\$	1.53	2,713	2,790	2,867	2,945	3,022	3,099	3,176	3,254
	1.61	2,752	2,833	2,915	2,996	3,077	3,159	3,240	3,321
	1.70	2,790	2,876	2,962	3,047	3,133	3,218	3,304	3,390
	1.79	2,828	2,918	3,008	3,098	3,188	3,278	3,369	3,459
	1.88	2,863	2,957	3,052	3,147	3,241	3,336	3,431	3,525
	1.97	2,897	2,997	3,096	3,195	3,295	3,394	3,493	3,593
	2.07	2,931	3,035	3,140	3,244	3,348	3,453	3,557	3,661
	2.17	2,964	3,074	3,184	3,293	3,403	3,512	3,622	3,731

**P/E (X)**

		2010 avg. pulp price (US\$/ton)							
		696	753	811	868	926	984	1,041	1,099
2010 avg. R\$/US\$	1.53	-387.6x	720.6x	186.7x	107.3x	75.2x	57.9x	47.1x	39.7x
	1.61	-1669.7x	279.5x	129.0x	83.8x	62.1x	49.3x	40.9x	34.9x
	1.70	748.3x	174.4x	98.7x	68.8x	52.8x	42.9x	36.1x	31.1x
	1.79	309.5x	127.2x	80.1x	58.4x	46.0x	37.9x	32.3x	28.1x
	1.88	200.0x	101.4x	67.9x	51.1x	40.9x	34.1x	29.3x	25.6x
	1.97	148.4x	84.4x	59.0x	45.4x	36.8x	31.0x	26.8x	23.6x
	2.07	118.3x	72.4x	52.2x	40.8x	33.5x	28.4x	24.6x	21.8x
	2.17	98.5x	63.4x	46.7x	37.0x	30.6x	26.1x	22.8x	20.2x

**EV/EBITDA (X)**

		2010 avg. pulp price (US\$/ton)							
		696	753	811	868	926	984	1,041	1,099
2010 avg. R\$/US\$	1.53	10.2x	9.9x	9.6x	9.4x	9.1x	8.9x	8.7x	8.5x
	1.61	10.0x	9.7x	9.5x	9.2x	8.9x	8.7x	8.5x	8.3x
	1.70	9.9x	9.6x	9.3x	9.0x	8.8x	8.5x	8.3x	8.1x
	1.79	9.8x	9.4x	9.2x	8.9x	8.6x	8.4x	8.2x	7.9x
	1.88	9.6x	9.3x	9.0x	8.7x	8.5x	8.2x	8.0x	7.8x
	1.97	9.5x	9.2x	8.9x	8.6x	8.3x	8.1x	7.9x	7.6x
	2.07	9.4x	9.1x	8.8x	8.5x	8.2x	8.0x	7.7x	7.5x
	2.17	9.3x	9.0x	8.6x	8.3x	8.1x	7.8x	7.6x	7.3x

Source: Goldman Sachs Research estimates.

**Exhibit 22: Suzano: Sensitivity of 2010E EPS, EBITDA, P/E and EV/EBITDA to FX rate and pulp prices****EPS (R\$)**

		2010 avg. pulp price (US\$/ton)							
		689	746	804	861	919	977	1,034	1,092
2010 avg. R\$/US\$	1.53	1.91	1.97	2.03	2.08	2.14	2.20	2.20	2.32
	1.61	1.98	2.04	2.11	2.17	2.23	2.29	2.35	2.42
	1.70	2.06	2.12	2.19	2.25	2.32	2.39	2.45	2.52
	1.79	2.14	2.21	2.28	2.35	2.41	2.48	2.55	2.62
	1.88	2.22	2.29	2.36	2.44	2.51	2.58	2.65	2.73
	1.97	2.30	2.38	2.45	2.53	2.61	2.68	2.76	2.83
	2.07	2.39	2.47	2.55	2.63	2.71	2.79	2.87	2.95
	2.17	2.48	2.56	2.65	2.73	2.82	2.90	2.98	3.07

**EBITDA (R\$ mn)**

		2010 avg. pulp price (US\$/ton)							
		689	746	804	861	919	977	1,034	1,092
2010 avg. R\$/US\$	1.53	1,587	1,610	1,632	1,655	1,678	1,701	1,723	1,746
	1.61	1,616	1,640	1,664	1,688	1,712	1,735	1,759	1,783
	1.70	1,646	1,671	1,697	1,722	1,747	1,772	1,797	1,822
	1.79	1,678	1,704	1,731	1,757	1,784	1,810	1,837	1,863
	1.88	1,709	1,737	1,765	1,793	1,820	1,848	1,876	1,904
	1.97	1,742	1,771	1,800	1,830	1,859	1,888	1,917	1,946
	2.07	1,776	1,807	1,838	1,868	1,899	1,929	1,960	1,991
	2.17	1,812	1,844	1,876	1,909	1,941	1,973	2,005	2,037

**P/E (X)**

		2010 avg. pulp price (US\$/ton)							
		689	746	804	861	919	977	1,034	1,092
2010 avg. R\$/US\$	1.53	11.4x	11.1x	10.7x	10.4x	10.1x	9.9x	9.6x	9.4x
	1.61	11.0x	10.6x	10.3x	10.0x	9.8x	9.5x	9.2x	9.0x
	1.70	10.6x	10.2x	9.9x	9.6x	9.4x	9.1x	8.9x	8.6x
	1.79	10.2x	9.9x	9.6x	9.1x	9.0x	8.8x	8.5x	8.3x
	1.88	9.8x	9.5x	9.2x	8.9x	8.7x	8.4x	8.2x	8.0x
	1.97	9.5x	9.1x	8.9x	8.6x	8.3x	8.1x	7.9x	7.7x
	2.07	9.1x	8.8x	8.5x	8.3x	8.0x	7.8x	7.6x	7.4x
	2.17	8.8x	8.5x	8.2x	8.0x	7.7x	7.5x	7.3x	7.1x

**EV/EBITDA (X)**

		2010 avg. pulp price (US\$/ton)							
		689	746	804	861	919	977	1,034	1,092
2010 avg. R\$/US\$	1.53	6.3x	6.2x	6.1x	6.0x	6.0x	5.9x	5.8x	5.7x
	1.61	6.2x	6.1x	6.0x	5.9x	5.8x	5.8x	5.7x	5.6x
	1.70	6.1x	6.0x	5.9x	5.8x	5.7x	5.6x	5.5x	5.5x
	1.79	6.0x	5.9x	5.8x	5.6x	5.6x	5.5x	5.4x	5.3x
	1.88	5.8x	5.7x	5.6x	5.6x	5.5x	5.4x	5.3x	5.2x
	1.97	5.7x	5.6x	5.5x	5.4x	5.3x	5.3x	5.2x	5.1x
	2.07	5.6x	5.5x	5.4x	5.3x	5.2x	5.1x	5.0x	5.0x
	2.17	5.5x	5.4x	5.3x	5.2x	5.1x	5.0x	4.9x	4.8x

Source: Goldman Sachs Research estimates.

**Exhibit 23: Macroeconomic assumptions**

Macro Assumptions	2008	2009E	2010E	2011E	2012E	2013E	2016E
<b>Brazil</b>							
Real GDP (yoy)	5.1%	-0.1%	6.4%	5.0%	4.3%	4.3%	4.3%
CPI inflation (IPCA) end of period	5.9%	4.3%	5.4%	5.2%	4.5%	4.5%	4.5%
BRL/USD end of period	2.31	1.74	1.85	2.00	2.10	2.12	2.20
BRL/USD period average	1.84	2.00	1.79	1.94	2.05	2.11	2.19
SELIC (reference interest rate) end of period	13.8%	8.8%	12.5%	12.5%	12.5%	12.5%	12.5%

Source: Goldman Sachs Global ECS Research, Goldman Sachs Research estimates.

## Reg AC

I, Marcelo Aguiar, hereby certify that all of the views expressed in this report accurately reflect my personal views about the subject company or companies and its or their securities. I also certify that no part of my compensation was, is or will be, directly or indirectly, related to the specific recommendations or views expressed in this report.

## Investment Profile

The Goldman Sachs Investment Profile provides investment context for a security by comparing key attributes of that security to its peer group and market. The four key attributes depicted are: growth, returns, multiple and volatility. Growth, returns and multiple are indexed based on composites of several methodologies to determine the stocks percentile ranking within the region's coverage universe.

The precise calculation of each metric may vary depending on the fiscal year, industry and region but the standard approach is as follows:

**Growth** is a composite of next year's estimate over current year's estimate, e.g. EPS, EBITDA, Revenue. **Return** is a year one prospective aggregate of various return on capital measures, e.g. CROCI, ROACE, and ROE. **Multiple** is a composite of one-year forward valuation ratios, e.g. P/E, dividend yield, EV/FCF, EV/EBITDA, EV/DACF, Price/Book. **Volatility** is measured as trailing twelve-month volatility adjusted for dividends.

## Quantum

Quantum is Goldman Sachs' proprietary database providing access to detailed financial statement histories, forecasts and ratios. It can be used for in-depth analysis of a single company, or to make comparisons between companies in different sectors and markets.

## Disclosures

### Coverage group(s) of stocks by primary analyst(s)

Marcelo Aguiar: Latin America-Metals, Mining & Steel, Latin America-Paper & Pulp.

Latin America-Metals, Mining & Steel: Companhia Siderurgica Nacional, Companhia Siderurgica Nacional, Gerdau S.A., Gerdau S.A., Gerdau S.A. (ADR), Metalurgica Gerdau S.A., Ternium S.A., Usiminas, Usiminas, Vale, Vale.

Latin America-Paper & Pulp: Fibria Celulose S.A., Fibria Celulose S.A., Klabin S.A., Suzano Papel E Celulose SA.

### Company-specific regulatory disclosures

The following disclosures relate to relationships between The Goldman Sachs Group, Inc. (with its affiliates, "Goldman Sachs") and companies covered by the Global Investment Research Division of Goldman Sachs and referred to in this research.

Goldman Sachs expects to receive or intends to seek compensation for investment banking services in the next 3 months: Fibria Celulose S.A. (\$21.40) and Suzano Papel E Celulose SA (R\$21.60)

Goldman Sachs had a non-investment banking securities-related services client relationship during the past 12 months with: Fibria Celulose S.A. (\$21.40)

Goldman Sachs had a non-securities services client relationship during the past 12 months with: Fibria Celulose S.A. (\$21.40)

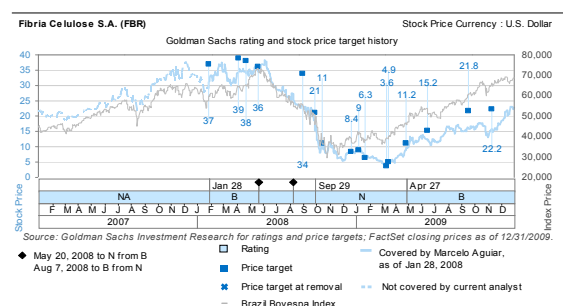
### Distribution of ratings/investment banking relationships

Goldman Sachs Investment Research global coverage universe

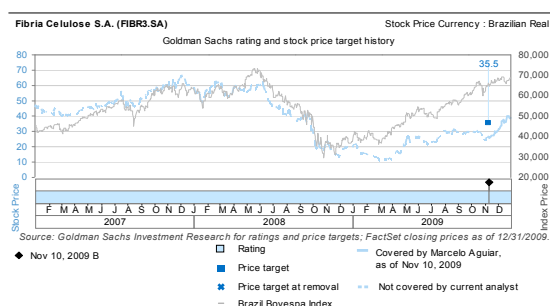
	Rating Distribution			Investment Banking Relationships		
	Buy	Hold	Sell	Buy	Hold	Sell
Global	31%	53%	16%	53%	47%	40%

As of January 1, 2010, Goldman Sachs Global Investment Research had investment ratings on 2,763 equity securities. Goldman Sachs assigns stocks as Buys and Sells on various regional Investment Lists; stocks not so assigned are deemed Neutral. Such assignments equate to Buy, Hold and Sell for the purposes of the above disclosure required by NASD/NYSE rules. See 'Ratings, Coverage groups and views and related definitions' below.

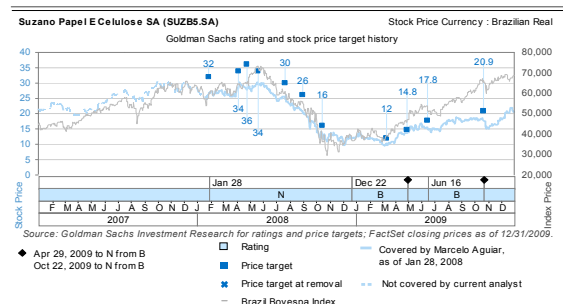
## Price target and rating history chart(s)



The price targets shown should be considered in the context of all prior published Goldman Sachs research, which may or may not have included price targets, as well as developments relating to the company, its industry and financial markets.



The price targets shown should be considered in the context of all prior published Goldman Sachs research, which may or may not have included price targets, as well as developments relating to the company, its industry and financial markets.



The price targets shown should be considered in the context of all prior published Goldman Sachs research, which may or may not have included price targets, as well as developments relating to the company, its industry and financial markets.

## Regulatory disclosures

### Disclosures required by United States laws and regulations

See company-specific regulatory disclosures above for any of the following disclosures required as to companies referred to in this report: manager or co-manager in a pending transaction; 1% or other ownership; compensation for certain services; types of client relationships; managed/co-managed public offerings in prior periods; directorships; for equity securities, market making and/or specialist role. Goldman Sachs usually makes a market in fixed income securities of issuers discussed in this report and usually deals as a principal in these securities.

The following are additional required disclosures: **Ownership and material conflicts of interest:** Goldman Sachs policy prohibits its analysts, professionals reporting to analysts and members of their households from owning securities of any company in the analyst's area of coverage.

**Analyst compensation:** Analysts are paid in part based on the profitability of Goldman Sachs, which includes investment banking revenues. **Analyst as officer or director:** Goldman Sachs policy prohibits its analysts, persons reporting to analysts or members of their households from serving as an officer, director, advisory board member or employee of any company in the analyst's area of coverage. **Non-U.S. Analysts:** Non-U.S. analysts may not be associated persons of Goldman Sachs & Co. and therefore may not be subject to NASD Rule 2711/NYSE Rules 472 restrictions on communications with subject company, public appearances and trading securities held by the analysts.

**Distribution of ratings:** See the distribution of ratings disclosure above. **Price chart:** See the price chart, with changes of ratings and price targets in prior periods, above, or, if electronic format or if with respect to multiple companies which are the subject of this report, on the Goldman Sachs website at <http://www.gs.com/research/hedge.html>.

### Additional disclosures required under the laws and regulations of jurisdictions other than the United States

The following disclosures are those required by the jurisdiction indicated, except to the extent already made above pursuant to United States laws and regulations. **Australia:** This research, and any access to it, is intended only for "wholesale clients" within the meaning of the Australian Corporations Act. **Canada:** Goldman Sachs & Co. has approved of, and agreed to take responsibility for, this research in Canada if and to the extent it relates to equity securities of Canadian issuers. Analysts may conduct site visits but are prohibited from accepting payment or reimbursement by the company of travel expenses for such visits. **Hong Kong:** Further information on the securities of covered companies referred to in this research may be obtained on request from Goldman Sachs (Asia) L.L.C. **India:** Further information on the subject company or companies referred to in this research may be obtained from Goldman Sachs (India) Securities Private Limited; **Japan:** See below. **Korea:** Further information on the subject company or companies referred to in this research may be obtained from Goldman Sachs (Asia) L.L.C., Seoul Branch. **Russia:** Research reports distributed in the Russian Federation are not advertising as defined in the Russian legislation, but are information and analysis not having product promotion as their main purpose and do not provide appraisal within the meaning of the Russian legislation on appraisal activity. **Singapore:** Further information on the covered companies referred to in this research may be obtained from Goldman Sachs (Singapore) Pte. (Company Number: 198602165W). **Taiwan:** This material is for reference only and must not be reprinted without permission. Investors should carefully consider their own investment risk. Investment results are the responsibility of the individual investor. **United Kingdom:** Persons who would be categorized as retail clients in the United Kingdom, as such term is defined in the rules of the Financial Services Authority, should read this research in conjunction with prior Goldman Sachs research on the covered companies referred to herein and should refer to the risk warnings that have been sent to them by Goldman Sachs International. A copy of these risk warnings, and a glossary of certain financial terms used in this report, are available from Goldman Sachs International on request.



**European Union:** Disclosure information in relation to Article 4 (1) (d) and Article 6 (2) of the European Commission Directive 2003/126/EC is available at [http://www.gs.com/client\\_services/global\\_investment\\_research/europeanpolicy.html](http://www.gs.com/client_services/global_investment_research/europeanpolicy.html) which states the European Policy for Managing Conflicts of Interest in Connection with Investment Research.

**Japan:** Goldman Sachs Japan Co., Ltd. is a Financial Instrument Dealer under the Financial Instrument and Exchange Law, registered with the Kanto Financial Bureau (Registration No. 69), and is a member of Japan Securities Dealers Association (JSDA) and Financial Futures Association of Japan (FFAJ). Sales and purchase of equities are subject to commission pre-determined with clients plus consumption tax. See company-specific disclosures as to any applicable disclosures required by Japanese stock exchanges, the Japanese Securities Dealers Association or the Japanese Securities Finance Company.

## Ratings, coverage groups and views and related definitions

**Buy (B), Neutral (N), Sell (S)** -Analysts recommend stocks as Buys or Sells for inclusion on various regional Investment Lists. Being assigned a Buy or Sell on an Investment List is determined by a stock's return potential relative to its coverage group as described below. Any stock not assigned as a Buy or a Sell on an Investment List is deemed Neutral. Each regional Investment Review Committee manages various regional Investment Lists to a global guideline of 25%-35% of stocks as Buy and 10%-15% of stocks as Sell; however, the distribution of Buys and Sells in any particular coverage group may vary as determined by the regional Investment Review Committee. Regional Conviction Buy and Sell lists represent investment recommendations focused on either the size of the potential return or the likelihood of the realization of the return.

**Return potential** represents the price differential between the current share price and the price target expected during the time horizon associated with the price target. Price targets are required for all covered stocks. The return potential, price target and associated time horizon are stated in each report adding or reiterating an Investment List membership.

**Coverage groups and views:** A list of all stocks in each coverage group is available by primary analyst, stock and coverage group at <http://www.gs.com/research/hedge.html>. The analyst assigns one of the following coverage views which represents the analyst's investment outlook on the coverage group relative to the group's historical fundamentals and/or valuation. **Attractive (A).** The investment outlook over the following 12 months is favorable relative to the coverage group's historical fundamentals and/or valuation. **Neutral (N).** The investment outlook over the following 12 months is neutral relative to the coverage group's historical fundamentals and/or valuation. **Cautious (C).** The investment outlook over the following 12 months is unfavorable relative to the coverage group's historical fundamentals and/or valuation.

**Not Rated (NR).** The investment rating and target price have been removed pursuant to Goldman Sachs policy when Goldman Sachs is acting in an advisory capacity in a merger or strategic transaction involving this company and in certain other circumstances. **Rating Suspended (RS).** Goldman Sachs Research has suspended the investment rating and price target for this stock, because there is not a sufficient fundamental basis for determining an investment rating or target. The previous investment rating and price target, if any, are no longer in effect for this stock and should not be relied upon. **Coverage Suspended (CS).** Goldman Sachs has suspended coverage of this company. **Not Covered (NC).** Goldman Sachs does not cover this company. **Not Available or Not Applicable (NA).** The information is not available for display or is not applicable. **Not Meaningful (NM).** The information is not meaningful and is therefore excluded.

## Global product; distributing entities

The Global Investment Research Division of Goldman Sachs produces and distributes research products for clients of Goldman Sachs, and pursuant to certain contractual arrangements, on a global basis. Analysts based in Goldman Sachs offices around the world produce equity research on industries and companies, and research on macroeconomics, currencies, commodities and portfolio strategy. This research is disseminated in Australia by Goldman Sachs JBWere Pty Ltd (ABN 21 006 797 897) on behalf of Goldman Sachs; in Canada by Goldman Sachs & Co. regarding Canadian equities and by Goldman Sachs & Co. (all other research); in Hong Kong by Goldman Sachs (Asia) L.L.C.; in India by Goldman Sachs (India) Securities Private Ltd.; in Japan by Goldman Sachs Japan Co., Ltd.; in the Republic of Korea by Goldman Sachs (Asia) L.L.C., Seoul Branch; in New Zealand by Goldman Sachs JBWere (NZ) Limited on behalf of Goldman Sachs; in Russia by OOO Goldman Sachs; in Singapore by Goldman Sachs (Singapore) Pte. (Company Number: 198602165W); and in the United States of America by Goldman Sachs & Co. Goldman Sachs International has approved this research in connection with its distribution in the United Kingdom and European Union.

**European Union:** Goldman Sachs International, authorized and regulated by the Financial Services Authority, has approved this research in connection with its distribution in the European Union and United Kingdom; Goldman Sachs & Co. oHG, regulated by the Bundesanstalt für Finanzdienstleistungsaufsicht, may also distribute research in Germany.

## General disclosures

This research is for our clients only. Other than disclosures relating to Goldman Sachs, this research is based on current public information that we consider reliable, but we do not represent it is accurate or complete, and it should not be relied on as such. We seek to update our research as appropriate, but various regulations may prevent us from doing so. Other than certain industry reports published on a periodic basis, the large majority of reports are published at irregular intervals as appropriate in the analyst's judgment.

Goldman Sachs conducts a global full-service, integrated investment banking, investment management, and brokerage business. We have investment banking and other business relationships with a substantial percentage of the companies covered by our Global Investment Research Division. Goldman Sachs & Co., the United States broker dealer, is a member of SIPC (<http://www.sipc.org>).

Our salespeople, traders, and other professionals may provide oral or written market commentary or trading strategies to our clients and our proprietary trading desks that reflect opinions that are contrary to the opinions expressed in this research. Our asset management area, our proprietary trading desks and investing businesses may make investment decisions that are inconsistent with the recommendations or views expressed in this research.

We and our affiliates, officers, directors, and employees, excluding equity and credit analysts, will from time to time have long or short positions in, act as principal in, and buy or sell, the securities or derivatives, if any, referred to in this research.

This research is not an offer to sell or the solicitation of an offer to buy any security in any jurisdiction where such an offer or solicitation would be illegal. It does not constitute a personal recommendation or take into account the particular investment objectives, financial situations, or needs of individual clients. Clients should consider whether any advice or recommendation in this research is suitable for their particular circumstances and, if appropriate, seek professional advice, including tax advice. The price and value of investments referred to in this research and the income from



them may fluctuate. Past performance is not a guide to future performance, future returns are not guaranteed, and a loss of original capital may occur. Fluctuations in exchange rates could have adverse effects on the value or price of, or income derived from, certain investments.

Certain transactions, including those involving futures, options, and other derivatives, give rise to substantial risk and are not suitable for all investors. Investors should review current options disclosure documents which are available from Goldman Sachs sales representatives or at <http://www.theocc.com/publications/risks/riskchap1.jsp>. Transactions cost may be significant in option strategies calling for multiple purchase and sales of options such as spreads. Supporting documentation will be supplied upon request.

Our research is disseminated primarily electronically, and, in some cases, in printed form. Electronic research is simultaneously available to all clients.

Disclosure information is also available at <http://www.gs.com/research/hedge.html> or from Research Compliance, One New York Plaza, New York, NY 10004.

**Copyright 2010 The Goldman Sachs Group, Inc.**

**No part of this material may be (i) copied, photocopied or duplicated in any form by any means or (ii) redistributed without the prior written consent of The Goldman Sachs Group, Inc.**