

April 2006

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Contrasting Returns on Kraft Pulp Production

by Jim Rowland

In contrast to the experience of off shore kraft market pulp producers, the early part of the 21st century has not been kind to those based in North America. It has been particularly difficult for Canada-based capacity.

Once a mainstay of the Canadian forest products industry, kraft pulp has become less and less an economically viable product, either as an on-site raw material for conversion into a finished paper or board product or as a raw material for sale in the “open” market. It faces a litany of competitive factors that have reduced its profitability to a bare minimum. Among the factors confronting this sector are higher fiber and energy costs, unattractive price structure (particularly in Canadian dollar terms) and increasing competition from overseas producers. The result of this “perfect storm” has been all too predictable—a significant reduction in kraft pulping capacity in the past few years.

In summary form, **Table 1** on the following page shows a list of pulp closures including those that are considered as “indefinite”, such as Domtar’s Lebel-sur-Quevillon mill that could possibly restart should the environment improve.

Of the 2.3 million mt of kraft pulp capacity in this list, roughly 30% was converted on-site to a paper or board product; the other 70% was dried and sold as market pulp. The casualty list has now extended to U.S.-based producers. Fraser Papers recently announced a decision to close a hardwood kraft pulp mill (capacity of 230,000 mt) in New Hampshire and Georgia-Pacific has plans to shut down a pulp mill (capacity of 220,000 mt) in Maine.

The difficulties faced by North American kraft pulp producers are readily apparent when the financial results of their market pulp »» continued on page 2

Big 3 news magazines struggle As other media outlets evolve

by David Allan

“The State of the News Media 2006” looks at magazines, traditional daily newspapers, ethnic and specialty publications, network and cable television and the Internet. It can be viewed at stateofthenewsmedia.com. It was published by the Project for Excellence in Journalism (PEJ), an affiliate of the Columbia School of Journalism.

News magazines have long been the flagships of the North American magazine business, and if 2005 is any indication, the business is in for some changes in the future. A recent review of the state of magazine industry showed some bright spots, but suggested that the good news can’t obscure the fact that some prominent titles need to evolve to keep up with a fast-changing media market.

The importance of this issue to the paper industry is underlined by **Figure 1** and **Figure 2**, representing RISI’s view of usage trends by the U.S. magazine industry. Apparent consumption of paper by all magazines isn’t expected to grow by a lot—in fact, as **Figure 1** illustrates, RISI sees 2010 usage as rising by just 3.6% from 2005 levels, going from 3.52 million to about 3.65 million tons. At the core of RISI’s forecast is a belief that ad pages will edge up by an average of about just over 1% per annum, slightly below the rate of the most recent three years. At the same time, circulation is projected to decrease by something over a quarter-percent per annum.

During the forecast period, supercalendered uncoated mechanical should gain a bit of share from coated paper, while usage within the coated spectrum shifts modestly from no. 5 to no. 3 and no. 4 (**Figure 2**). Thus, it appears that some magazines will be choosing a lower-cost (but nearly quality-competitive) substrate for economy reasons while others attempt to “upgrade” their »» continued on page 5

CONTRASTING RETURNS ‹‹‹ continued from page 1

operations are analyzed and then compared with those of off-shore producers. The recent financial history of a cross-section of major producers—all with capacity located in North America—is set out below. For simplicity, the financial focus is on three key variables—sales revenue, EBITDA and operating profit—and a key derivative, the EBITDA margin. EBITDA margin is defined as the ratio of cash operating profit before financial charges and income taxes to sales revenue. In using it as a comparative tool, the margin is not without weaknesses. The definition of sales revenue—normally gross sales less discounts and allowances—might also net out outbound freight costs. Transfer pricing policy for wood fiber flowing from a firm's wood harvesting/sawmilling operations to its market pulp operations varies among companies. EBITDA margins among companies can also be materially impacted by pulp price and currency hedging activities. Notwithstanding the different approaches taken by individual firms in these areas, the EBITDA margin ranks among the best statistical tools for measuring a company's financial performance in relation to that of competitors.

NORTH AMERICAN PRODUCERS

Bowater

Bowater Inc. is a major North American producer of market pulp, both hardwood and softwood kraft as well as fluff pulp. Until the pending closure of a pulp line at its Thunder Bay, Ontario mill, some 45% of its market pulp capacity of 1.2 million metric tons was located in Canada, with the remaining 55% in the United States. As the data below indicates, Bowater has had one respectable year in the past four years. Some improvement is expected in 2006 resulting from some price appreciation and the closure of the high-cost pulp line in Thunder Bay.

Catalyst Paper (formerly NorskeCanada)

Located on the coast of British Columbia, Catalyst Paper produces 500,000 metric tons kraft market pulp at two of its five regional pulp and paper mills. One of the higher cost Canada-based producers, Catalyst Paper has struggled to break even on a cash basis in the past four years. Unless there is sustained improvement in the pulp segment's bottom line, Catalyst Paper will, no doubt, look to shut down at least a portion of its high-cost pulping capacity down the road, most likely the higher cost capacity at its Campbell River mill.

Pope & Talbot

An American company, Pope & Talbot has 75% of pulp capacity of 800,000 metric tons at two mill sites in British Columbia, with the remaining capacity located at a mill in Oregon. The high cost of its three-line operation in Nanaimo,

TABLE 1

Company/Mill	Capacity	Closure Date
Bowater/Thunder Bay, Ont.	210,000 mt	Q2/2006
Domtar/ Lebel-sur Quevillon, Que	265,000 mt	Q4/2005
Domtar/ Cornwall, Ont	140,000 mt	Q1/2006
Neenah Paper/Terrace Bay, Ont	125,000 mt	Q2/2005
New Skeena/Prince Rupert, BC	450,000 mt	Q2/2004
Smurfit-Stone/New Richmond, Que	200,000 mt	Q3/2005
UPM/Miramichi, NB	220,000 mt	Q1/2005
West Fraser/Hinton, Alb.	70,000 mt	Q4/2006
Western Forest/Squamish BC	275,000 mt	Q4/2005
Weyerhaeuser/Prince Albert, Sask	330,000 mt	Q1/2006

TABLE 2 - BOWATER MARKET PULP OPERATIONS

(\$US millions)	2002	2003	2004	2005
Sales Revenues	498.7	489.9	543.3	534.3
EBITDA	76.4	66.4	94.8	65.8
EBITDA Margin	15.3%	13.6%	17.4%	12.3%
Depreciation	67.4	59.7	57.6	58.1
Operating Profit	9.0	6.7	37.2	7.7

TABLE 3 - CATALYST PAPER MARKET PULP OPERATIONS

(\$CAD millions)	2002	2003	2004	2005
Sales Revenues	237.9	278.6	287.9	300.1
EBITDA	(10.7)	7.2	4.2	(22.1)
EBITDA Margin	(4.5%)	2.6%	1.5%	(7.4%)
Depreciation	23.9	29.7	33.1	36.7
Operating Profit	(34.6)	(22.5)	(28.9)	(58.8)

British Columbia, remains a significant obstacle to achieving an acceptable level of profitability.

SFK Pulp

SFK Pulp owns one market pulp mill (capacity of 375,000 mt) in north-central Quebec. It is the newest (start-up 1978) and the largest kraft pulp mill in eastern Canada. Relatively efficient in many respects, it suffers from the ongoing reduction in the available supply of softwood fiber in Quebec and Ontario.

OFF-SHORE PRODUCERS

North American market pulp producers are increasingly less competitive (and thereby less profitable) than producers in other areas of the world. And with better financial returns, these of shore producers have been actively re-investing in their market pulp businesses. There follows below a financial profile of four major market pulp producers, two located in northern Europe and two in South America.

Metsa Botnia

Metsa Botnia, one of the largest Nordic producers with 100% of its capacity based in Finland, has had substantially better financial results than its North American brethren. (Its 2005 results would have been even better if it had not endured a mid-year industry-wide strike.). Metsa Botnia, having enjoyed healthy cash flows from its domestic operations, is

TABLE 4 - POPE & TALBOT MARKET PULP OPERATIONS

(\$US millions)	2002	2003	2004	2005
Sales Revenues	322.9	369.9	432.5	442.6
EBITDA	5.4	21.0	40.6	12.8
EBITDA Margin	1.7%	5.7%	9.4%	2.9%
Depreciation	26.7	28.9	28.8	26.4
Operating Profit	(21.3)	(7.9)	11.8	(13.6)

TABLE 5 - SFK PULP

(\$CAD millions)	2002	2003	2004	2005
Sales Revenues	87.5	215.9	269.5	236.2
EBITDA	24.5	42.4	62.0	29.3
EBITDA Margin	28.0%	19.6%	23.0%	12.4%
Depreciation	13.1	30.7	30.0	29.6
Operating Profit	11.4	11.7	32.0	(0.3)

Note: Data for 2002 are for the May 21 - December 31 period subsequent to the sale of the mill to its present owners.

TABLE 6 - METSA BOTNIA (CORPORATE)

(Euros millions)	2002	2003	2004	2005
Sales Revenues	1,033.5	1,006.4	1,066.0	946.5
EBITDA	265.5	195.0	262.1	192.5
EBITDA Margin	25.7%	19.4%	24.6%	20.3%
Depreciation	111.7	110.7	120.5	112.2
Operating Profit	153.8	84.2	141.6	80.3

TABLE 7 - SODRA CELL

(SEK millions)	2002	2003	2004	2005
Sales Revenues	7,728	8,108	8,290	8,125
EBITDA	1,533	2,248	1,973	1,433 ¹
EBITDA Margin	19.8%	27.7%	23.8%	17.6%
Depreciation	774	759	733	725 ¹
Operating Profit	759	1,489	1,241	708

1. Estimated.

now looking to diversify its geographic risk by helping to bankroll a new market pulp mill in Uruguay.

Sodra

The largest Nordic market pulp producer, Sodra Cell, the pulp segment of Sodra, has 75% of its market pulp capacity located in Sweden, with the remaining 25% in Norway. It is the largest “non-integrated” market pulp producer in the world with over 2 million mt of capacity.

Aracruz

The largest South American producer, Aracruz, has had a remarkably good record at maintaining healthy margins in the past four years, even in the face of a much stronger Brazilian currency versus the U.S. dollar. With this history of strong cash flows, Aracruz has not lost its appetite for expansion. In a joint venture with StoraEnso, the Nordic pulp and paper multinational, Aracruz started up in 2005 a new market pulp mill (known as Veracell) with a nominal capacity of 900,000 mt.

Arauco

Another large South American producer, Arauco has more than held its own in terms of profitability with its peer group of major off shore market pulp producers. With 85% of its pulp capacity in Chile and 15% in Argentina, Arauco has been expanding its market pulp capacity in its own back yard. In 2004, it started up a Chilean “greenfield” market pulp mill

TABLE 8 - ARACRUZ (CORPORATE)

(\$US millions)	2002	2003	2004	2005
Sales Revenues	670.0	1,003.1	1,167.1	1,345.2
EBITDA	267.0	498.7	562.8	648.2
EBITDA Margin	39.9%	49.7%	48.2%	48.2%
Depreciation	171.5	191.5	206.2	201.1
Operating Profit	95.5	307.2	356.6	447.1

Note: About 5% of Aracruz's sales are derived from paper production.

TABLE 9 - ARAUCO MARKET PULP OPERATIONS

(\$US millions)	2002	2003	2004	2005
Sales Revenues	631.0	712.4	1,008.6	1,006.4
EBITDA	265.3	310.4	478.3	400.0 ¹
EBITDA Margin	42.0%	43.6%	47.4%	40%
Depreciation	75.4	80.1	99.0	110.0 ¹
Operating Profit	189.9	230.3	379.3	290.0 ¹

1. Estimated.

(capacity of 685,000 mt); a second local “greenfield” mill (capacity of 850,000 mt) is scheduled to come on stream in mid-2006.

CONCLUSION

It is not difficult to draw conclusions from this overview of the recent financial history of a cross-section of the world's largest market pulp producers. Based on the margins of the two South American producers, it is not too surprising that, with these kinds of financial returns producing kraft market pulp, investments in new capacity are continuing at a rapid pace. In the Nordic region, very little in the way of new capacity is being contemplated, but a healthy re-investment in existing capacity should ensure a viable industry for years to come. In Canada and parts of the United States, the clock is ticking for a number of kraft pulp lines. With very little money being re-invested in most of these pulp mills, it seems only a matter of time before other mills join the ever-growing closure list.

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Folding carton field to grow on Product differentiation, innovation

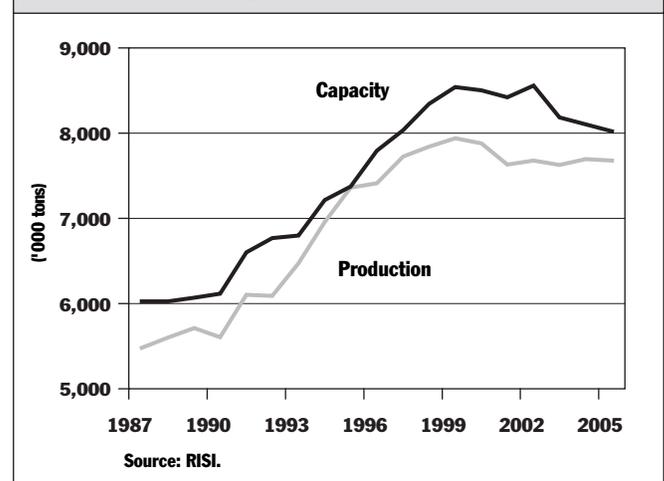
by Sandra Vasconcellos

Paperboard packaging is the largest sub-sector of the \$105 billion U.S. packaging industry, which also comprises the plastics, metals, and glass segments. According to industry sources, paper and paperboard packaging accounts for 49% of the overall consumption of packaging substrates, followed by plastics with 26%, metals with 16%, and glass with 4%, among other minor categories.

As the consumer has become a more integral part of the supply chain process, the role of packaging has evolved from simply protecting and transporting thousands of consumer products to providing convenience, portability, product information, winning advertisement, brand awareness, functionality, and more. These added functions are becoming ever more important to win

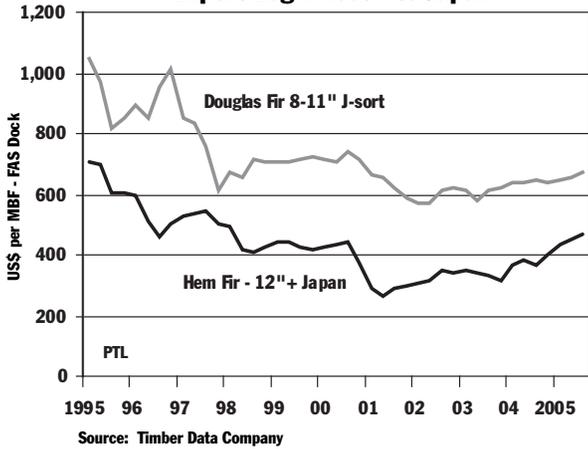
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FIGURE 1 - U.S. FOLDING BOXBOARD: PRODUCTION/CAPACITY

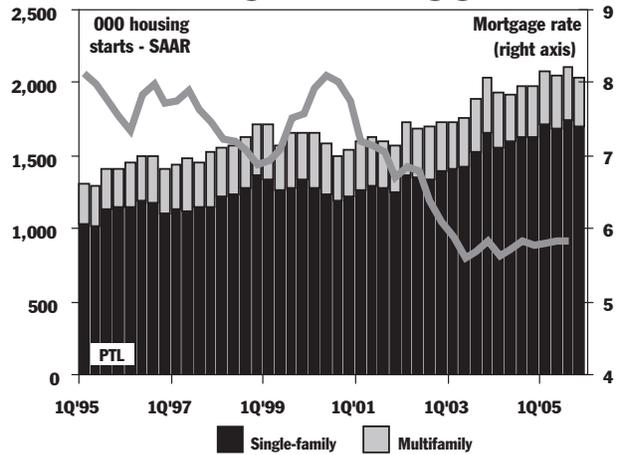


PTL Chartwatch: Wood Products

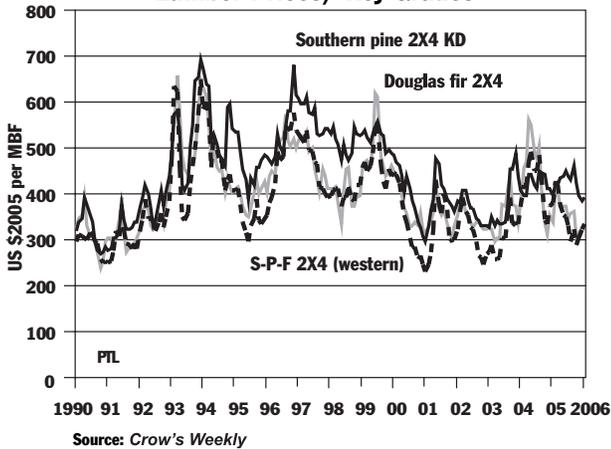
Export Log Prices - to Japan



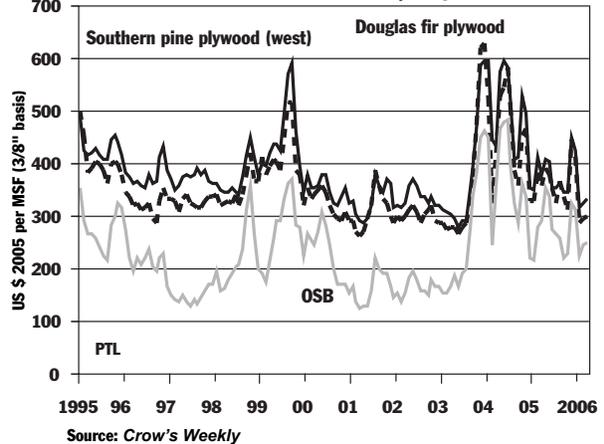
U.S. Housing Starts vs Mortgage Rates¹



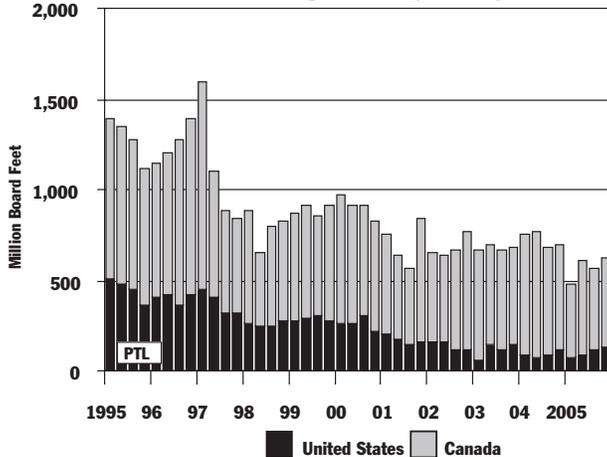
Lumber Prices, Key Grades



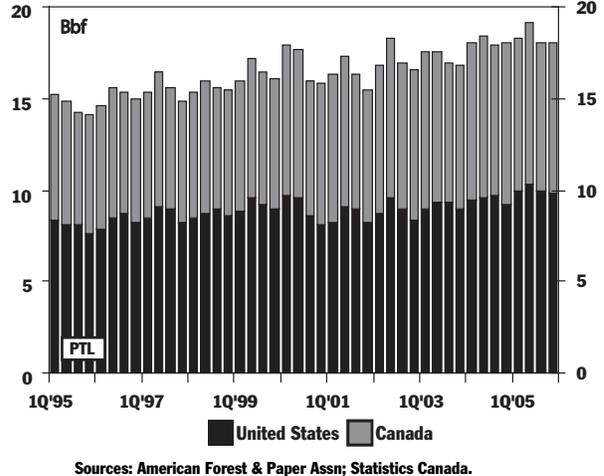
Structural Panel Prices, Key Grades



North American Overseas Lumber Exports* - Quarterly



North American Softwood Lumber Production



MAGAZINES

«« continued from page 1

appearance to attract more readers and advertisers. But the key point is that with so little growth in the outlook, the magazine paper industry can ill afford disruptive trends.

The State of the News Media 2006 report touches only lightly on issues affecting all magazines in general, spending most of its time on the news titles, which play an important social role and also bear some of the most time-honored names in the business. The report doesn't forecast hard numbers; it discusses trends based on recent history. Some interesting points:

- Magazine industry ad pages inched up by 0.5% in 2005 “despite a relatively strong economy”. (On the other hand, overall magazine ad dollars were up by 7%.) Normally, the report notes, a decent rise in Gross Domestic Product would have yielded stronger ad page tallies; they speculate that competition from new targeted media such as the Internet are eating into the franchise of targeted print publications like most magazines. Major titles such as *Time*, *Business Week* and *U.S. News and World Report* announced layoffs, while Gruner & Jahr exited the U.S. market completely.

- Despite predictions that the celebrity field was saturated, the sector expanded again in 2005, “with some titles seeing double-digit growth” in both advertising and circulation.

- The three big news magazines (*Time*, *Newsweek* and *U.S. News and World Report*) continue a trend away from national news and toward celebrity and other cultural news. For example, in one week in 2005 that the report examined in detail, *Time* had more “back of the book”—i.e. “soft news”, which appears in the back of the magazine—than hard news, by actual page count.

- While national news coverage in the print product may suffer, *U.S. News* and others indicated they will beef up such content on their web sites.

- With the news magazines continuing to drift away from hard news, a new title has emerged to give them a run for their money in the circulation and advertising areas. *The Week*, founded by a former White House correspondent, offers a digest of the week's news reporting from around the U.S. and the world, emphasizing conciseness while not actually

generating any of its own reportage. The publication has grown since its 2001 founding at a rate much greater than average for the magazine industry, with ad pages rising in 2005 by 8.6% and ad dollars shooting up by 62.5% (*Time* declined in both metrics last year.) More significantly, *The Week* in 2005 reached a third of the ad page count attained by *U.S. News & World Report* and a quarter of that recorded by *Time*—in just its fifth year in existence. It appears that *The Week*—with its focus on serious news, briefly presented—may have hit on something, and in the process may represent a threat to the traditional news magazines. It is unclear to the editors what will be the result of a successful title that makes no contribution to the costly activity of generating the actual news coverage readers still seem to want.

- Also showing strength among titles that provide at least some focus on current events were *The Economist* and the *New Yorker*. Along with the results for *The Week*, this suggests an audience remains for serious news coverage. The report wondered, “is it possible that the mass, broad-topic news magazine simply isn't going to be dominant in the future on the news side? Is the news market itself fragmenting and, if so, where does that leave the Big Three news titles?” The editors speculate that the world of news magazines in the future may break down into specialist titles like *The Economist* and the *New Yorker*, mass market “print-blog” products like *The Week*, and some as-yet-undetermined role for the traditional Big Three.

Looking at the entertainment news sector, the report notes that “entertainment titles are growing again, and growing fast. New titles are jumping into a market that was once thought to be saturated, some coming from Europe.”

As **Figure 3** illustrates, the decline in the Big Three news magazines' circulation, while not precipitous, is of fairly long duration. Indeed, all three now sell fewer copies than they did in 1988 despite the rise in population since that year. And the report notes that unaudited results for the three shows further declines in 2005 of 0.2% for *Time*, 0.3% for *Newsweek* and 1.0% for *U.S. News*. The average reader for the Big Three in 2005 was over 46 years of age, more than two years older than

FIGURE 1 - PROJECTED MAGAZINE PAPER USAGE
(000 tons)

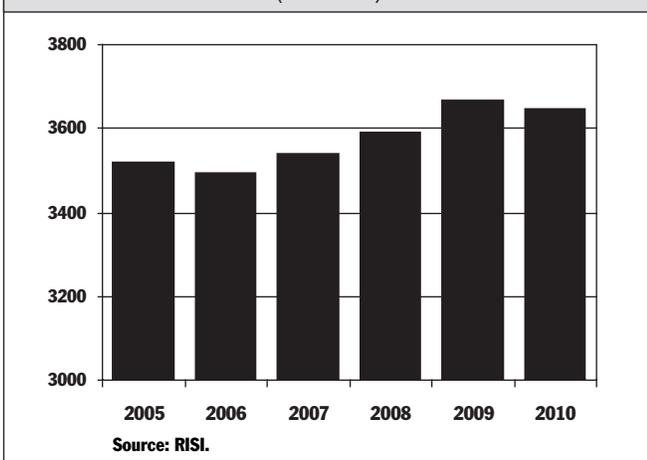
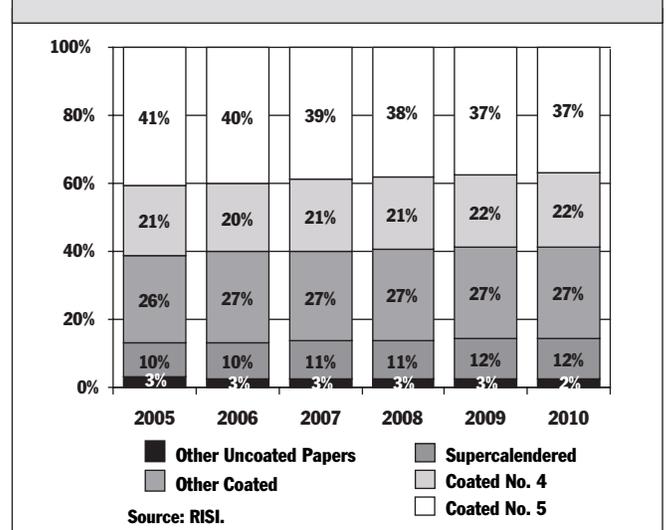


FIGURE 2 - MAGAZINE PAPER BREAKDOWN



the adult population as a whole. (On the other hand, *The Week* seems to do well with younger readers—as do its counterparts in the newspaper business, the free dailies.) A decade ago, the Big Three readership matched the population, at something under 42 years of age. These readers are also wealthier than the population as a whole, with family incomes that exceed the national average by \$15,000—compared with \$10,000 a decade ago.

Looking at the entertainment field, the result—at least for now—could not be more different. The report noted the 2005 debut of *OK!*, competing with *People*, *Us* and *The Star*. Even so, with new competitors in the field as well as existing titles like *In Touch* and *The Star* (re-launched as a glossy), circulation in the sector continues to expand. One of the best performers, *Us*, boosted its copy sales by two-thirds since 2000. The combination of “exclusives” about celebrities plus lots of pictures seems to be a winning one, in the editors’ view. They also note that the audience of the newer, faster-growing titles (as opposed to the old standards such as *People*) seems to be younger, so the new titles may be expanding the market by attracting newer readers.

The strength of the magazine field continues to be its receptiveness to entrepreneurial efforts, as the successes of *The Week* and *OK!* suggest. **Figure 4** shows the 2004 revenue of the top magazine publishing companies, but many of the most exciting new titles did not come from this list.

Conclusions

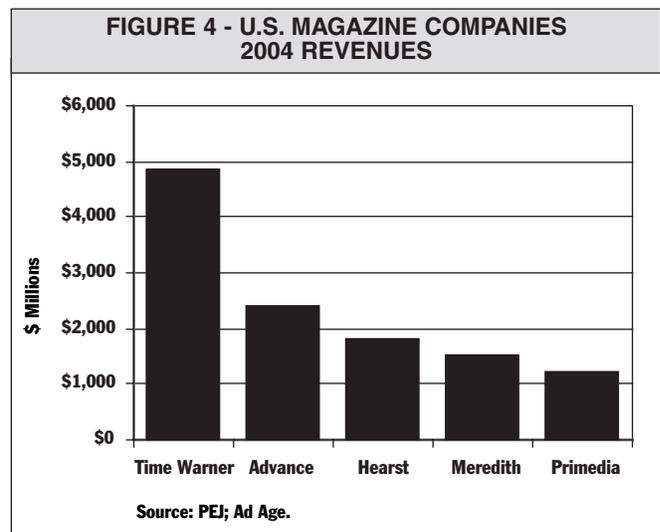
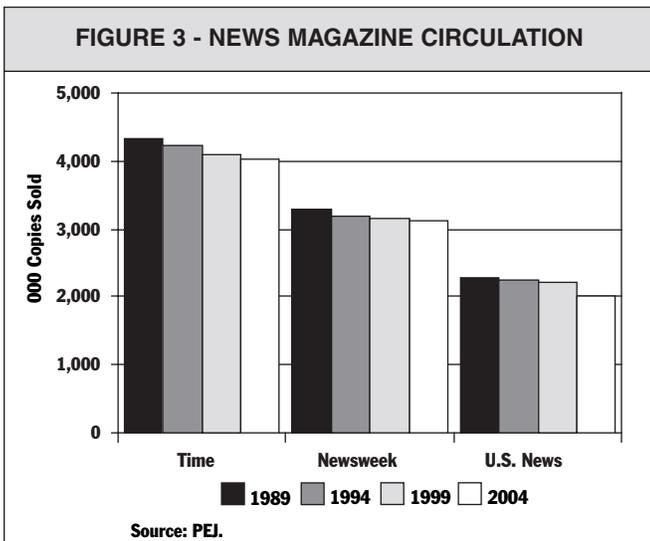
It has often been said that the magazine industry enjoys two (related) advantages over daily newspapers in the struggle to survive in today’s increasingly wired world: the highly entrepreneurial nature the magazine business, and the ability to offer advertisers a tightly focused audience for their commercial messages. There is a lot of truth to this, although it overstates the weakness of the newspaper industry (for example, the only reason newspaper publishing isn’t more entrepreneurial is the self-imposed limitations of the people who put out newspapers).

But it is easy to forget that all print media in general are blessed with one additional strength in the Internet Age: when they offer content that readers want, readers will pay for the

product—because most of us still enjoy holding a piece of paper in our hands and reading it. Even young people like the portability, the easy user-interface, and the sensory benefits of a well-printed, attractively-presented, relevant and interesting print product. The only reason they don’t read magazines (and newspapers) more often than they do is that they don’t often encounter print products that, from their point of view, meet the requirements I just stated.

I share the concerns of the authors of the study about the future of the print news media. It is hard to cover the budget of a news organization if content can be accessed for free by readers—and that applies whether the free content is appearing in digest form in *The Week* or is showing up on somebody’s web site. I don’t think we want a world where insightful, probing news coverage is unavailable because the fixed costs of journalism are no longer being spread across an adequate reader base—a world where the only “news” that is generally available comes in the form of press releases from the powers-that-be. The success of *The Week* shows that old-line titles aren’t delivering it in the way the audience wants—or, perhaps, have stopped trying to do so. The Big Three have, to some degree, responded to shifting audience priorities by taking the path of least resistance—dumbing down their content—rather than finding new ways to offer the news their readers need to see. Too few of them understand what it takes to create (with apologies to NBC) “Must-Read Magazines”.

No combination of feisty little specialty titles is going to replace the 9 million copies sold weekly by the Big Three if they go the way of the dodo (this is a particular concern to producers of no. 5 coated mechanical paper, used to print the Big Three). Until the traditional publishers identify a new path to readers’ hearts and minds, their recent circulation losses are likely to continue. The ultimate answer for any one of them is probably a combination of products and platforms capitalizing on their well-established brands; they need to compete for the universe of potential *Time* readers (for example) by offering various general and targeted products that reach them when, where, and how they want to be reached. It will take years to morph into that type of business. But if they water down the brand by turning their existing products into a form of *Us*



Weekly-with-senators, they will never rebuild the commercial-ly and journalistically powerful positions they once earned

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FOLDING CARTON FIELD <<< continued from page 3

the consumer given the plethora of choices at retail stores. Folding carton packaging appears poised to respond to this environment through continuous innovation to create greater shelf impact, functionality, variety, and a clearer environmental message.

With an aging population, and a more health-conscious consumer, pharmaceuticals, health foods and related products are some of the fastest growing segments for folding cartons. Also, food will continue to be an expanding market based on growing away-from-home and home-meal replacement consumption patterns, especially in the frozen food sector.

Product differentiation is the clear key to success and margin growth for paperboard packaging manufacturers amid aggressive competition from alternative packaging materials and rapid growth of foreign imports. Competing as a commodity will no longer be a future for folding carton packaging, because there are no price advantages for U.S. producers, especially as new capacity comes online in lower-cost producing regions.

Upstream trends

Paperboard or boxboard packaging production trends track the economics of processed foods and other nondurable goods, which in turn are driven by consumer spending trends. In more recent years, globalization and the reshuffling of trade flows of goods have also been impacting production patterns, with capacity in North America stagnating or shrinking and moving to emerging markets where the largest market growth potential exists.

U.S. capacity of folding boxboard, the material used to make folding cartons, significantly increased in the 1990s, posting a gain of 40.0% during the decade (See **Figure 1**). Capacity then decreased 6.1% between 1999 and 2005,

mainly in the recycled boxboard segment. The largest removal of tonnage occurred in the last few years mainly due to the economy, and substitution to plastics, imports, or consumer products produced overseas instead of the U.S. Also production of folding boxboard, excluding exports, steadily declined 5.9% between 1999 and 2005.

Last year, folding boxboard production (including exports) jumped 0.5% versus the prior year to 7.6 million short tons, but output is expected to decline once again by 1.0% this year and drop at an annualized rate of 0.9% through 2009, according to a RISI forecast. On the demand front, however, consumption of folding boxboard is projected to increase 1.1% this year to 8.5 million tons and at an annualized rate of 1.2% through 2009. But moderate demand growth will not be reflected in increased domestic production, as imports are expected to increasingly gain market share. As seen in **Figure 2**, boxboard imports were typically marginal, but have been on the rise since the 1990s. This growth will accelerate, with imports forecast to increase 24.1% in 2006 and jump at an annualized rate of 16.4% between 2006 and 2009.

The significant jump in imports is attributed to new capacity, especially in China. Asian regional capacity increased 1.1 million tons in 2004 and 1.3 million tons in 2005. Another 1.0 million tons are scheduled to come onstream in China during 2006.

This is causing a change in global trade flows. The new capacity in Asia has been displacing boxboard imports into China from suppliers in South Korea, Taiwan, and Indonesia into new export outlets. Because a wide price differential of about \$240/ton currently exists between Asia and North America, it is very likely that Asian boxboard will find a home in North America. The influx of Asian imports is expected to mostly impact the recycled boxboard sector, possibly triggering additional capacity shutdowns.

Folding cartons

The U.S. folding carton industry in 2005, comprised of about 300 companies with 480 plants, generated about \$9.01 billion in sales, flat from the previous year, according to the Paperboard Packaging Council. The top 10 folding carton producers in the U.S. account for 65% of carton sales, and the top

FIGURE 2 - FOLDING BOXBOARD IMPORTS

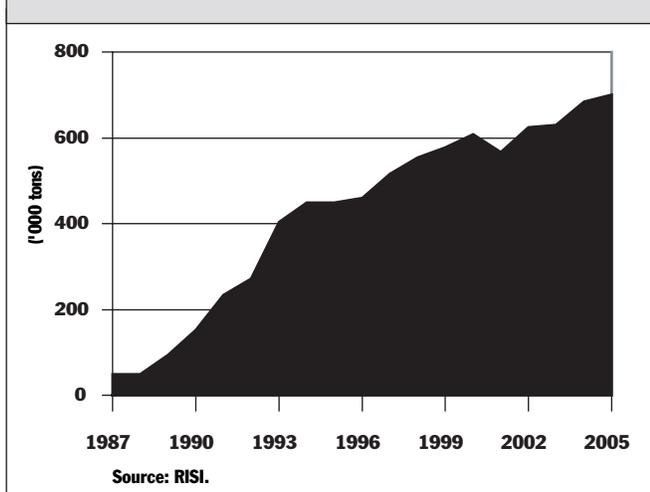
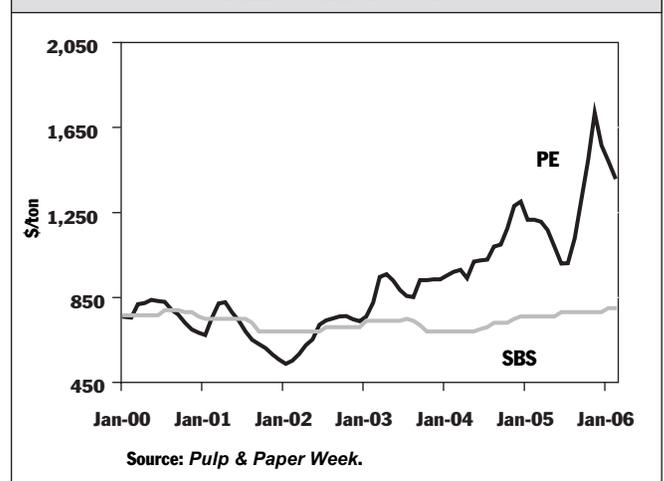


FIGURE 3 - U.S. PRICES: POLYETHYLENE VS. BLEACHED BOARD



five for 52%, with the largest producers relaying on significant levels of boxboard integration.

Folding carton manufacturers have also exercised capacity discipline on the back of competition against alternative materials and imports growth. Integrated producers have shut down about 21 folding carton plants since 2000, based on a survey conducted by RISI's *Pulp & Paper Week*. Folding carton shipments in 2005 fell 2.6% to 5.6 million tons compared with the previous year. Folding carton shipments this year are expected to jump 1.2% compared with 2005 and grow 1.1% in 2007, 1.2% in 2008, and just 0.1% in 2009, according to RISI's forecast for the PPC's 2005 Trends Report.

About 60% of carton shipments are for food products and 40% for non-food products. Carton shipments into non-food uses are expected to rise 2.1% this year, while shipments into food end uses are forecast to increase 1.2%. The markets with the best growth potential for folding cartons are in the health care and frozen foods sectors.

Carton shipments for the frozen food sector are expected to increase 1.8% this year and at an annualized rate of 2.0% in the next three years through 2009. Health care products will be the fastest growing segment among non-food products. U.S. shipments are projected to increase 3.1% this year and grow at an annualized rate of 4.9% between 2006 and 2009.

The anticipated growth in both the frozen foods and health care businesses are driven by fast-growing health care costs in the U.S. and growing demand for frozen food dinners, especially those that are for the diet conscious. In 2004, the U.S. spent \$1.4 trillion on health care, up from \$717 billion spent in 1990, according to the Henry J. Kaiser Family Foundation, a non-profit private group. That spending represents 16% of U.S. GDP. Continued increases in health care spending are expected to rise to 20% of U.S. GDP by 2015, the Centers for Medicare and Medicaid Services said in February.

The frozen meals and entrée market is about \$4.9 billion a year, up from \$3.4 billion in 1996, the Associated Press recently reported. On average, an American consumes six frozen meals a month, said the American Frozen Foods Institute, an industry group. Frozen foods have changed tremendously in terms of presentation, with selections today such as Indian curries, shrimp pad Thai, and panini grilled sandwiches.

Looking to other areas, RISI projects that U.S. folding carton shipments for paper products and soap products will increase at an annualized rate of 1.4% and 0.2%, respectively, in 2006-2009. Beverage is forecast to drop 0.9% this year and grow at an annualized rate of 1.5% in 2006-2009. Shipments into the dry food segment will continue a steady growth of 1.4% and 1.2%, respectively.

Packaging challenges and opportunities

Optimism in the folding cartons sector is tempered by concerns over energy and transportation costs, and aggressive global competition. Imports of consumer products have impacted folding carton demand domestically, because many of these goods are packaged onsite at foreign locations.

Amid a changing global playing field, folding carton manufacturers must redefine how they compete. The first step is to stop competing on price in the commodity arena and start competing on value derived from the special and unique qualities their cartons offer to consumers. Product

differentiation to satisfy specific customer needs can be done by investing in product authentication technology such as RFID, taking advantage of the environmental qualities of the paper substrate and its relatively stable pricing, being more creative with graphics, etc. Through product differentiation, folding carton manufacturers can generate higher value that can be reinvested on innovation to ultimately further expand market share and become more profitable.

Paperboard needs to play its qualities as a renewable, sustainable, and relatively stable priced substrate because recent price volatility in the plastics markets, increased consumer awareness of the environment, and innovation are opening a window of opportunity for paperboard packaging to regain market share. Consumers are becoming more aware of the impact the products they buy have on the environment and their health, with many deciding to purchase organic, healthier, and more environmentally friendly products at retail chains such as Whole Foods where they pay a premium over other stores.

Also, boxboard packaging has been more predictable and stable in terms of price, compared with competing plastic resins such as polyethylene, as shown in **Figure 3**.

Prices for plastics in the last few years have followed the volatility of natural gas and crude oil, providing an opportunity for folding carton manufacturers to regain position due to a more stable pricing scenario. The volatility in the petrochemical chain is expected to continue in coming years, which can only boost the competitiveness of paperboard packaging.

Sandra Vasconcellos is News Editor for boxboard and kraft paper at Pulp & Paper Week, and can be reached at svascon@risiinfo.com.

RISI PAPERTREE LETTER

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Accelerating Momentum: The Future of Latin America's Forest Products Industry

Join industry colleagues and RISI economists at the first-ever RISI Latin American Pulp and Paper Outlook Conference. This event focuses on the future of the Latin American forest products industry and will explore the issues, challenges and opportunities ahead. It will also provide insight into the industry and its position in the global marketplace.

The stimulating conference program will feature presentations from key industry executives, plus RISI's team of economists as they present their two-year forecasts for supply, demand, profitability, investment and trade for each major sector of pulp and paper markets.

Simultaneous translations in Portuguese, Spanish and English will be offered throughout the program.

21-23

May

2006

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RISI

LATIN AMERICAN PULP AND PAPER OUTLOOK Conference

Where Industry Insight and Opportunity Converge

Preliminary Program

Sunday, May 21, 2006

Pre-registration and Reception

Monday, May 22, 2006

Welcoming Remarks

Conference Chair: Rhiannon James-van Beuningen, Vice President, Editorial Products, RISI

Keynote Address

Rod Young, President/CEO, RISI

Session I

Investing in Latin America - How do Partnerships Work?

Otávio Pontes, Vice President Latin America, Stora Enso

The Challenges and Benefits of Building in Uruguay

Speaker to be announced

Latin American Plantations: How Much Growth is Still Available?

Celso Foelkel, Consultant, Degree Celsius and Vice President, ABTCP

The Fast Growing Pulp Industry in Latin America and its Impact on International Trade

Heloisa Barbosa, Marketing Manager, Aracruz

Logistics – Smoothing the Road to Market

Speaker to be announced

Session II

Your Environment, But the World is Watching

Speaker to be announced

Printing/Writing Papers: From Regional Player to Global Supplier

Andre Clark Juliano, Paper Sales General Manager, Votorantim Celulose é Papel

View from the Customer: Changing Dynamics in Latin American Paper Distribution

Andrés Romero, President, ANDIPA (Brazilian Association of Paper Distributors)

Working Closely with Customers: A Packaging Producer's Experience

Patrick Nogueira, Commercial Director, Orsa Celulose, Papel e Embalagens

CEO/Executive Panel – Latin America: What's in Store for the Next 10 Years?

Chaired by: Rod Young, President/CEO, RISI

Jose Luciano Penido, CEO, Votorantim Celulose é Papel

Maximo Pacheco, President, International Paper do Brasil

Miguel Sampol Pou, CEO, Klabin

RISI Dinner

Tuesday, May 23, 2006 Session III: RISI Two-Year Economic Outlook

Macroeconomic Outlook: Global Economy is Poised For a Slowdown

Brendan Lowney, Vice President, Macroeconomics, RISI

Cost Benchmarking: Latin America's Competitive Position

Dan Temple, Director of Benchmarking Sales, RISI

World Newsprint Outlook: Who Will Supply the Growth in Latin America?

Andrew Battista, Director, Consumer Products, RISI

World Printing & Writing Paper Outlook: Will Demand Keep Up with Supply?

Beth Lis, Vice President, Asian Paper and Packaging, RISI

Latin America Tissue Outlook: Supply Growth Poised to Stall

Andrew Battista, Director, Consumer Products, RISI

World Containerboard and Boxboard Outlook: Perspectives for Paper Packaging Markets in a Changing Global Environment

Anne Bousquet, Director, European Paper and Packaging, RISI

Fiber Outlook – Market Pulp and Recovered Paper

Kurt Schaefer, Director, Fiber, RISI

Summary and Wrap-Up

Rod Young, President/CEO, RISI

B63Z

For program updates and to register visit www.risiinfo.com/la_conf

Accelerating Momentum: The Future of Latin America's Forest Products Industry

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Hotel Accommodations

A block of rooms has been secured at the Windsor Barra Hotel & Congressos. Be sure to mention you are attending the RISI Latin American Conference to ensure the following per night group rates:

Superior Rooms, Single: R\$330,00 + 10% + 5% ISS (approximately US\$169.00)

Superior Rooms, Double: R\$363,00 + 10% + 5% ISS (approximately US\$186.00)

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Please make your reservations by following the directions and completing the Hotel Reservation Form (PDF format) found at www.risiinfo.com/la_conf. Reservations will be accepted at the conference rate until the room block is full or April 4, 2006, whichever comes first. After that date, reservations will be honored on a space/rate available basis only. Above rates are inclusive of local taxes and service fees.

Cancellation Policy

For registered attendees who are unable to attend the conference, the following cancellation policy applies:

- Full refund of the registration fee with written notification of cancellation received before April 28, 2006.
- 60% refund and a copy of the conference proceedings with written notification of cancellation received on or before May 5, 2006.
- Fees will not be refunded if cancellation notification is received after May 5, 2006 or in case of no-show.
- Substitutions are allowed any time.

LATIN AMERICAN PULP AND PAPER OUTLOOK Conference

Where Industry Insight and Opportunity Converge

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events@risiinfo.com

Registration Fee:

US\$985 per participant (if registered by April 30, 2006)
US\$1185 per person (if registered on or after May 1, 2006)

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Companies sending five or more attendees will benefit from a group discount of 20%. Please call or email to take advantage of this offer.

The registration fee covers participation in all conference sessions, cocktail reception on May 21st, lunch on May 22nd and 23rd, RISI Dinner on the 22nd, breaks, and a copy of the conference proceedings binder. The fee does not include accommodations or meals other than those mentioned above. All fees must be paid in full prior to the conference.

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Lunch on May 22, 2006 (12:15pm-1:45pm)

RISI Dinner on May 22, 2006 (8:00pm)

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