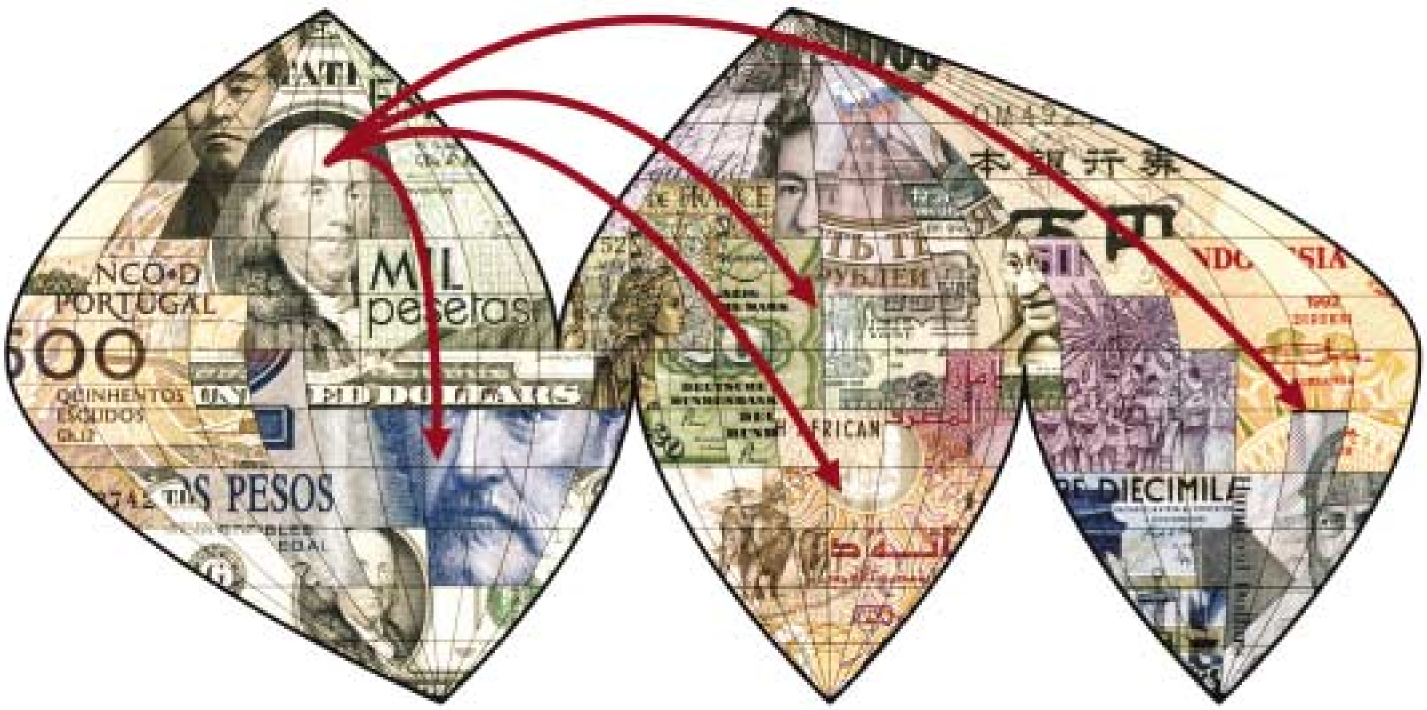



# Global Investment Trends

## A call for action in North America

**By Clive Suckling**

Here's a dilemma for your next Investment Committee meeting. You have two options for locating your next pulp and paper mill. The first is in a country with significant timber shortages, water restrictions, an unstable energy situation and where there are a number of cultural, political and legal hurdles to overcome. The second is in a country with massive forest resources, the world's largest supply of recovered paper, access to large volumes of high grade pulp and pulpwood, plenty of available water and energy, a stable and well-developed legal and political environment…and with a huge demand for paper in all forms. Where would you choose to invest? It's obvious; you would invest in the latter ….wouldn't you?

Well, the paper industry is of course choosing to invest in the first option, as there are other factors in the investment equation; not least the high growth dynamics of the China market which has seen total paper and board production and consumption increase fourfold since 1990 to more than 50 million tons. It is this factor which is driving the industry's investment into China, despite all the obstacles, as low labour costs count for little in this sector. Further, despite all the inherent attractions, there continues to be a trend of disinvestment in the industry in North America, which has seen the US's share of global pulp, paper and board production erode from 30% to around 20% over the past twenty years.

## TRENDS IN DEMAND

Before looking further at investment trends, it is important to consider changing patterns in global demand.

During the 1990s, the average annual growth in demand globally for paper and board was around 3%. This growth was unevenly distributed, ranging from 1.8% and 2.0% in North America and Europe respectively to 5.0% and 5.3% in Latin America and Asia respectively.

Since 2000, the rate of growth has slowed to around 2.4% per annum, and Jaakko Poyry's most recent base scenario suggests average annual growth in demand globally of 2.1% through to 2020. This is predicated upon global GDP growth of 3.1% per annum over the same period. Some key points which arise are:

- The growth in demand for paper and board will continue to be unevenly distributed, with North America and Western Europe below 2% and the major emerging markets in Asia at more than double that rate. This is unsurprising since the emerging markets are expected to continue to show superior economic growth to the mature markets of North America, Western Europe and Japan.
- In the past it had been safely assumed that demand for paper and board tracked global GDP growth. The uncoupling of these trends became most apparent in the US in the 1990s due, for example, to electronic media. Continued pressures to reduce waste and trends towards lower basis weights can also be expected to reduce paper and board consumption relative to economic growth. Accordingly, the "paper intensity" of economic growth is forecast to continue.
- Another trend that is expected to continue is the global shift in manufacturing a wide range of products, which require packaging, to the lower cost emerging economies. Thus even to the extent that end use demand for packaged products continues in the mature markets, increasingly the paperboard will be made close to where the product is manufactured.

Overall therefore there will be stable or moderate demand in the mature markets with above average growth opportunities in the emerging markets.

## TRENDS IN SUPPLY

Given the shifting patterns of demand, it is unsurprising that the investment in new paper making capacity is largely centred on these growing markets. According to Jaakko Poyry's base scenario, China alone will account for around 40%, equivalent to around 50 million tons, of new global paper making capacity through to 2020.

The Veracel pulp mill in Brazil is a joint venture between Stora Enso and Aracruz Celulose. The 900,000 tpy mill started production of low-cost, high-quality eucalyptus pulp in May 2005.

Another evident trend is the sourcing of an increasing volume of industrial wood fibre from plantation rather than natural forests. From only 18 million hectares in 1980, the worldwide area of forest plantation had risen to over 250 million hectares by 2005, supplying perhaps 40% of the global need for industrial wood fibre. Advances in biotechnology have enabled rotation ages as low as five to seven years for pulp wood. Heavily concentrated in the Southern Hemisphere and the emerging markets of Asia, high yield plantations are usually able to provide fibre at lower cost than natural forests and have accelerated the trend to using more hardwood relative to softwood. In turn, this low cost plantation fibre has supported the rapid growth of adjacent pulp mills. In addition, technology advances in pulp and paper making have enabled the undesirable wood property characteristics of this fibre to be overcome except in the most demanding products and processes.

Emerging markets growth combined with the development of integrated plantation/pulp production has spawned local, modern and thriving paper industries, with producers such as Aruaco (Chile), Aracruz (Brazil) and Nine Dragons (China) growing fast and aggressively. It has also bred "disintegrated" business models, whereby pulp production is located where there is low cost fibre and paper production where there is demand – Brazil and Indonesia supplying pulp to China is an obvious case in point.

Over the past fifteen or twenty years, there has been substantial consolidation amongst paper producers in the mature regions, such that the share of the ten largest producers of global paper and board production has increased from around 15% in 1990 to over 25% by 2004, with Stora Enso (Finland) leading the way followed by International Paper and UPM (also Finland). However, this consolidation has been very much regional to date. The number of sizeable cross-regional acquisitions has been limited, and those which have been executed have yielded mixed results. As a result, although the global footprints of the leading producers has extended, their production capacities are still concentrated in their home regions. This is particularly true of the major North American paper producers.

So whilst acquisitions have been the order of the day within the mature regions, investment in new capacity has been the trend by the major producers in the emerging markets. These strategies have been driven by both the need to access low cost fibre to enhance their competitiveness and to access superior growth. The Scandinavian producers have been at the vanguard here with moves such as their investments in plantations in Latin America and Asia, pulp in Latin America and paper production in the emerging markets, following a "disintegrated" model.

## TRENDS IN CAPITAL INVESTMENT

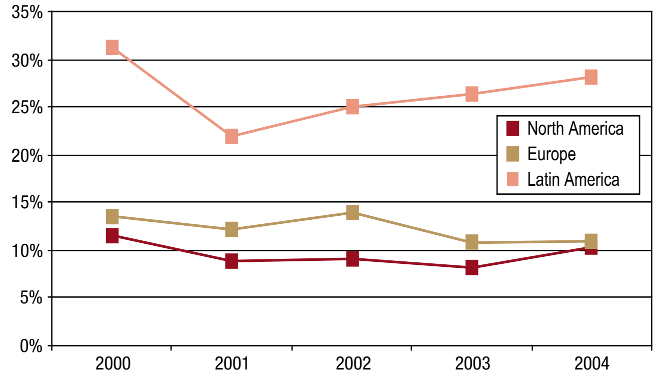
PricewaterhouseCoopers' annual surveys of the performance of the 100 largest forest and paper companies have tracked capital investment and reinvestment trends over several years.

On the premise that strong cash flows are necessary to support investment, Figure 1 shows cash flow as a weak dollar percentage of sales in selected regions.

Cash flow returns in North America have generally declined over the five years. The improvement in 2004 can be wholly attributed to wood products based in turn on strong US housing demand. Adjusting for this, cash flows continued to trend down despite the competitive advantages gained by US-based paper producers domestically and in export markets from the weak dollar. The evidence is that there was no improvement for North American paper producers in 2005.

Over the same period, European producers generated better cash flows, although these trended downwards in 2003/2004, in part because of the strong euro versus the dollar, a currency trend which partly reversed in 2005.

**Fig. 1 Cash Flow* as a Percentage of Sales**

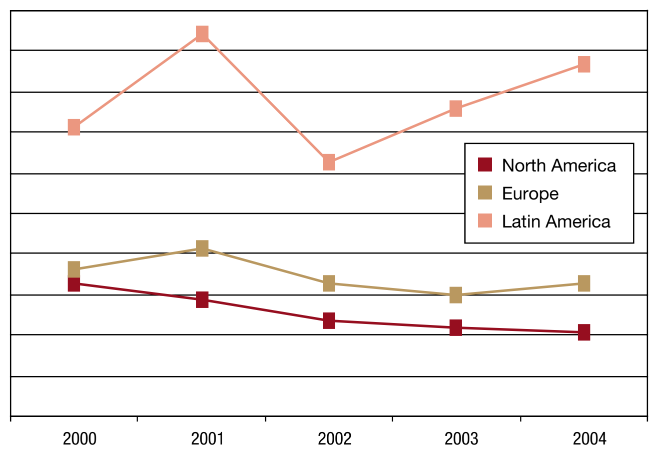



*Operating earnings plus depreciation; a reasonable approximation to EBITDA

The performance of companies in mature markets is overshadowed by Latin American producers, which has generated vastly superior returns. These strong cash flows reflect the significant benefits of low fibre costs in that region.

Figure 2 shows capital investment in assets as a percentage of sales. For this purpose, spending on company acquisitions is excluded.

**Fig. 2 Capital Investment as % of Sales**

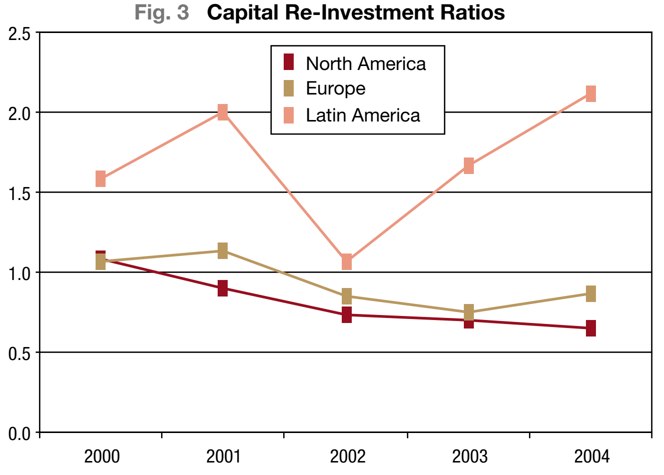



Not only has cash flow generation trended downwards in North America, but so has capital investment as a percentage of sales. Again North America has lagged Europe, with Latin American companies investing very strongly to take advantage of their low cost fibre.

A telling metric is the rate of reinvestment. Figure 3 shows capital investment in assets as a percentage of asset depreciation. When the ratio is greater than 1.0, it broadly indicates that capital assets are more than being replaced.

Conversely, where the ratio is less than 1.0, it broadly indicates that assets are being used faster than they are being replaced.

Fig. 3 **Capital Re-Investment Ratios**




The capital reinvestment ratio is a broad measure of confidence in the industry. Since 2000, for the industry as a whole, the ratio has not exceeded 1.0, indicating that the Top 100 are disinvesting. For the US, this disinvestment trend pre-dates the turn of the millennium, as there was a spike in spending in the year 2000; by contrast, although European producers have cut back on reinvestment in recent years, they were trending above 1.0 before 2000.

Except for Latin America, the Top 100 does not yet include a good representation of emerging markets-based producers showing that the structure of these new native industries is fragmented. Nevertheless, investment today is primarily going to the emerging markets in the Southern Hemisphere and Asia, a factor which is borne out by the strong capital investment and reinvestment trends by Latin American producers.

European players have invested more strongly than their North American counterparts. As a result, their assets are on the whole newer than those in North America and operating costs are lower, helping them generate higher cash flows even though they have to deal with higher fibre costs.

European companies are more product-focused than the North Americans, allowing them to simplify their capital investment decisions. This has also helped them keep their core production assets more modern. The pulp sector is a case in point, where the average age of recovery boiler capacity in North America is close to 30 years. In turn this results in low efficiency, higher maintenance and overall higher operating costs, notably higher energy costs.

## ISSUES IN NORTH AMERICA

The industry as a whole has fallen seriously out of favour with investors, as it has consistently struggled to return its cost of capital. This is a point which has been amply drawn out by PricewaterhouseCoopers' annual surveys of the Top 100. In recent years, North American companies have repeatedly been the worst performers within a poor performing industry. Those companies which have delivered value are either focused on forest land ownership, timber or engineered wood and not on pulp and paper on any scale except in rare instances.

Initiatives in the paper sector such as the many acquisitions to increase size and hence be hopeful of exercising greater influence in the marketplace, divestments of forest land holdings, etc. have not been successful in reversing this trend. It is therefore no wonder that private equity players are now investing in the industry; with the funding power behind them, they believe they can turnaround organisations and operations where industry players have failed. It is noteworthy that Koch Industries' recent $21 billion acquisition of Georgia-Pacific is equivalent to almost three years capital investment by quoted US forest and paper companies.

Despite closures, asset capacity in North America is still out of balance with demand. The industry has been unable to effectively rationalise capacity leaving most paper grades oversupplied now and in the context of demand prospects which range from modest to negative. The many acquisitions that have been made have failed to spur solutions to this problem. Combined with the lack of reinvestment in modern capacity, this means that the quality and performance of North America's productive capacity continues to decline steadily relative to the world leaders.

## NORTH AMERICA—A PLACE TO INVEST?

Whilst European companies also have problems such as overcapacity and costly capacity, these problems are accentuated in North America. It's not just a question of closing surplus capacity because what remains is not competitive. Long term plans to restore profitable growth are necessary, the type of plans which the short-termism of the investment community will find hard to digest. However, without a will and mindset to do that, it is difficult to see how fortunes will be reversed… or maybe private equity has to do the job.