Tissue Trumps!

A review of the global economic climate and the financial performance of the Pulp and Paper industry

By Kristi Magllara and Sarah Rabl

2016 started well for the global economy, with world output growth in Q1 2016 slightly above the IMF forecast. However, forecasts have been revised due to continuing geopolitical uncertainties, such as the Brexit vote and sluggish economic growth intensified by persistent low commodity prices, weak global trade and diminishing capital flows: In July, the IMF reduced its January 2016 global growth outlook by 0.1pp to 3.1%, preceded by the World Bank's alterations in June, lowering their "global economic outlook" by 0.5pp to 2.4%. Equally alarmed, the OECD revisited their outlook in September, noting that "the prolonged weakness in the world economy generates a self-reinforcing low-growth trap".

GDP growth forecast
2016-2017

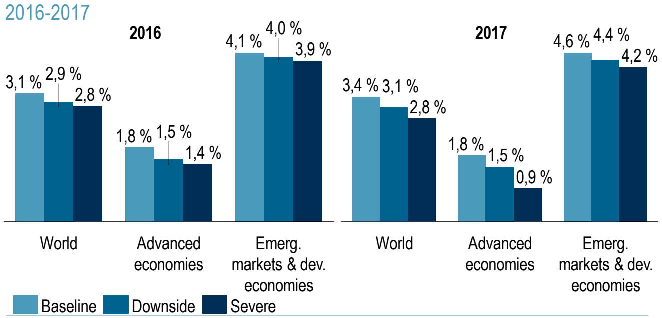


Figure 1: IMF Global GDP growth forecast scenarios

Although economic growth is forecasted to increase to 3% by 2018, structural concerns persist. Deteriorating conditions among key commodity exporters, softer-than-expected activity in advanced economies, rising private sector debt in some large emerging markets, paired with political change, remain a challenge to achieving a stronger global environment. Additionally, the increasing nationalistic tendencies in a lot of countries do not support a free market spirit.

Unstable financial markets also contribute to the lethargic economic development. With plummeting interest rates even below zero, equities have continued to attract capital. Increasing home prices, toughened credit spreads and reduced credit quality further widen the gap on the financial market and increase the vulnerability of economic development. Even 7 years after the financial crisis the financial sector especially in Europe is still suffering from the aftermath of the crisis: bad loans and increasing capital requirements. Especially in Europe, the sector is undergoing structural changes triggered by new competition from the internet sector.

Continuing negative or low interest rates and margins impact negatively on the business models and perseverance of financial institutions, specifically on pension funds, retirement incomes and savings accounts. This is also shown by the below-average performance of bank stock. Current monetary policies are different between Europe and the US. While Europe continues its policy of quantitative easing, the US continues to increase interest rates.

Short-term interest rate development
2012-2016

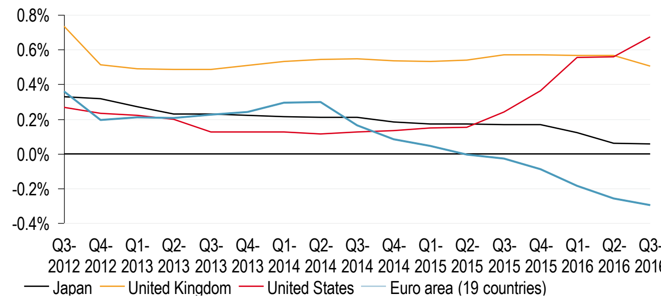


Figure 2: Short-term interest rate development

Despite the gloomy outlook painted by global economy watchdogs, and the immediate impact Brexit caused on the financial market, no immediate reaction has been observed in the manufacturing sector. As mirrored in the Purchasing Managers' Index (PMI) in Figure 3, PMI is an early economic indicator for manufacturing sector as it represents Purchasing Managers' expectations who are in turn ordering raw materials and supplies for manufacturing processes. The PMI is an index based on five major indicators: new orders, inventory levels, production, supplier deliveries & employment environment.

Purchasing managers index (PMI)
08.2015-09.2016

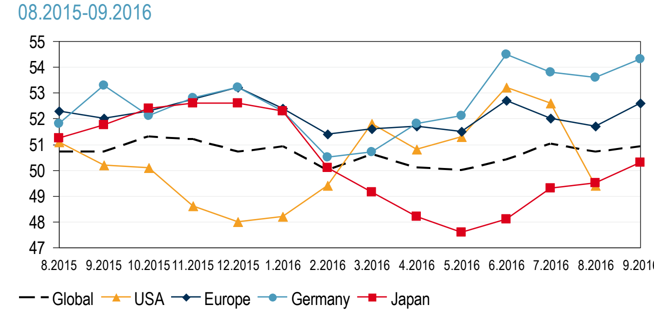


Figure 3: Purchasing Managers' Index

Although the PMI has recovered globally since the last financial crisis and remained relatively stable in the last 12 months, it is still significantly below the levels of the pre-crisis times. While the index has developed positively in Europe and especially in Germany, where it is currently at a 12-months high, very different developments can be observed in the US: After decreasing significantly in the second half of 2015, the US PMI climbed up strongly in the first half of 2016, only to drop again sharply in August 2016. Whether the development is of lasting nature, remains to be seen. In Japan, on the contrary, the PMI followed a positive trend for the second half of 2015, but then declined steadily in the beginning of 2016. However, a slight recovery has been recorded in the last 4 months.

The economic impact on the pulp and paper industry

Despite the challenging economic and political developments, overall, the business environment has remained very good for many companies in the industry. The 2016 StepChange Pulp, Paper and Economic Outlook Study shows that North America remains an attractive industry location for forest based industries. The Americas are perceived as a competitive top tier location on a global scale.

Although the overall business outlook is still comparatively positive, expectations have slightly dropped and are mixed depending on the sector (forestry and wood products upward trend, paper & paperboard manufacturing ambivalent). Less focus has been placed on cost reduction, however, it is still ranked second, and increased attention is given to marketing, customer service and retention, ranked first in the survey.

The following issues were identified as risk factors for a potential decline in North America:

- Increased raw material prices and transportation costs
- Stricter environmental regulations
- Availability of qualified labor force, labor costs and productivity

These issues highlight the significant importance of geopolitical events on the industry.

M&A continues

M&A activity continues. The last two years have been characterized by a number of strategic acquisitions with a total value of more than $22 billion.

- April 2014: International Paper acquires Orsa International (Americas) for $135 million
- September 2014: Canfor Corp acquires Southern Lumber Company (Americas) for $48.7 million
- January 2015: Rock-Tenn merges with MeadWestvaco in a $9.2 billion deal
- March 2015: Smurfit Kappa Group acquires Grupo CYBSA (Americas) for $104 million
- February 2015: DS Smith acquires Duropack GmbH (EuropeA) for $341 million
- May 2015: KapStone Kraft Paper buys Victory Packaging (Americas) for $640 million
- June 2015: DS Smith acquires Grupo Lantero (EMEA) for $212 million
- September 2015: Canfor Corp buys Anthony Forest Products (Americas) for $93.5 million
- November 2015: WestRock Company buys SP Fiber Holdings (Americas) for $288,5 million
- October 2015: SCA Americas acquires Wausau Paper Corp. (Americas) for $513 million
- November 2015: Weyerhaeuser buys Plum Creek Timber (Americas) for $8.4 billion
- January 2016: Smurfit Kappa Group acquires INPA (Americas) for $200.6 million
- May 2016: IP acquires Cellulose Fiber Pulp mills of Weyerhaeuser Co. (North America) for $2.2 billion

The above examples show that the industry continues its consolidation path. However, regional differences exist between Europe and the US. Whereas European M&A deals have seemingly slowed down, the industry in North America continues to consolidate through recent bigger M&A deals. The MeadWestvaco/Rock-Tenn and IP/Weyerhaeuser deals have further streamlined the industry landscape in North America.

Analysis of financial performance

As in previous years, StepChange has analyzed the financial performance of the major stock listed companies in the paper and packaging sector to compare the financial development from 2013 to H1-2016 across North America, Latin America, Europe and Asia.

Despite the continuing consolidation throughout the last years, many of the paper industry segments continue to suffer persistent overcapacity.

Graphic paper markets continue to be impacted by a further drop in demand in both North America and Europe. Newsprint markets have continued to decline with an accelerated trend of 6-12% in Europe and North America over the last years, accompanied by a more modest slowdown in other world regions. Also graphic paper markets continue to be impacted by a further drop in demand. In spite of the already conducted and announced closures and capacity cuts, further closures and capacity rationalization will be imminent in these segments.

For the tissue industry, the planned capacity increases 2016-2018 in North America amount to ~800k tons. Considering the sluggish growth in consumption, this is likely to decrease the utilization rate significantly, if no closures occur. For the same period, capacity increase of almost 700k tons is planned in Europe, while the demand is estimated to grow by 400k tons in this time – leading to serious overcapacity of the tissue markets.

Although profitability of the pulp industry is still high, a more challenging market environment can be expected in next years: with a capacity increase of more than 9m tons expected until 2018. Demand is estimated to grow by only ~5m tons in the same timeframe. The hardwood pulp segment with a planned capacity increase of ~6,5m tons, is likely to be hit especially hard. However, an increased supply of hardwood pulp will most likely also have an impact on softwood pulp prices.

Also containerboard markets can be expected to be pressured, especially in Europe. Following the sluggish demand in Europe, also the global demand, long carried by the growth in emerging economies, has started to slow down, tightening the export markets. At the same time, conversions from other paper capacities to recycled containerboard are still taking place and further contributing to the rising overcapacity. In the upcoming years, operating rates are likely to decrease, resulting in lower profitability.

The regional comparison of the EBIT development shows an overall positive trend from 2013-2016. US companies continue to perform on a healthy level of profitability, European companies have experienced a more positive development, surpassing North America by 3pp in 2015. EBIT margins of Latin American players skyrocketed in 2015 mainly due to a favorable situation of the local pulp companies. In the meantime, the Asian pulp and paper companies have encountered decreasing profitability, mainly due to the declining graphic paper markets.

So far, the results for 2016 have been positive, with US companies recording a profitability growth of 1%. European profitability has remained stable, and the Latin American companies face a slightly negative trend of 2%.

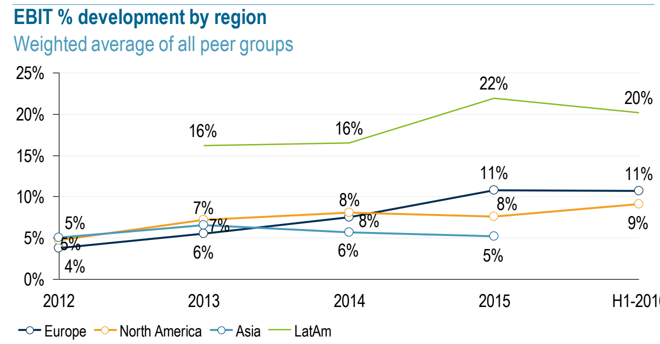


Figure 4: Industry EBIT development US, Europe & Asia

Peer Group Comparison

The peer group comparison of EBIT results shows a shifting trend in the profitability of different segments. While the profitability of the graphic paper industry has already been declining for some time, a decreasing profitability for can be observed. Still the second strongest peer group in 2015 with an EBIT of 10%, the profitability has fallen to 8% in H1-2016, leaving the packaging peer group behind tissue, pulp and flexible industries. Even though the pulp industry is still going strong in terms of profitability, there was a decrease from 14% in 2015 to 11% in H1-2016, making the tissue and flexible packaging peer groups the two most profitable segments in H1-2016. Whereas Flexible packaging grew moderately from 11% in 2015 to 12% EBIT in H1-2016, the EBIT of the tissue peer group has increased significantly from 9% to 13% in H1-2016.

In some of the peer groups, regional performance seems to differ significantly. Graphic peers appear to be performing considerably better in Europe (10% EBIT in 2015) compared to North America and Asia. On the contrary, pulp peer group companies are performing much stronger in Latin America than in other regions (average 22% EBIT in 2015) driven by their low cost structures.

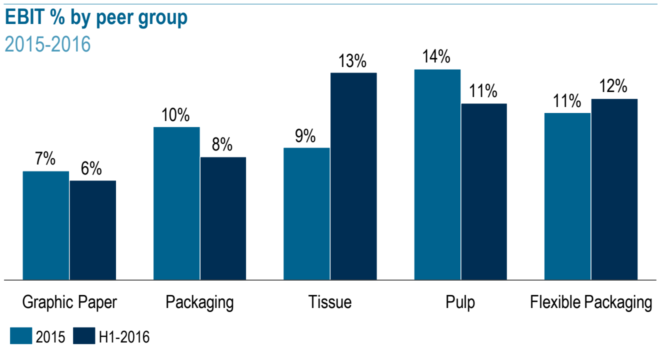


Figure 5: Industry EBIT development by peer group

In terms of Return on Capital Employed (ROCE), the tissue peer group outperforms the rest of the peers in H1-2016. Its performance is highly impacted by Kimberly-Clark's ROCE results of more than 34% while other tissue peer companies remain between 8% and 12% ROCE.

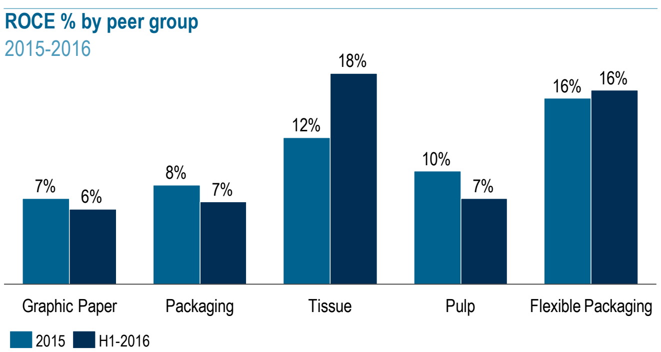


Figure 6: Industry ROCE development by peer group

Also flexible packaging companies outperform in terms of high ROCE results as well as constant performance in 2015-2016. Amcor and Mondi lead the flexibles peer group results with Aptar Group and Huhtamaki following close behind. The rest of the flexible peers have significantly lower ROCE levels. Within the Packaging peer group, Mondi is the clear outperformer with Packaging Corporation of America and Mayr-Melnhof following.

As can be seen in Figure 7, the WC levels increased in H1-2016 in all peer groups. In both years, the tissue peer group outperforms the rest, followed by the flexible packaging peer group with the second best working capital levels despite the biggest relative increase in H1-2016 compared to other peer groups. The latter is due to a slight decrease in DPO and considerable increase in DSO and DIO.

Overall, all peer groups have experienced an increase in DSO and DIO levels in H1-2016 compared to 2015.

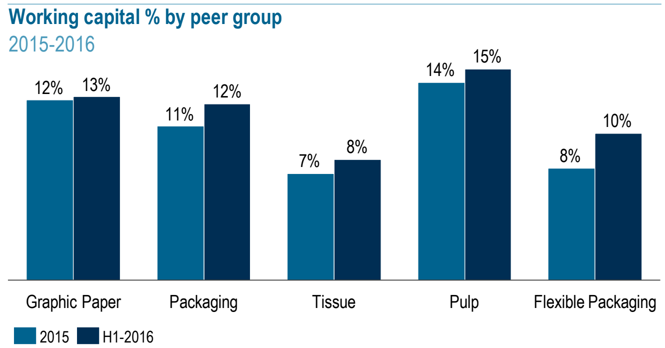


Figure 7: Industry WC development by peer group

H1-2016 operating cash flows (OCF) show varying results by peer groups (Figure 8). The graphic and tissue peer groups increased their operating cash flow compared to 2015 while the rest decreased by 2-4 percentage points. The flexibles peer group experienced the biggest cash flow decline, mainly driven by the results of Amcor and Huhtamaki.

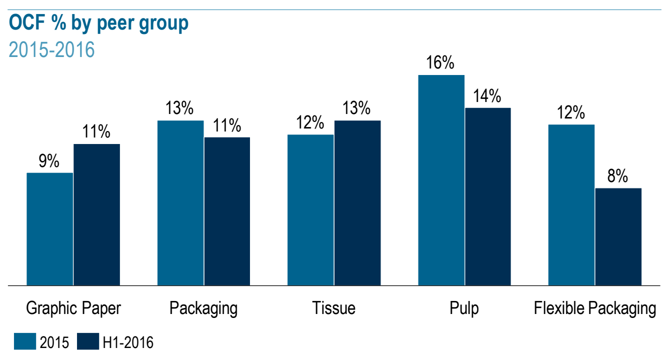


Figure 8: Industry OCF development by peer group

Graphic Paper Peer Group

The regional comparison of the EBIT 2012-2016 reveals a positive profitability trend for the European companies, whereas the development for Asia and North America has been rather negative. From 2012 to 2015, the profitability of the European companies active in graphic papers increased from 3% (2012) to 10% (2015) and has since remained stable in H1-2016.

On the contrary, North American graphic industry profitability has decreased continuously since 2012; a trend which continued in H1-2016 as well. Asian peers have experienced a decline in profitability over the last 3 years but are yet remaining on higher profitability levels than North American companies. On a company level, Holmen, Mondi, The Navigator Company and Sappi were the only ones able to increase their EBIT earnings in H1-2016 while The Navigator Company continues to outperform all peers.

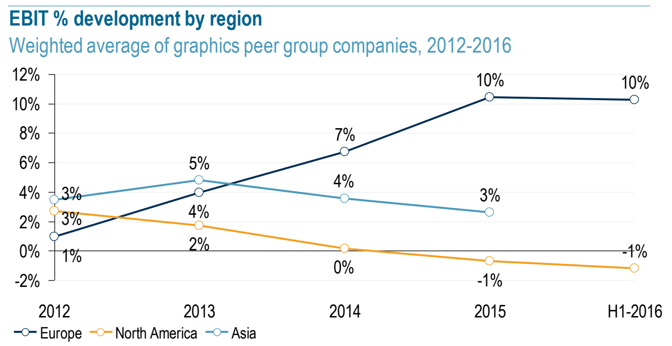


Figure 9: Industry EBIT development Europe, North America & Asia

Average EBITDA for the peer group is 12.8%, a decrease of 0.7 percentage points compared to previous year (Figure 10). Navigator and Mondi outperform the peer group.

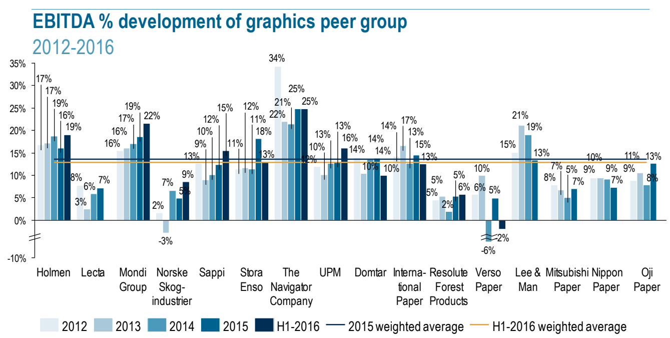


Figure 10: Company-wide EBITDA development

As can be seen in Figure 11, although the average EBITDA 2012-2015 is clearly positive for all of the companies, most of the peers are shrinking in terms of revenue. The Navigator Company, Holmen and Lee & Man outperform the peer group in terms of average EBITDA earnings for the last four years. The Verso revenue growth is driven by the merger with NewPage.

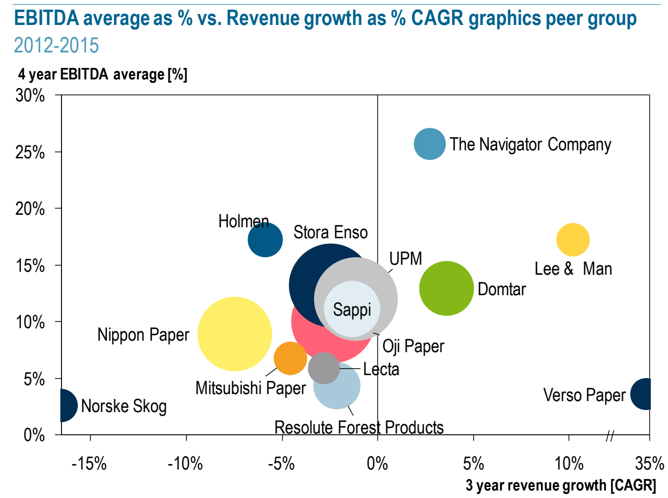


Figure 11: Company-wide EBITDA average as % vs. Revenue CAGR as %

As shown in Figure 12 the development of Working Capital from 2012 to 2016 has been rather stable in Europe with a slight increase in 2016. North American graphic peer group companies have experienced deterioration of working capital levels since 2014 due to the increase in DSO and DIO which outweighed the slight improvement in DPO. Nevertheless, the working capital levels of the Asian companies remain at the highest level compared to other regions (~19% for Asia (2015) compared to 16% for North America and 12% for Europe in H1-2016).

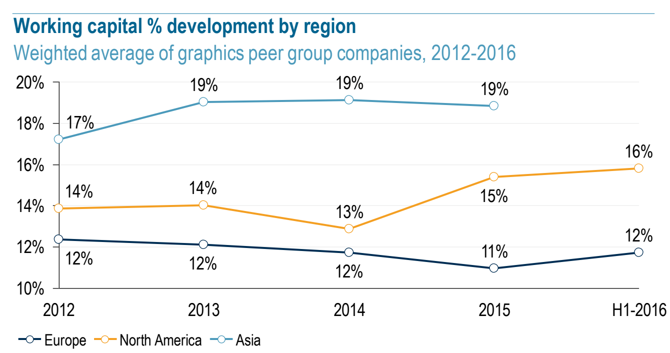


Figure 12: Industry WC development Europe, North America & Asia

On a company level (Figure 13), Lecta and NorskeSkog lead the group in terms of lowest working capital over the last five years. The Asian companies Lee & Man and Mitsubishi Paper have the highest working capital levels compared to the other companies in the peer group despite their continuous improvement over the last years.

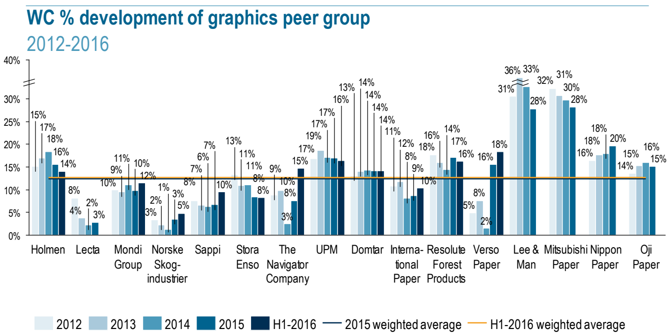


Figure 13: Company-wide WC development

The analysis of cash flows (Figure 14) gives indication of the financial health of the companies and their ability to finance investments internally. On the one side, the higher the operating cash flow, the stronger the company's growth potential is, whether from organic growth or through acquisitions.

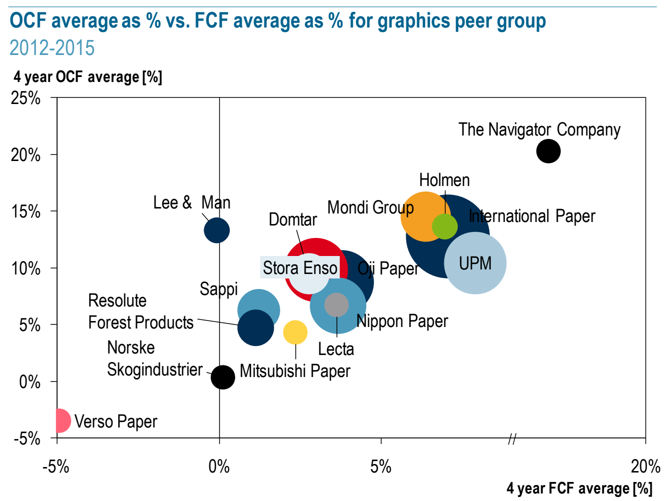


Figure 14: Company-wide OCF average as % vs. FCF average as %

On the other side, a company with a strong cash flow and a low market valuation becomes a potential takeover target as "re-payment" of the acquisition through cash flow becomes rather fast. In a normal operating environment, the operating cash flow (OCF) will be higher than the free cash flow (FCF), the difference typically being investments. If OCF is significantly higher than FCF, this can be due to big investments, whereas a small difference signals minor investments. If FCF is bigger than OCF, this is typically due to divestments or a consolidation of activities. As depicted in Figure 14, most of the companies invested less cash than they generated during 2012-2015. Verso Paper is the only peer group company with a negative average operating cash flow while The Navigator Company, on the contrary, reveals the strongest operating cash flow. Overall, operating cash flow of the peer group increased by 2.2 percentage points in H1-2016, compared to an average of 10.9% in 2015. On the company level, after years of very low or negative cash flows, Norske Skog and Verso have managed to turn their OCF positive in H1-2016.

Packaging Peer Group

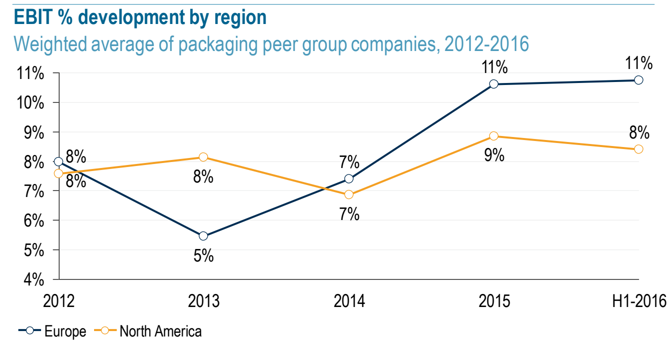


Figure 15: Industry EBIT development Europe, North America

After outperforming Europe in 2013, The North American packaging companies lost the lead to their European peers in 2014. While the European companies achieved a significant profitability growth from 2014 to 2015 (7% and 11% respectively) and have retained the level in 2016, the US peers only experience a profit growth of 2 percentage points in (up to 9%) in 2015. Widening the gap between Europe and the US, a slight decrease of the US companies was recorded in H1-2016, leaving the US 3 percentage points below Europe.

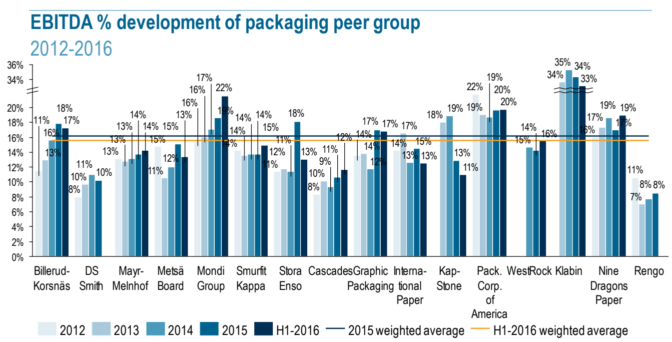


Figure 16: Company-wide EBITDA development

As can be depicted in Figure 16, EBITDA levels slightly decreased vs. 2015. Klabin, PCA, Nine Dragons and Mondi are leading the peer group in 2016.

As can be seen in Figure 17, most packaging peer group companies have had a positive revenue growth in 2012-2015. Unlike in the graphic paper peer group, only 4 companies have a negative revenue growth. Packaging Corporation of America outperforms both in terms of EBITDA and revenue development. Mondi and Nine Dragons have a high EBITDA average for 2012-2015 but a more moderate growth. International Paper follows Mondi and Nine Dragons both in terms of EBITDA and revenue growth.

EBITDA average as % vs. Revenue growth as % CAGR packaging peer group
2012-2015

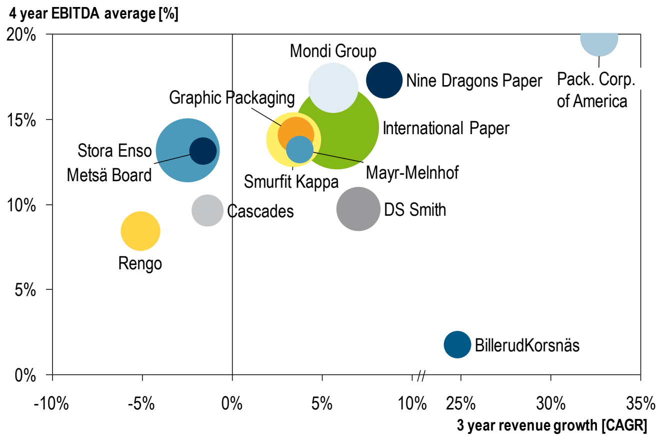


Figure 17: Company-wide EBITDA average as % vs. Revenue CAGR as %

Working Capital development has been volatile but generally declining in both regions with an increase in 2016. However, it needs to be stated that mid-year Working Capital levels are typically higher (Figure 18).

Working capital % development by region
Weighted average of packaging peer group companies, 2012-2016

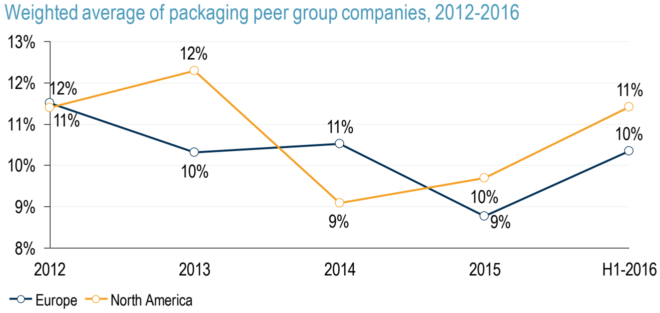


Figure 18: Industry WC development Europe, North America

On company level (Figure 19), Klabin's WC levels remain extremely high but supported by exceptional profitability, whereas DS Smith is continuously outperforming all peer groups for the last four years with even negative levels of Working Capital.

WC % development of packaging peer group
2012-2016

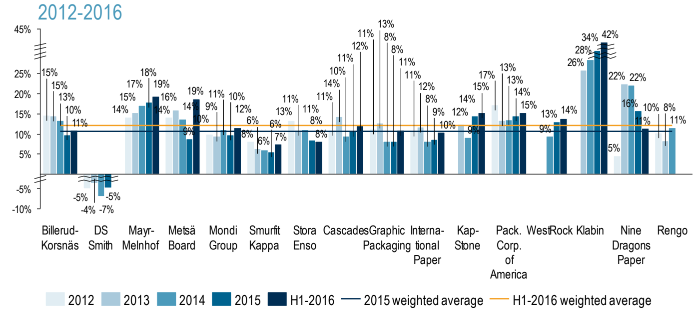


Figure 19: Company-wide WC development

Tissue Peer Group

The average EBIT margin of the tissue peer group increased considerably in H1-2016; this was heavily influenced by the strong results of Kimberly-Clark as the rest of the peer group remained stable. In addition to Kimberly-Clark, Cascades and Clearwater Paper improved vs. 2015 (compared to available H1-2016 results).

EBIT % development of tissue peer group
2012-2016

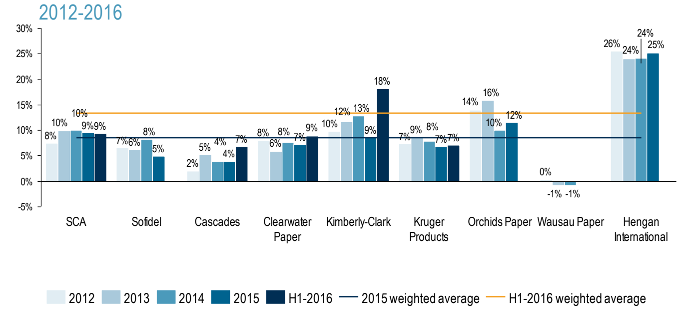


Figure 20: Company-wide EBIT development

Kimberly-Clark and Hengan outperform the peer group in terms of EBIT (Figure 20).

EBITDA % development of tissue peer group
2012-2016

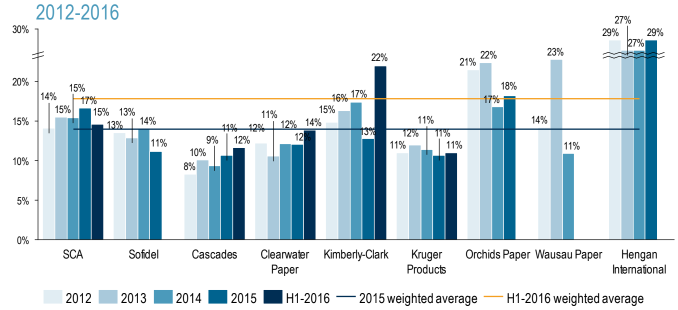


Figure 21: Company-wide EBITDA development

As shown in Figure 21, average EBITDA increased by 3.9 percentage points vs. 2015. Cascades, Clearwater, Kimberly-Clark, Kruger, Orchids and Hengan improved EBITDA in 2016.

Working Capital increased by 1 percentage point vs. 2015 (Figure 22). Clearwater Paper and Kruger Products are struggling to keep WC down. Sofidel has continuously decreased its WC levels since 2013. Overall, it seems that WC has been a focus of European companies in 2013, as most of them recorded improvements in this year. While some of them have managed to continue on this positive track since then, others are now struggling to keep achieved levels.

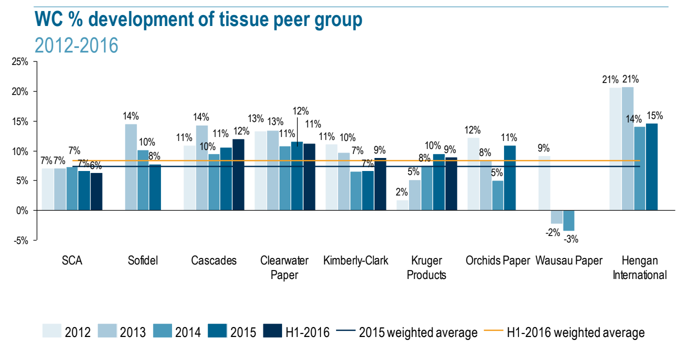


Figure 22: Company-wide WC development

Like in the other peer groups, all of the companies in the tissue peer group had a positive average EBITDA in the 2012-2015 timeframe (Figure 23). All of these companies, with Cascades as an exception, also reported positive revenue development. Hengan International and Orchids Paper outperform the peer group, recording both very strong revenue growth as well as above-average EBITDA earnings for the last four years.

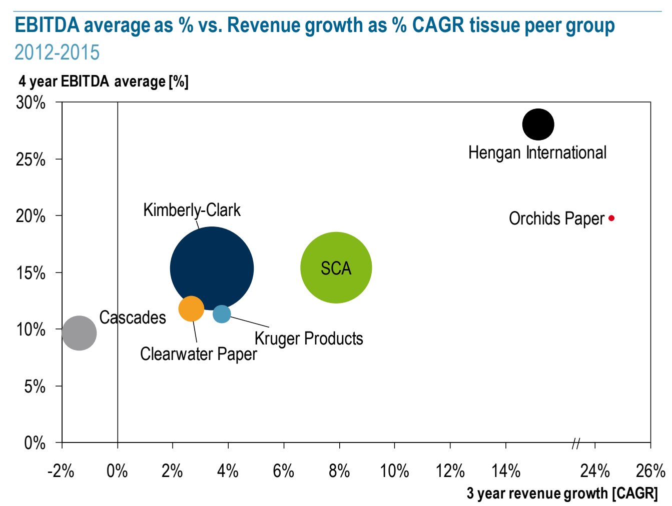


Figure 23: Company-wide EBITDA average as % vs. Revenue CAGR as %

Pulp Peer Group

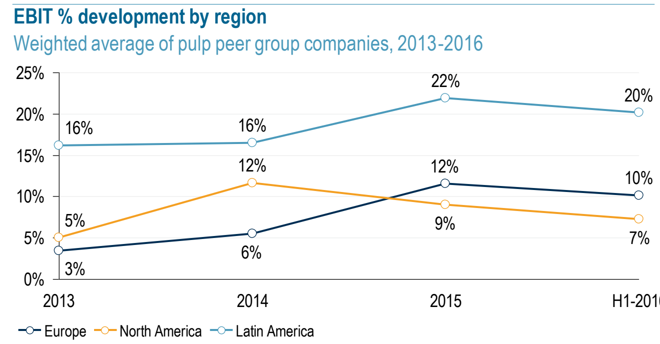


Figure 24: Industry EBIT development Europe, North America & Latin America

The regional comparison of the EBIT development for the pulp peer group highlights the dominance of the Latin American companies (Figure 24). Whereas the profitability of the North American pulp industry has been deteriorating since 2014, European peers had a positive trend from 2014-to 2015 but H1-2016 reveals a deterioration. This deterioration of 2 percentage points was also recorded by the other regions in equal measure.

As pointed out in Figure 25, majority of companies have decreasing EBITDA in H1-2016. Latin American players outperform. In terms of EBITDA, Altri is strongest in Europe and Weyerhaeuser in North America.

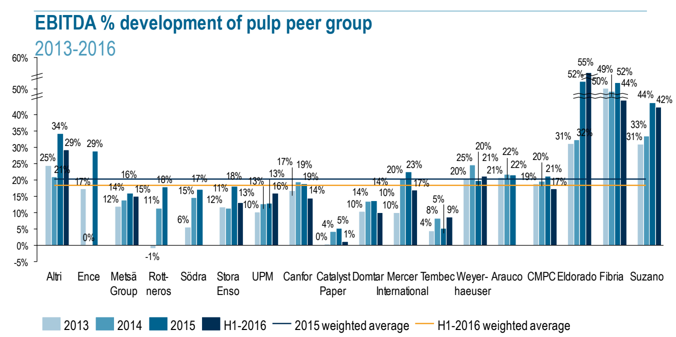


Figure 25: Company-wide EBITDA development

Analyzing Figure 26 reveals that most pulp companies have been able to significantly grow their revenue in the last years, many pulp companies having a growth of more than 7% while some of them achieving more than 15%. These growth results exceed other peers. Suzano and Eldorado outperform the peer group in terms of both average EBITDA earnings and revenue growth for the last three years. Catalyst's revenue growth results are merger-driven.

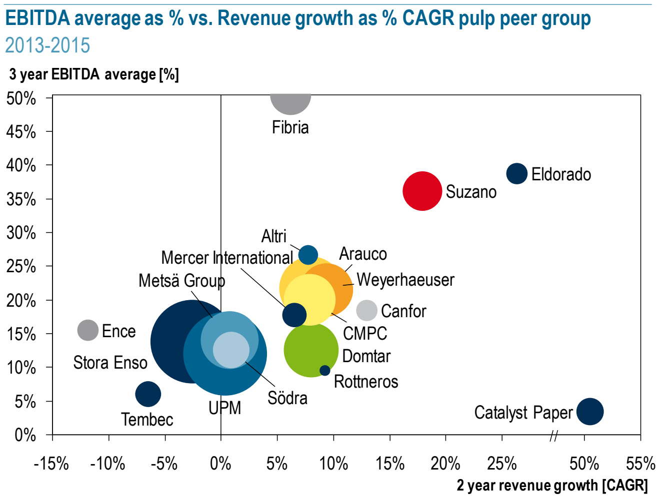


Figure 26: Company-wide EBITDA average as % vs. Revenue CAGR as %

As can be seen in Figure 27, the development of Working Capital from 2012 to 2016 has been rather stable in North America with a slight improvement in H1-2016. The Latin American pulp peer group has experienced a considerable deterioration of WC levels in H1-2016 compared to 2015. The pulp industry in Latin America continues to operate on very high levels of DSO. European companies have managed to slightly improve their working capital levels which are comparable with those of the graphics and packaging paper peer groups in Europe.

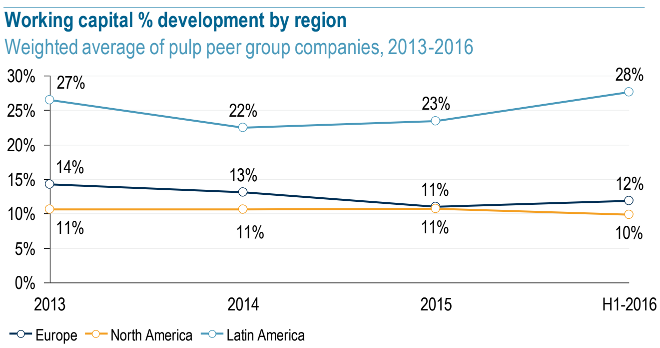


Figure 27: Industry WC development Europe, North America & Latin America

Flexibles Peer Group

Regional comparison of the EBIT development for the flexibles peer group shows that the average profitability for 2012 – 2016 was positive for both European and North American companies (Figure 28).

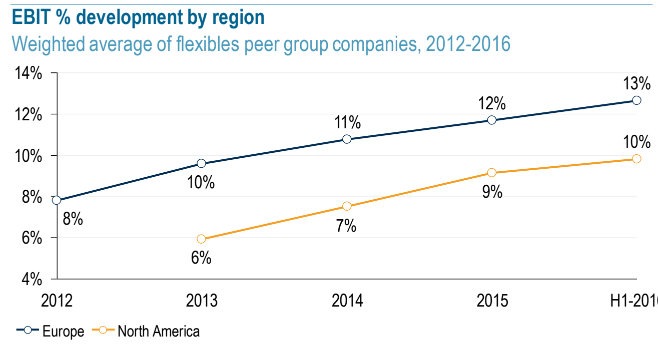


Figure 28: Industry EBIT development Europe, North America

Despite European flexible companies still performing stronger in terms of EBIT, the gap between Europe and North America is shrinking since 2015.

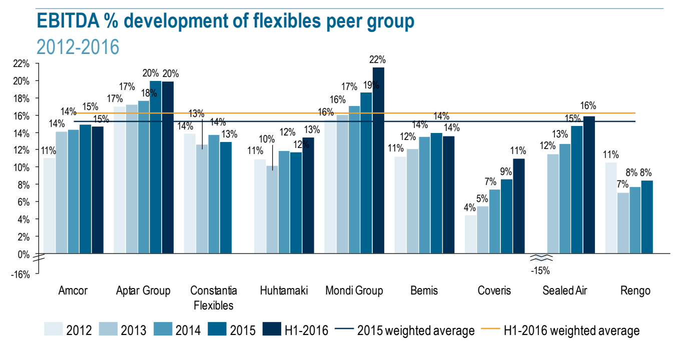


Figure 29: Company-wide EBITDA development

Mondi Group and Aptar Group report the highest EBITDA levels followed by Sealed Air. Many companies are showing constant profitability improvement over the last years (Figure 29).

As pointed out in Figure 30, all flexible companies have had a positive average EBITDA in the last 3 years. Most of the companies also have a positive revenue growth, a trend different from the one in the graphics peer group. In 2013-2015, Amcor and Rengo were the only companies within the peer group with a shrinking revenue.

EBITDA average as % vs. Revenue growth as % CAGR flexibles peer group
2013-2015

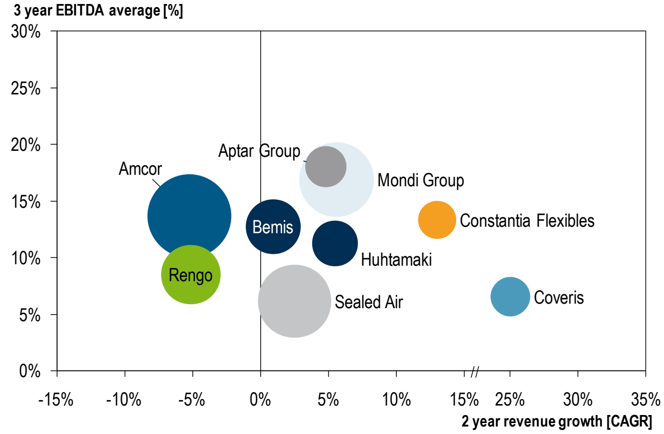


Figure 30: Company-wide EBITDA average as % vs. Revenue CAGR as %

Working Capital levels for the flexible peer group have improved considerably for North American peers from 2012 to 2015 (average 15% WC in 2012 vs. 8% WC in 2015) reaching the European levels of WC in 2015 (Figure 31). Europe has had a more stable performance with no major changes in 2012-2015. Starting from the same WC levels in 2015, both regions have experienced a deterioration of 2 percentage points in H1-2016 (up to 10% WC for both regions) due to an increase in DSO and DIO and decrease in DPO.

Working capital % development by region
Weighted average of flexibles peer group companies, 2012-2016

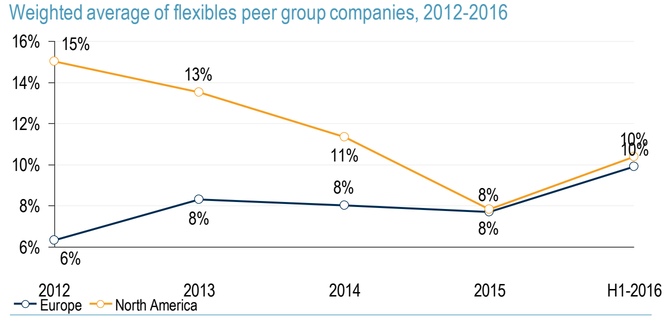


Figure 31: Industry WC development Europe, North America

Summary

Despite the challenging economic environment, the profitability of the pulp & paper industry as a whole has remained positive. However, there are significantly differences between the peer segments.

On the one side, companies in the graphic paper segment continue to struggle, recording continuously declining profitability, especially if highly exposed to publishing paper markets. Also for the packaging paper segment, a recent negative development can be observed, reflecting a potential slow-down in demand and some existing overcapacity on the market especially in Europe.

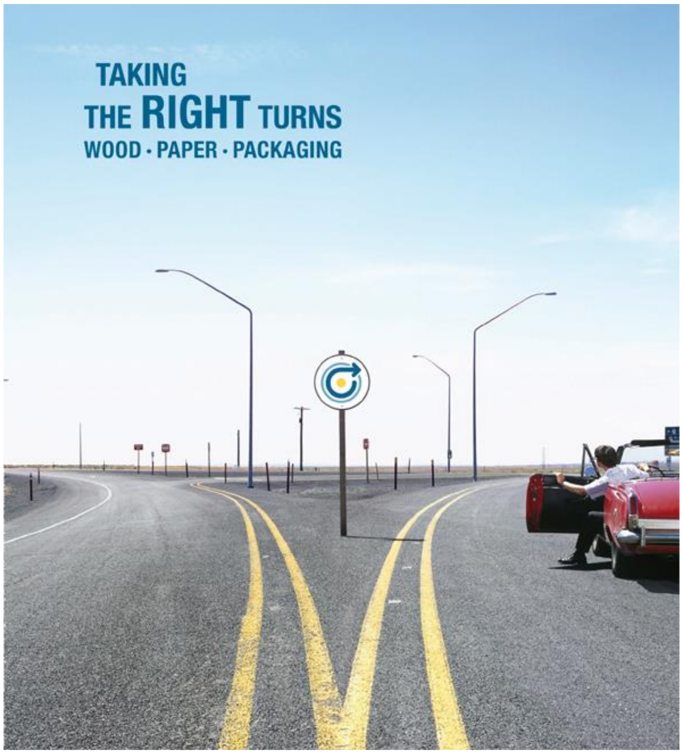
As highlighted the pulp segment can be expected to face challenging market conditions in the future. This is likely to reinforce the decline in EBIT development started in H1-2016.

On the other side, a clearly positive profit development can be observed in Tissue and Flexible packaging: Flexible packaging remains a highly profitable segment with an average EBIT ratio above 10%. Even more significant is the improved profitability of the tissue peer group

Cash flow levels in the packaging segment remain higher than in the graphic papers segment even though on par in 2016. However, the pulp peer group reached the highest OCF levels in both 2015 and H1-2016. Working Capital levels increased in 2016 for all peer groups and regions (the exception being North American tissue companies). Working Capital levels of pulp and graphics peer group remain the highest among the peer groups.

On a global level, the graphic paper and printing market was down -6% vs. 2014 and is expected to decrease further due to continued substitution driven by digitization. in 2016 by at least2%. The pulp sector is coping with declining growth and price pressures due to increasing capacities. Looking forward challenges can be expected not only in the graphic paper segment but also in packaging due to a declining growth in demand and expected overcapacity in recycled containerboard in the next years. Tissue profitability has been high and stable but it can be expected that profitability will be impacted due to capacity increases in all areas of the world.

Financially most companies are in good health with a few players remaining very exposed to the declining graphic paper markets. European consolidations have supported the increase in profitability of the graphic segment. More consolidation can be expected in the declining segments and most larger companies in the growing segments continue their M&A activities. In Europe further consolidation is necessary for companies to grow and in Asia markets are developing and still promise big opportunities. It can be expected that capacity in Asia combined with a local drop in demand will continue to have an impact on the global demand and supply balance.



About StepChange Consulting

StepChange is an industry focused and independent management consulting company with a proven track record in supporting clients to achieve sustainable value. StepChange provides support to top tier organizations in the industry from strategy development to implementation of operational improvements.

With an international team of industry experts StepChange can hit the ground running. StepChange provides innovative and yet pragmatic solutions, placing an emphasis on delivering measurable business results.

For further inquiries and comments regarding this Point of View please contact us at leapfrog@stepchange.com.

Kristi Magllara is a performance improvement consultant at StepChange Consulting. In addition to her client work, she focuses on financial & performance benchmarking of the industry.

Sarah Rabl focuses on M&A and operational & performance benchmarking of companies in the sector.

DRIVING CHANGE
TO DELIVER RESULTS