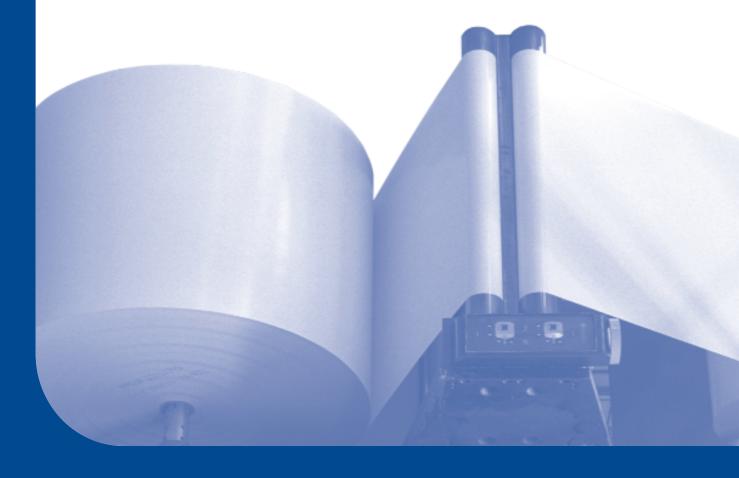


GLOBAL MONTHLY MONITOR BY REGION, BY GRADE, BY MONTH, BY EMGE

MARCH 2019



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Introduction

In this document, you will find the latest EMGE Global Monthly Monitor, which provides EMGE data for **FEBRUARY / MARCH 2019**, together with charts and tables showing the development of Paper Demand, Shipments, Capacity, Operating Ratios and Tendency movements for all major grades by region and globally, plus charts on key economic indicators.

Important note: Readers can see two Shipments-to-Capacity Ratios:

- a) The "raw" Shipments-to-Capacity Ratio, based on the basic shipments and capacity figures. The raw figures do not take account of any seasonal factors or other influences (such as the number of weekends per month), so the "raw" shipments-tocapacity Ratio is likely to be distorted by these monthly variations. As such, we believe they can be a misleading indicator of the true state of the market.
- b) For this reason, we have developed the EMGE Shipments-to-Capacity Ratio, which is an adjusted figure, designed to be more representative. The EMGE Shipmentsto-Capacity Ratio is calculated by us, based on a methodology that takes seasonal trends and a range of other factors into account.

DEFINITIONS:

DEMAND is defined as apparent consumption of paper, taking account of exports and imports between local regions.

Whereas DELIVERIES/ SHIPMENTS is a proxy for Production - sales from producers in one particular region to all world regions.

We provide the Current Month data, together with "Year-to-Date" and recent 3-month moving averages. When a "TENDENCY" is either up (\blacktriangle), down (∇) or stable (O), this refers to a comparison between the moving averages for the most recent 3 months and the last 12 months.

CAPACITY numbers are calculated on a Monthly basis, derived from the EMGE global mill and machine database. They take account of changes in capacity (improvements and investments). Also, the capacity numbers are adjusted for monthly variations in availability, but not for market-related downtime, strikes etc.

The SHIPMENTS TO CAPACITY RATIO is a proxy for Operating Ratios and therefore may not necessarily equate precisely to mill Operating Rates.

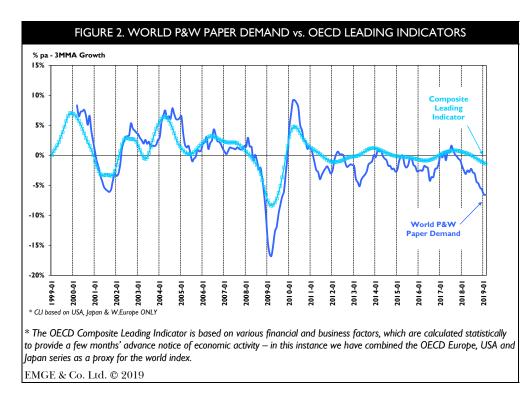
In order to make this document as easy as possible to use, while at the same time providing an enormous amount of information and data, we summarise the key issues in the charts and tables below.



Overview – February 2019 Data

Global demand continues to fall steeply

FIGURE I. EMGE GLOBAL MONTHLY MONITOR SUMMARY								
WORLD DEMAND – FEBRUARY 2019 DATA								
	Printing	Printing Coated Uncoated Co						
	& Writing	Fine	Fine	Mech.	Mech.			
Tendency	•	▼	▼	▼	▼			
Current Month	-6.1%	-8.3%	-2.5%	-12.0%	-10.7%			
Last 3 Months	-6.3%	-10.2%	-3.7%	-8.9%	-7.2%			
Last 12 Months	-4.4%	-7.8%	-2.4%	-5.5%	-4.7%			
Year-to-Date	-5.9%	-8.5%	-3.1%	-9.9%	-8.4%			
	(growth %	6 change over prev	vious year)					
MGE & Co. Ltd. © 2019								



This table summarises the Global Paper market demand, based on February 2019 data.

The single-month figure showed Global P&W apparent demand falling by -6.1% in February 2019.

The 3-month moving average (3mma) eased from -6.5% to -6.3%, and despite the slight improvement, this was still one of the worst numbers for a decade.

Meanwhile, the tendency (3mma vs. last 12 months) remained negative for an eighth month.

This chart compares the EMGE world Pr/Wr demand growth rates with growth in the OECD composite leading indicator* (CLI). These show the cyclical development of the markets.

The CLI has now been negative for 8 months, but paper demand is much worse, suffering its steepest downturn since the Financial Crisis of 2008-2009.



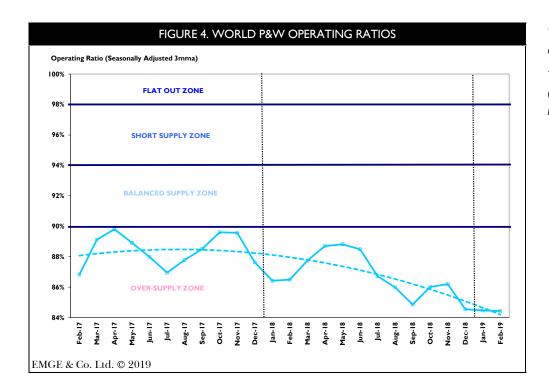
Operating Ratios (3mma) weak, but stable, in February

FIGURE 3. EMGE GLOBAL MONTHLY MONITOR SUMMARY							
WORLD OPERATING RATIOS - FEBRUARY 2019 DATA							
	Printing	Coated	Uncoated	d Coated	Uncoated		
	& Writing	Fine	Fine	Mech.	Mech.		
Tendency	•	▼	0	▼	▼		
Current Month	86%	83%	89%	86%	86%		
Last 3 Months	84%	83%	85%	84%	85%		
Last 12 Months	88%	83%	89%	89%	88%		
Year-to-Date	86%	83%	89%	86%	86%		
4GE & Co. Ltd. © 2019							

This table summarises EMGE's Global Shipments to Capacity Ratio (i.e. Operating Ratio) for February 2019 data, which showed a single month ratio of 86% (up from 84%).

If we consider 90% to be a minimum to indicate a balanced market, then the global market remained oversupplied in February.

The 3mma Operating Ratio, meanwhile, remained at 84%.



This chart shows the three-month moving average Operating Ratio. The global Operating Ratio (3mma) remained at 84% in February 2019.



EMGE's Paper Market Highlights

Highlights of recent trends

Global Printing & Writing paper demand fell by -6.1% in February 2019, thus remaining in decline for an 18th straight month. Meanwhile, the 3-month average (-6.3%) eased slightly, although it was still one of the worst numbers in a decade.

The 12-month average, meanwhile, was -4.4%.

By grade and region, there were very many out-of-trend developments in February. Globally, both Woodfree grades were better than trend, while both Mechanical grades were below trend. Arguably the standout notable development was very weak demand and shipments for both Coated grades in North America. Also, UWF was surprisingly healthy in Western Europe, while CM was very poor in "Big Asia" (China/Japan/Korea).

At the global level, demand fell for Coated Woodfrees (by -8.3%), for Uncoated Woodfrees (by -2.5%), for Coated Mechanical Papers (by -12.0%) and for Uncoated Mechanical Papers (by -10.7%).

By region, total Printing & Writing Paper demand in February 2019 fell by -7.8% in Western Europe, by -4.8% in North America, by -5.2% in "Big Asia" (China/Japan/Korea) and by -6.2% in the Rest of the World.

The headline 3-month moving average (3mma) global Pr/Wr Operating Ratio was 84% in February 2019, thereby remaining in the oversupply zone (i.e. below 90%). The tendency of global Pr/Wr Operating Ratios (3mma vs. 12-month average), remained negative for a third month.

The 3mma Global Operating Ratios in February 2019 were:

- 83% for Coated Woodfree (-1% from a month ago)
- 85% for Uncoated Woodfree (+1%)
- 84% for Coated Mechanical (-1%)
- 85% for Uncoated Mechanical (unchanged)

The regional 3mma Pr/Wr Paper Operating Ratios in February 2019 were:

- 86% in Western Europe (+1% from a month ago)
- 84% in North America (-1%)
- 84% in China/Japan/Korea (-1%)
- 84% in the Rest of the World (+1%)



	5. MAJOR PRINTING	Mill						
Country	Company		-	p (est.)	Date	Grade		
<u>Q1 2018</u>								
USA	Flambeau River Papers	Park Falls	PM3	-70	Jan-18	UWF		
Italy	Burgo	Verzuolo	PM8	-160	Jan-18	СМ		
China	Sun Paper	Yanzhou	PM38	200	Mar-18	UWF		
Germany	Scheufelen	Oberlenningen	Mill	-70	Mar-18	CWF		
Japan	Chuestu Pulp	Futatsuka	PM2	-35	Mar-18	UM		
		<u>Q2 201</u>	<u>8</u>					
Japan	Daio Paper	Mishima	PM16	-85	Apr-18	CWF		
USA	Georgia-Pacific	Camas	PM20	-210	Apr-18	UWF		
USA	Boise Paper	Wallula	PM3	-180	May-18	C/UWF		
Japan	Nippon Paper	Akita	CI	-150	May-18	CWF		
Japan	Nippon Paper	Ishinomaki	C2	-90	May-18	CWF		
		<u>Q3 201</u>	<u>8</u>					
China	Chenming Paper	Shouguang	PM4	500	Jul-18	UWF		
China	Chenming Paper	Shouguang	PM7	510	Aug-18	UWF		
India	JK Paper	Sirpur-Kagaznag	ar Mill	125	Aug-18	UWF		
		<u>Q4 201</u>	<u>8</u>					
Japan	Mitsubishi Paper Mills	Hachinohe	PM4	-150	Nov-18	CWF		
Germany	Feldmuehle	Uetersen	Mill	-80	Dec-18	CWF		
		<u>Q1 201</u>	<u>9</u>					
Sweden	Arctic Paper	Grycksbo	PM7	-45	Feb-19	CWF		
UAE	Ittihad Paper Mill	Abu Dhabi	Mill	320	Feb-19	UWF		
USA	Georgia-Pacific	Port Hudson	PM1/2	-575	Mar-19	UWF		
Japan	Hokuetsu Paper	Niigata	PM6	-160	Mar-19	CWF		
Japan	Nippon Paper	Fuji	PM12	-55	Mar-19	UWF		
		<u>Q2 201</u>	<u>9</u>					
France	Arjowiggins	Bessé-sur-Braye	Mill	-245	Apr-19	C/UWF		
this table lists i	major announced/confirmed	l capacity changes.						
GE & Co. Ltd	. © 2019							

In response to falling demand, paper producers have been reducing capacity. The table above shows capacity reductions and expansions in 2018 and 2019 (Q1).

The Arjowiggins Woodfree mill at Bessé-sur-Braye in France is now closed.



Industry-Specific Issues (paper demand drivers)

Paper demand drivers were clearly negative on balance in the past month (see below).

Negative indicators for paper demand drivers included:

- <u>Global</u> Advertising: Magazine advertising to fall by -7%pa worldwide Zenith
- <u>Germany</u> Printing: Sales down in 2018
- <u>Germany</u> Magazine Circulation: Down almost -7% in 2018
- Germany Books: Sales volumes slump in March, compared with strong year-ago
- France Advertising: Print falls again in 2018
- Spain Print Advertising: Magazine forecast for 2019 still negative
- USA Printing Jobs: Steady falls continue
- USA Magazines: Advertising slump eases, but still very steep
- USA Publishing: F+W declares bankruptcy; books and mags for sale
- Brazil Magazines: Abril titles to be sold off

Neutral/debatable/mixed indicators for paper demand drivers included:

- <u>Germany</u> Magazine Advertising: February less weak than January
- USA Bookstore Sales: December negative, but full year 2018 in growth
- USA Publishing Jobs: Growth rate slowing
- USA Books: Publisher revenue from print slips in January after growth in 2018

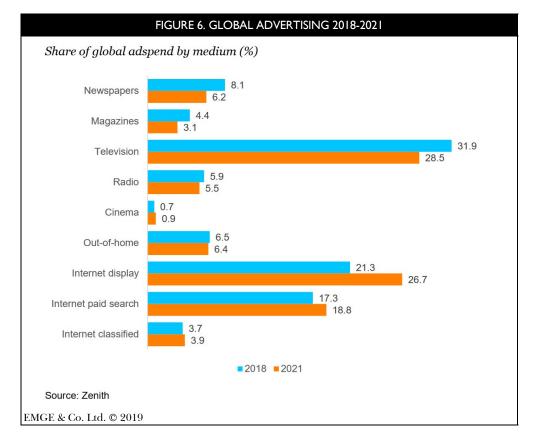
Positive indicators for paper demand drivers included:

- <u>Germany</u> Printing: Business conditions recover in March
- <u>UK</u> Wood, Paper Products & Printing: January in growth
- USA Printing: Output stays in growth in early-2019
- <u>Canada</u> Books: Sales in growth for last four years

See following pages for details...







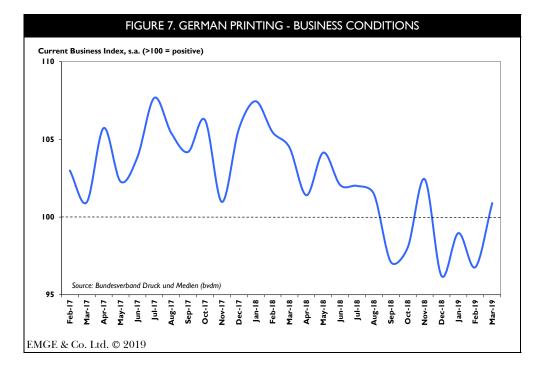
Global Advertising: Magazine advertising to fall by -7%pa worldwide - Zenith

The latest global advertising forecast by Zenith paints a dark picture for print.

The firm notes that "Over the last ten years internet advertising has risen from 12% of total global spend (in 2008) to 42% (in 2018). Meanwhile newspapers' share of global spend has fallen from 25% to 8%, while magazines' has fallen from 12% to 4%." It goes on to forecast that magazine advertising will fall by -7%pa in the 2018-2021 period, with their share of the global advertising market shrinking from 4% in 2018 to 3% by 2021.

Newspaper advertising, meanwhile, is predicted to decline by -5%pa over the period, with its share of the global advertising market falling from 8% to 6%.





Germany Printing: Business conditions recover in March

According to Germany's Print & Media Association (bvdm), the seasonally-adjusted index for **current business conditions** turned positive in March 2019 after three negative months, rising from 97.0 to 100.9, which was nevertheless -2.8% worse than a year earlier. Orders and production were healthy in March, said the bvdm.

The German printing industry's **future expectations** for the coming 6 months, meanwhile, improved by +1.0% to 101.2 in March, which was also +0.5% above the year-earlier reading.

The overall **printing sentiment index** climbed +2.5% to 101.1, which was -1.2% worse than a year earlier, although the trend is improving.

Germany Printing: Sales down in 2018

The annual survey by the German Association of Print & Media (BVDM) showed a drop in sales in 2018, according to Drunk & Media magazine.

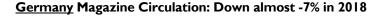
Inserts and brochures were the worst hit, while large-format printing showed aboveaverage growth.



Germany Magazine Advertising: February less weak than January

According to Nielsen, German magazine advertising expenditure fell by -5.1% in the first two months of 2019, implying a drop of -3.5% in February.

By sub-type, the decline in total magazine advertising for the January-February period included a -5.2% drop in consumer magazines and a fall of -4.2% in the much smaller trade magazine sector.





Circulation of printed magazines in Germany fell by -6.9% last year.

In the final quarter of 2018, the total was down by -5.2%, which was broadly in line with the rest of the year. The declines in the previous quarters of 2018 were -5.8%, -5.5% and -4.5%, respectively.

By sector, customer magazines suffered the most last year, with an average fall of around -11%, while the largest segment, consumer magazines, fell by -around -6%. The smallest sector, trade magazines, was down by -4%.

Since 2002, total German magazine circulation has fallen by more than -30%.



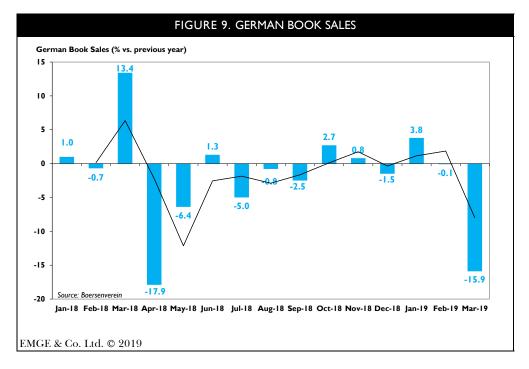
Germany Magazines: New launches and a cutback

Publisher Nikolaus Förster is ending subsidised distribution of its business magazine, Impulse, planning instead to concentrate on full-priced subscriptions, according to Meedia. The former Gruner + Jahr title that was bought out by management will, as a result, from this month see its circulation fall from 70,000 auf 12,500 copies, while the price will rise to Euro 24.90 per copy or Euro 249 for an annual subscription.

At the same time, Meedia also reports that the publisher of the Zeit newspaper has launched a new, free, quarterly business magazine, "Zeit für Unternehmer" (roughly "Time for Businesspeople"). Circulation is expected to be around 80,000 copies per issue.

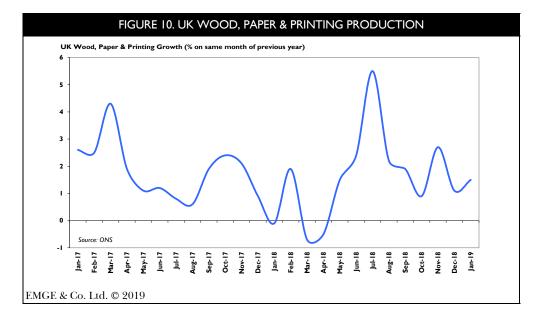
Also launching a new magazine is Herder-Verlag, which will publish a new monthly title, "Mitten im Leben" (roughly: "In Life"). The magazine will be written by former bishop, Margot Käßmann, and will focus on theological matters.





According to the Boersenverein, the association of German booksellers, public book sales (from a range of high-street retail and e-commerce sources) were flat (-0.1%) in February 2019, but collapsed in March (-15.9%). However, the March 2019 figure compared with a very strong March 2018, when sales grew by +13.4%.





UK Wood, Paper Products & Printing: January in growth

The UK's latest seasonally-adjusted Index of Production, output from Wood, Paper Products & Printing businesses show the sector in growth for the last 9 months of 2018, including in January 2019. The data for recent months were consistent with the previous month's report, which featured quite significant revisions, while earlier data had shown declines in many of those same months.

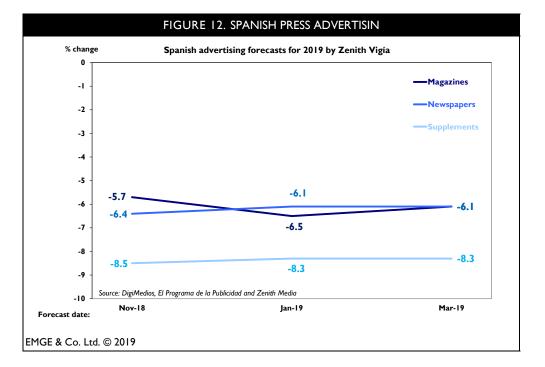
Advertising (page volumes)					
	2017	2018	% change		
Newspapers & Magazines	2,280	2,172	-4.7%		
Catalogues	749	693	-7.5%		
Direct mail	956	906	-5.2%		
Unaddressed brochures/flyers	622	621	-0.2%		
TOTAL PRINT	4,392	4.607	-4.7%		

France Advertising: Print falls again in 2018

France's Unified Advertising Market Barometer (or "BUMP" in French), from IREP, France Pub and Kantar Media saw press (newspaper + magazine) advertising fall by -4.7% in 2018. The smaller sectors were also all in decline, although unaddressed brochures/flyers were close to stable, edging down by less than -0.2%.

All of this added up to a fall of -4.7% in spending on total printed advertising/marketing, according to our calculations.



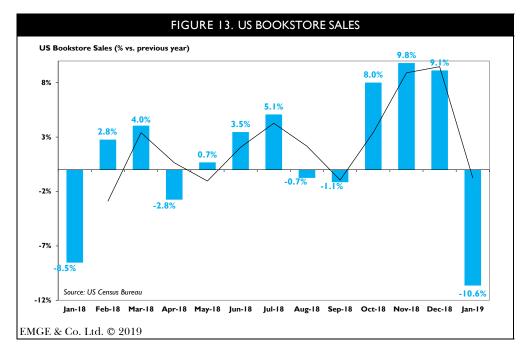


Spain Print Advertising: Magazine forecast for 2019 less negative in March

In Spain, the Zenith Vigía panel of media advertising forecasters has upgraded its forecasts for printed magazine advertising in 2019, according to Dircomfidencial.

After downgrading from -5.7% back in November to -6.5% in January, that has now been eased to -6.1% in March. The forecast for newspaper inserts/supplements, meanwhile, was unchanged from January at -8.3%.





USA Bookstore Sales: January negative, but December and 2018 in growth

Sales from US bookstores (by value) grew by +9.1% in December 2018, lifting the average for the full year 2018 to +1.7%, according to the latest data from the US Census Bureau. By comparison, January 2019 was very weak, with sales revenue down by -10.6%.

USA Printing Jobs: Steady falls continue

According to the latest preliminary data from the US Bureau of Labor Statistics, the number of production-related employees in the US printing industry fell by -4.6% in February and -4.3% in March 2019. (January was upgraded from an original estimate of -4.9% to -4.3%.)

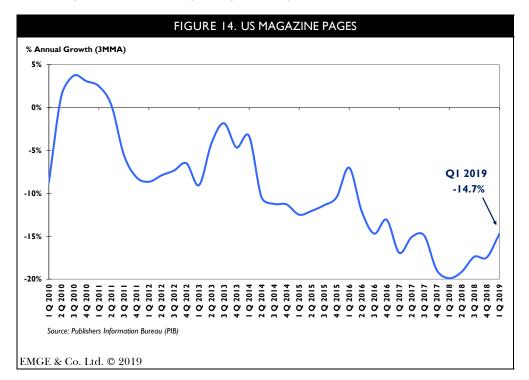
For the full year 2018, the average fall was -3.4%, following a drop of -2.1% in 2017.

USA Publishing Jobs: Growth rate slowing

The latest preliminary data for non-internet publishing employee numbers in the USA, following what appears to be a recently-revised dataset, shows growth in employment numbers slowing, according to data from the US Bureau of Labor Statistics. Growth in the first three months of 2019 was reported at +0.4%, +0.4% and +0.2%, respectively.

We remind our readers that before the recent revision, the data had shown employee numbers falling by around -1% in both 2017 and 2018. After the revision, 2018 shows growth of +0.5%.





USA Magazines: Advertising slump eases again in QI 2018

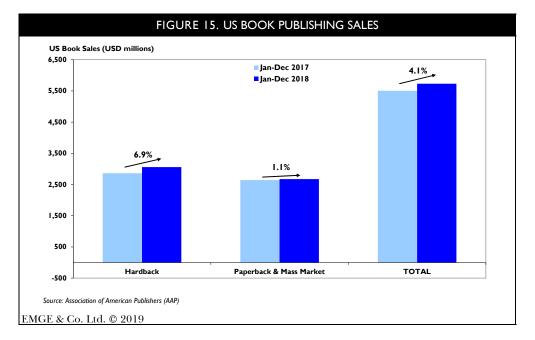
Following a fall of -18.4% in 2018, the rate of decline in US magazine advertising page volumes eased to -14.7% in Q1 2019. The trend has been on a broadly "improving" trend (i.e. becoming less weak) since Q2 2018.

Nevertheless, compared with the peak first-quarter total in Q1 2007, that is <u>a fall of</u> <u>-75% in US magazine advertising pages.</u>

USA Publishing: F+W declares bankruptcy; books and mags for sale

F+W Media, which publishes around 50 magazines and a range of books on crafts, collecting and other hobbies, has filed for Chapter 11 bankruptcy collection, amid high debts and steeply falling advertising income, according to Folio:. The firm is aiming to sell both the magazine and the books businesses by the middle of this year.





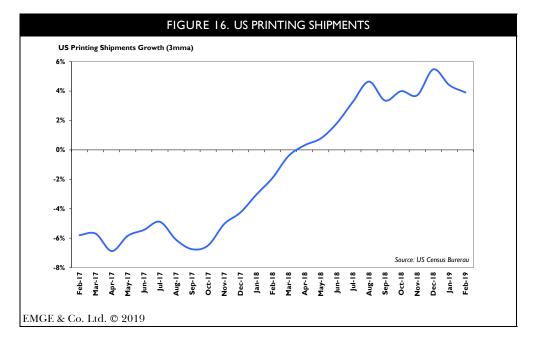
USA Books: Publisher revenue from print slips in January after growth in 2018

US publishers' revenue from printed books fell by -3.2% in January 2019, according to data from the Association of American Publishers. However, that includes digital and audio books, and the decline in printed books was steeper.

Revenue from hardback books fell by -7.8% in January 2019, while the drop in paperback/mass market books was -5.7%.

This was a lot weaker than the recent trend, which has been clearly positive. Revenue in 2018 as a whole grew by +4.6%, including +6.9% growth from hardbacks and +1.1% from paperbacks/mass market books.





USA Printing: Output stays in growth in early-2019

According to the latest available non-seasonally adjusted data, the value of US printing companies' shipments grew by +3.1% in February 2019 and by +3.5% in first two months of the year.

This compared with a full-year 2018 average decline of +1.7%.

Canada Publishing: Joseph buys Rogers magazines

French magazine publisher, Rogers Média, has sold its magazines to St. Joseph Communications (SJC), according to Le Devoir. The titles involved include Maclean's, Châtelaine, Today's Parent and HELLO! Canada. SJC owns Toronto Life, Fashion Magazine, Weddingbells and Mariage Québec.

Canada Books: Sales in growth for last four years

A new study by a French-language booklist management body in Quebec has found that sales by booksellers in the province of Quebec have been in solid growth since 2015, according to Publishing Perspectives.

According to the Société de Gestion de la Banque de Titres de Langue Française for the Quebec Booksellers Association, sales fell between 2012 and 2014, but then grew by +3.9% in 2015, +4.9% in 2016, +5% 2017 and +5,3% 2018. The average for the whole 2012-2018 period was growth of +1.9%.



Brazil Magazines: Abril titles to be sold off

Brazilian firm Abril, the largest publisher in Latin America (for now), is expected to sell off multiple magazines as part of its debt-restructuring/rescue, according to Brazilian newspaper, Estadão.

One, the business and economy magazine "Exame", is expected to go to the bank that bought Abril's almost US\$300 million in debt, BTG. It is thought other titles may be auctioned off.

Japan Advertising: Magazine spending falls steeply in 2018

According to advertising agency group, Dentsu, spending on Japanese magazine advertising fell by -9% in 2018.

Newspaper advertising fell by -7.1%, the firm reported.

Australia Magazines: Readership close to flat in 2018

According to the Roy Morgan readership survey, readership of printed magazines in Austrialia fell by just -0.4% in 2018.



Econo-Political Issues

The net balance of paper/econo-political concurrent indicators weakened at the global level in the past month:

- The Net Balance of latest Global indicators weakened from -2 to -4.
- The balance of indicators was -3 in Western Europe (-2 compared with a month ago), -1 in North America (+3), -3 in Japan (+2) and +3 in China (+2).

Meanwhile, our limited economic overview was moderately negative, on balance (see below).

Negative indicators included:

- Global Consensus 2019 forecast falls again in March
- Consensus Forecast downgraded for North America
- Consensus Forecast downgraded for Western Europe
- Consensus Forecast downgraded for Eastern Europe
- Consensus Forecast downgraded for Latin America
- European Manufacturing PMI gets even worse
- North American Services PMI slips to 8-month low
- Japanese Manufacturing PMI remains negative
- Global Manufacturing PMI remains at 2¹/₂-year low

Neutral/debatable indicators included:

- Japanese Services PMI weakens, but still in growth
- Indian PMIs both ease back, but remain fairly healthy

Positive indicators included:

- European Services PMI improves for a second month
- North American Manufacturing PMI recovers slightly
- Chinese Manufacturing PMI breaks back into growth
- Chinese Services PMI climbs to one-year high
- Global Services PMI recovers further

See following pages for details...

Economic Indicator Summary - Weaker at global level

In our global Market Indicator Summary, the balance of paper and economic indicators weakened from -2 to -4 in the past month, despite North America, China and Japan all improving.

The balance of indicators was -3 in Western Europe (-2 compared with a month ago), -1 in North America (+3), -3 in Japan (+2) and +3 in China (+2).

LATEOT	HREE MON			ai Growinj		GDP Growth Forecast, so
	Month	Month	Latest	Latest		Consensus Economics
	minus-2	minus-l	Month	Movement	Latest Data	
WEST EUROPE						
GDP Forecast (2019)	1.5%	1.4%	1.3%	v	MAR	CLI = OECD Composite I
СЦ (% ра)	-2.0%	-2.0%	-1.9%	۸	FEB	Indicator (concurrent/forv
PMI (Manufacturing)	50.5	49.3	47.5	v	MAR	
BCI (% pa)	-1.1%	-1.2%	-1.3%	v	FEB	looking for economic
PW Shipments (% pa)				v	FEB	growth/GDP)
Net Balance				-3		o ,
N. AMERICA						PMI = Purchasing Manag
GDP Forecast (2019)	2.5%	2.5%	2.3%	v	MAR	
CLI (% pa)	-0.8%	-1.1%	-1.3%	v	FEB	Index (Manufacturing) –
PMI (Manufacturing)	56.6	54.2	55.3	۸	MAR	50 is positive, below 50 is
BCI (% pa)	-0.8%	-1.0%	-0.9%	۸	MAR	
PW Shipments (% pa)				v	FEB	negative
Net Balance				-1		
JAPAN						BCI = Business Confidence
GDP Forecast (2019)	1.0%	0.9%	0.7%	v	MAR	Indicator
СЦ (% ра)	-0.4%	-0.5%	-0.6%	v	FEB	
PMI (Manufacturing)	50.3	48.9	49.2	٨	MAR	
BCI (% pa)	-0.3%	-0.5%	-0.6%	v	MAR	PW = Printing & Writing
PW Shipments (% pa)				v	FEB	Shipments (EMGE)
Net Balance				-3		
CHINA						
GDP Forecast (2018)	6.4%	6.3%	6.2%	v	JAN	
CLI (% pa)	-1.8%	-1.6%	-1.4%	^	FEB	
PMI (Manufacturing)	48.3	49.9	50.8	^	MAR	
BCI (% pa)	-0.8%	-0.6%	-0.5%	۸	MAR	
PW Shipments (% pa)				۸	FEB	
Net Balance				3		
WORLD						
GDP Forecast (2019)	2.9 %	2.9%	2.8%	v	MAR	
СLI (% ра)	-1.3%	-1.4%	-1.5%	v	FEB	
PMI (Manufacturing)	50.7	50.6	50.6	o	MAR	
BCI (% pa)	-0.8 %	-0.9 %	-1.0%	v	FEB	
PW Shipments (% pa)	-7.3%	-5.7%	-6.1%	v	FEB	
Net Balance				-4		



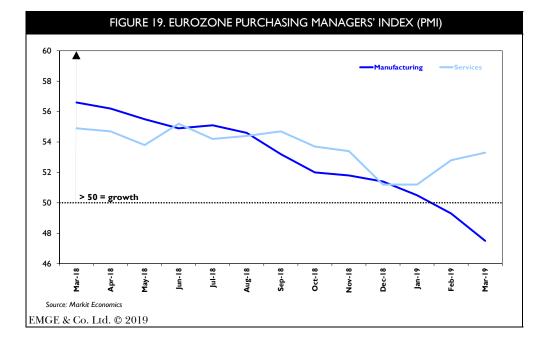
Global Consensus 2019 forecast falls again in March

The Consensus Economics forecast for global GDP in 2019 fell from +2.9% to +2.8% in March. This was the third downgrade in five months, following drops in November 2018 and January 2019.

Regionally, there were minor downgrades for all regions except Asia-Pacific.

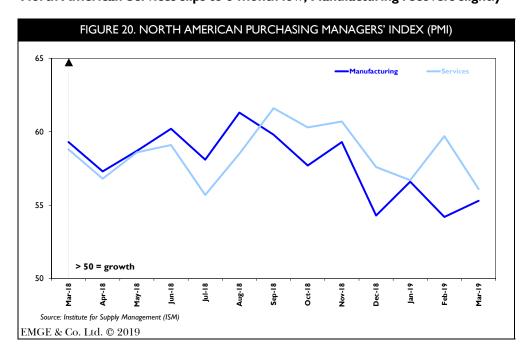
FIGURE 18. CONSENSUS GDP GROWTH FORECASTS For full-year 2019								
North America	2.3%	2.5%	2.5%	-0.2%				
Western Europe	1.3%	1.4%	1.5%	-0.1%				
Asia Pacific	4.5%	4.5%	4.6%	-				
(of which Japan)	0.7%	0.9%	1.0%	-0.2%				
Latin America	1.9%	2.0%	2.1%	-0.1%				
Eastern Europe	2.0%	2.1%	2.1%	-0.1%				
Rest of World	2.7%	2.8%	2.8%	-0.1%				
WORLD TOTAL EMGE & Co. Ltd. © 2019	2.8%	2.9 %	2.9%	-0.1%				





European Manufacturing PMI gets even worse

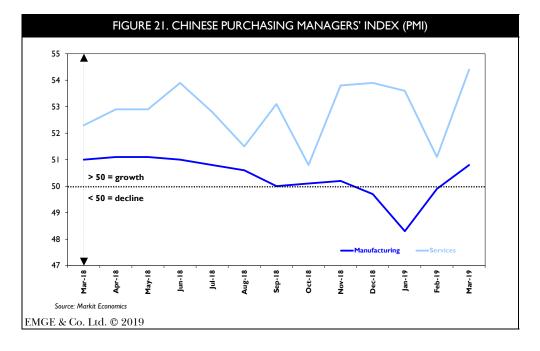
In March 2019, the Purchasing Managers' Index (PMI) for Manufacturing in the Eurozone fell further into decline and hit new a 5¹/₂-year low, while Services improved for a second month.



North American Services slips to 8-month low; Manufacturing recovers slightly

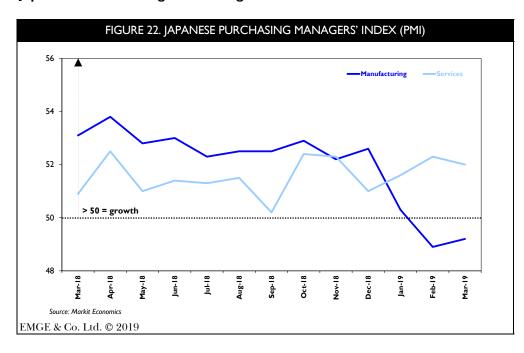
The North American PMI for Manufacturing recovered in March from a 3-year low, but the Services PMI fell to an 8-month low.





Chinese Manufacturing PMI breaks back into growth

After two months in decline, the Chinese PMI for Manufacturing broke back into growth in March, and Services also climbed strongly to reach a one-year high.

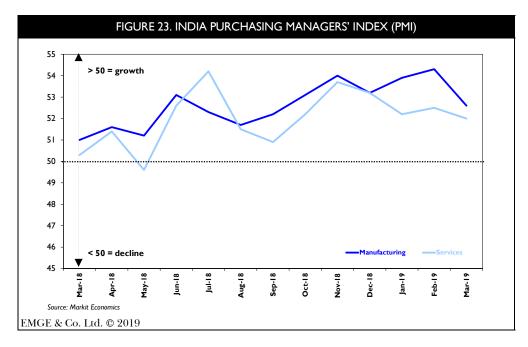


Japanese Manufacturing remains negative

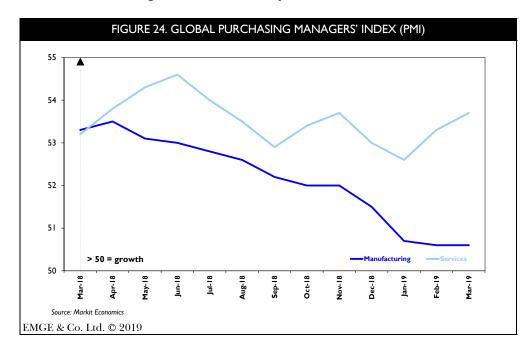
The Purchasing Managers' Index (PMI) for Manufacturing in Japan remained negative and close to its lowest reading for $2\frac{1}{2}$ years in March, while the Services PMI weakened slightly, but remained in growth.







The Indian PMIs for Manufacturing and Services both edged downwards in March, but remained fairly healthy.



Global Manufacturing PMI remains at 21/2-year low

The Global Purchasing Managers' Index (PMI) for Manufacturing was unchanged in March, remaining at a $2\frac{1}{2}$ -year low, while the Services PMI recovered further from the 2-year low it hit back in January.

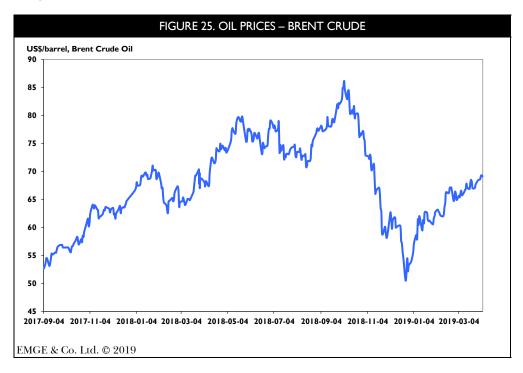


US dollar mixed

Between March and April 2019, the US dollar was mixed against the basket of currencies that we monitor.

The US dollar was more or less stable against the Euro (at US\$1.13) and the Canadian dollar (at CAD\$1.34), weakened against the Brazilian Real (from Real 3.87 to Real 3.83) and the Indonesian Rupiah (from Rup 14293 to Rup 14157), but was slightly up against the British Pound Sterling (from US\$1.30 to US\$1.31).

Oil price rises further

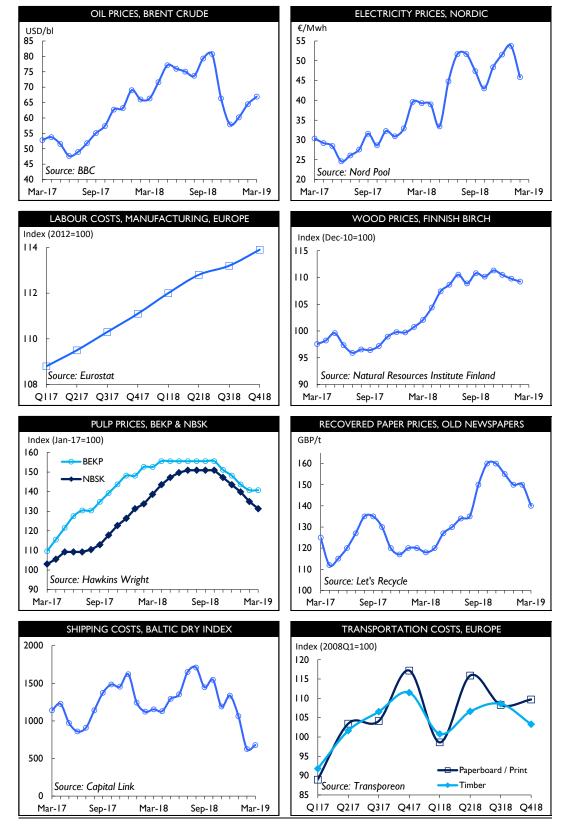


The headline US dollar Oil price recovered again in the past month.

At the time of writing, Brent Crude was trading around US\$71/barrel (up by US\$5/barrel from a month earlier), while West Texas Crude was trading around US\$64/barrel (up US\$7/barrel from a month earlier).

IIth April 2019, EMGE & Co. Ltd. © 2019

Cost Indicators



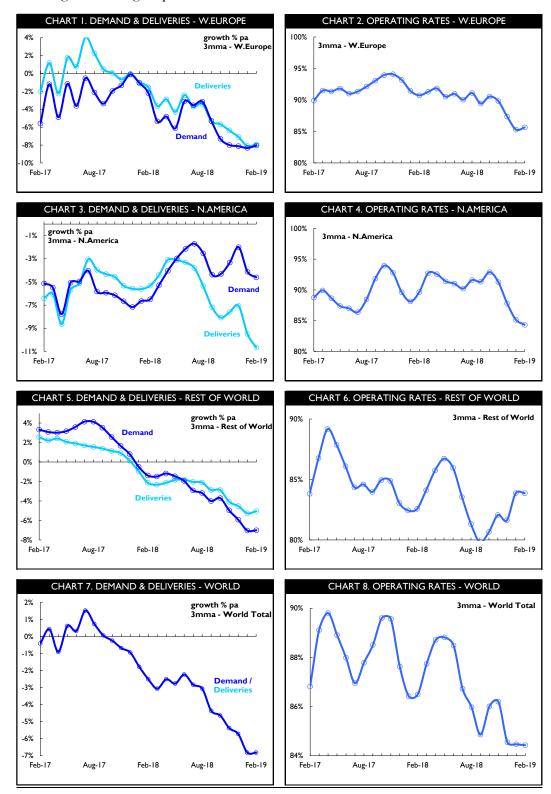
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1. Printing & Writing Papers

PRINTING &	& WRIT	INGS			IGE stry Consultants
GLOBAL MONTH		TOR		Month Year	2 2019
APPARENT Tendency DEMAND (3 months)	Current Month ('000 tonnes)	Growth %pa	Year-to-Date ('000 tonnes)	Growth %pa	Growth %pa Last 3 Months
W.EUROPE N.AMERICA CN / JP / KR OTHERS					
WORLD					
DELIVERIES/ SHIPMENTS					
W.EUROPE N.AMERICA					
CN / JP / KR OTHERS					
WORLD					
CAPACITY					
W.EUROPE N.AMERICA CN / JP / KR OTHERS					
WORLD					
SHIPMENTS TO CAPACITY RATIO %	Current Mon 2019	th (Raw) 2018	EMGE RATIO	- I month 2018	Last 3 Months
W.EUROPE N.AMERICA CN / JP / KR OTHERS					
WORLD					





Printing & Writing Paper Charts

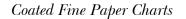


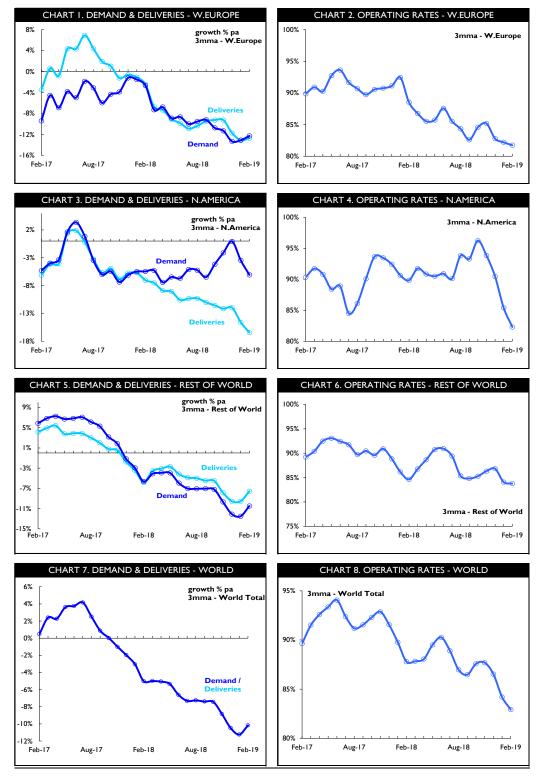
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2. Coated Fine Papers

COATED FI	NE PAP	PERS			1GE stry Consultants
GLOBAL MONTH	Month Year	2 2019			
APPARENT Tendency DEMAND (3 months)	Current Month ('000 tonnes)	Growth %pa	Year-to-Date ('000 tonnes)	Growth %pa	Growth %pa Last 3 Months
W.EUROPE					
N.AMERICA					
CN / JP / KR					
OTHERS					
WORLD					
DELIVERIES/ SHIPMENTS					
W.EUROPE					
N.AMERICA					
CN / JP / KR					
OTHERS					
WORLD					
CAPACITY					
W.EUROPE					
N.AMERICA					
CN / JP / KR					
OTHERS					
WORLD					
SHIPMENTS TO CAPACITY RATIO %	Current Mon 2019	nth (Raw) 2018	EMGE RATIO	- I month 2018	Last 3 Months
W.EUROPE					
N.AMERICA					
CN / JP / KR					
OTHERS					
WORLD					







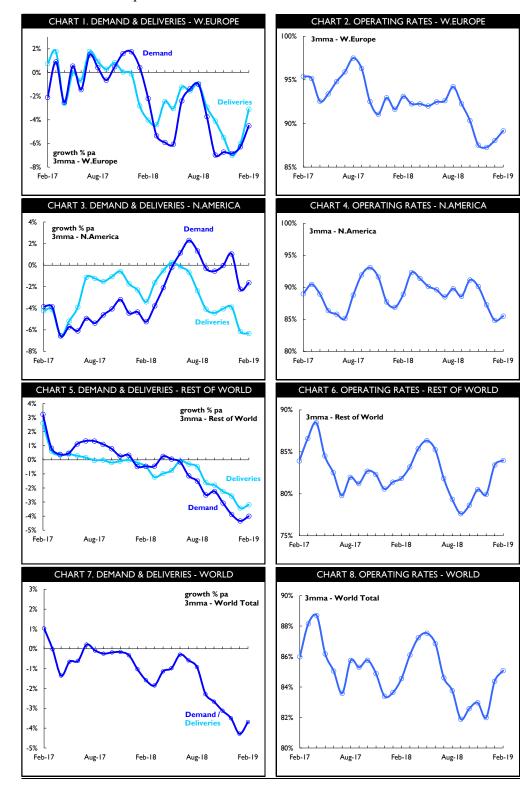
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3. Uncoated Fine Papers

UNCOATED	FINE PA	PERS		EN Paper Indu	1GE stry Consultants
GLOBAL MONTH		Month Year	2 2019		
APPARENT Tendency DEMAND (3 months)	Current Month ('000 tonnes)	Growth %pa	Year-to-Date ('000 tonnes)	Growth %pa	Growth %pa Last 3 Months
W.EUROPE					
N.AMERICA					
CN / JP / KR					
OTHERS					
WORLD					
DELIVERIES/ SHIPMENTS					
W.EUROPE					
N.AMERICA					
CN / JP / KR					
OTHERS					
WORLD					
CAPACITY					
W.EUROPE					
N.AMERICA					
CN / JP / KR					
OTHERS					
WORLD					
SHIPMENTS TO	Current Mon	th (Raw)	EMGE RATIO	- I month	Last 3
CAPACITY RATIO %	2019	2018	2019	2018	Months
W.EUROPE					
N.AMERICA					
CN / JP / KR					
OTHERS					
WORLD					





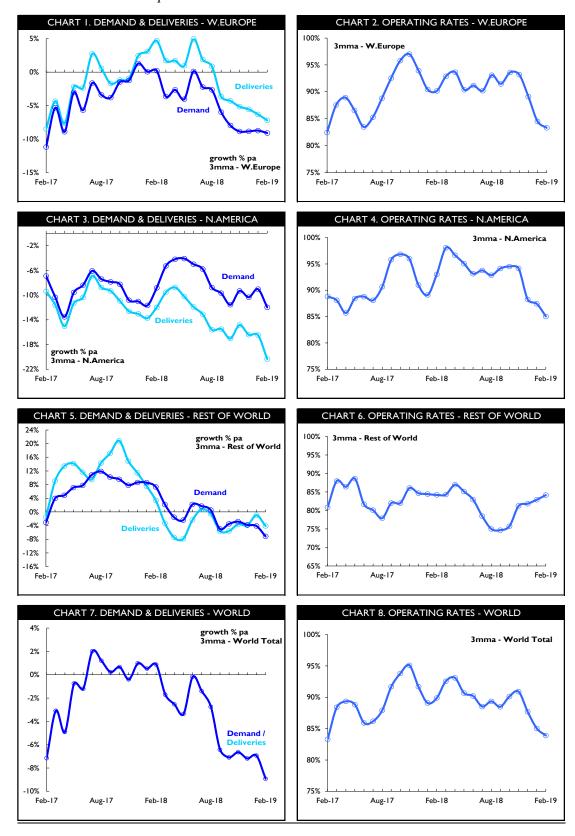
Uncoated Fine Paper Charts



4. Coated Mechanical Papers

COATED MI	ECHAN	CAL			1GE
GLOBAL MONTH		Month Year	2 2019		
APPARENT Tendency DEMAND (3 months)	Current Month ('000 tonnes)	Growth %pa	Year-to-Date ('000 tonnes)	Growth %pa	Growth %pa Last 3 Months
W.EUROPE N.AMERICA CN / JP / KR OTHERS					
WORLD DELIVERIES/					
SHIPMENTS W.EUROPE N.AMERICA CN / JP / KR OTHERS					
WORLD CAPACITY					
W.EUROPE N.AMERICA CN / JP / KR OTHERS WORLD					
SHIPMENTS TO CAPACITY RATIO %	Current Mon 2019	th (Raw) 2018	EMGE RATIO 2019	- I month 2018	Last 3 Months
W.EUROPE N.AMERICA CN / JP / KR OTHERS WORLD					





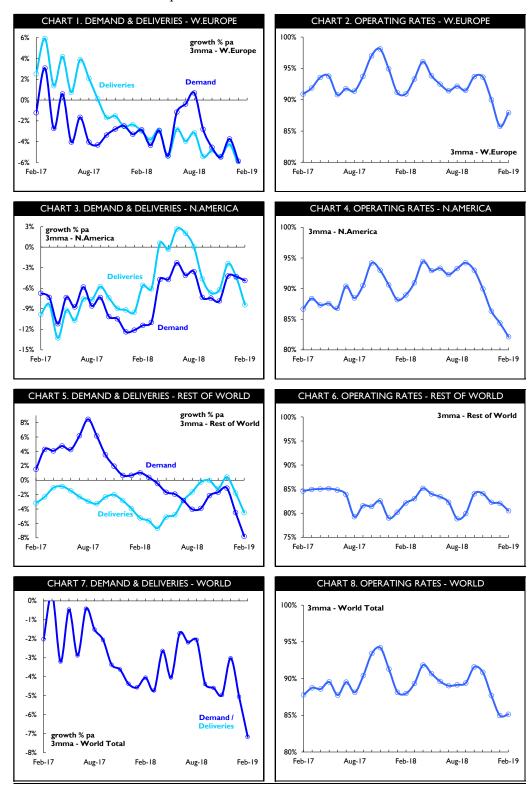
Coated Mechanical Papers Charts



5. Uncoated Mechanical Papers

UNCOATED	MECHAN	IICAL		EN Paper Indu	AGE
GLOBAL MONT	Month Year	2 2019			
APPARENT Tendency DEMAND (3 months)	Current Month ('000 tonnes)	Growth %pa	Year-to-Date ('000 tonnes)	Growth %pa	Growth %pa Last 3 Months
W.EUROPE					
N.AMERICA					
CN / JP / KR					
OTHERS					
WORLD					
DELIVERIES/ SHIPMENTS					_
W.EUROPE					
N.AMERICA					
CN / JP / KR					
OTHERS					
WORLD					
CAPACITY	_				
W.EUROPE					
N.AMERICA					
CN / JP / KR					
OTHERS					
WORLD					
SHIPMENTS TO CAPACITY RATIO %	Current Montl 2019	h (Raw) 2018	EMGE RATIO	- I month 2018	Last 3 Months
W.EUROPE					
N.AMERICA					
CN / JP / KR					
OTHERS					
WORLD					





Uncoated Mechanical Paper Charts

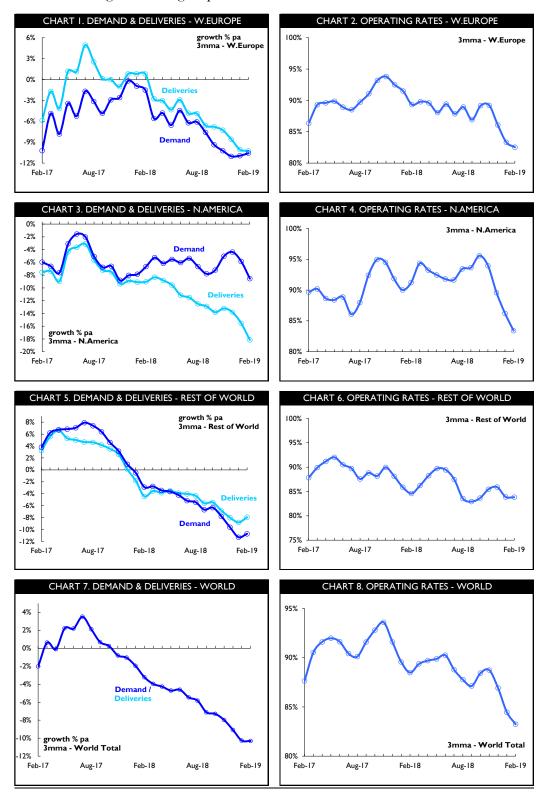
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6. Coated Printing & Writing Papers

COATED PAPERS				EMGE Paper Industry Consultants		
GLOBAL MONTHLY MONITOR STRICTLY CONFIDENTIAL				Month Year	2 2019	
APPARENT Tendency DEMAND (3 months)	Current Month ('000 tonnes)	Growth %pa	Year-to-Date ('000 tonnes)	Growth %pa	Growth %pa Last 3 Months	
W.EUROPE N.AMERICA CN / JP / KR OTHERS						
WORLD						
DELIVERIES/ SHIPMENTS						
W.EUROPE						
N.AMERICA						
OTHERS						
WORLD						
CAPACITY						
W.EUROPE						
N.AMERICA						
CN / JP / KR						
OTHERS						
WORLD						
SHIPMENTS TO	Current Mon	th (Raw)	EMGE RATIO	- I month	Last 3	
CAPACITY RATIO %	2019	2018	2019	2018	Months	
W.EUROPE						
N.AMERICA						
CN / JP / KR						
OTHERS						
WORLD						





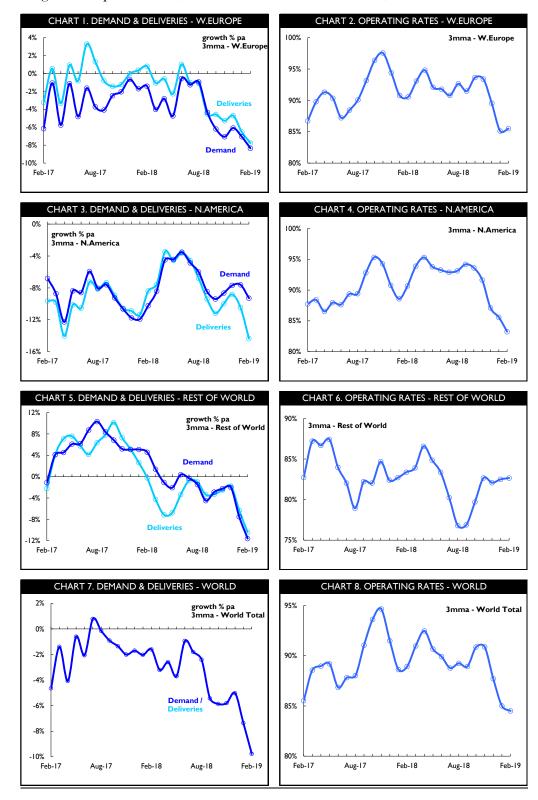
Coated Printing & Writing Paper Charts



7. Magazine Papers (Coated & Uncoated Mechanical)

MAGAZINE PAPERS					EMGE		
GLOBAL MONTHLY MONITOR					stry Consultants 2		
STRICTLY CONFIDENTIAL				Year	2019		
APPARENT Tendency DEMAND (3 months)	Current Month ('000 tonnes)	Growth %pa	Year-to-Date ('000 tonnes)	Growth %pa	Growth %pa Last 3 Months		
W.EUROPE N.AMERICA CN / JP / KR OTHERS							
WORLD							
DELIVERIES/ SHIPMENTS							
W.EUROPE N.AMERICA							
CN / JP / KR							
OTHERS WORLD							
CAPACITY							
W.EUROPE							
N.AMERICA							
CN / JP / KR OTHERS							
WORLD							
SHIPMENTS TO	Current Mon	th (Row)	EMGE RATIO	- I month	Last 3		
CAPACITY RATIO %	2019	2018	2019	2018	Last 3 Months		
W.EUROPE							
N.AMERICA							
CN / JP / KR OTHERS							
WORLD							





Magazine Papers Charts (Coated & Uncoated Mechanical)

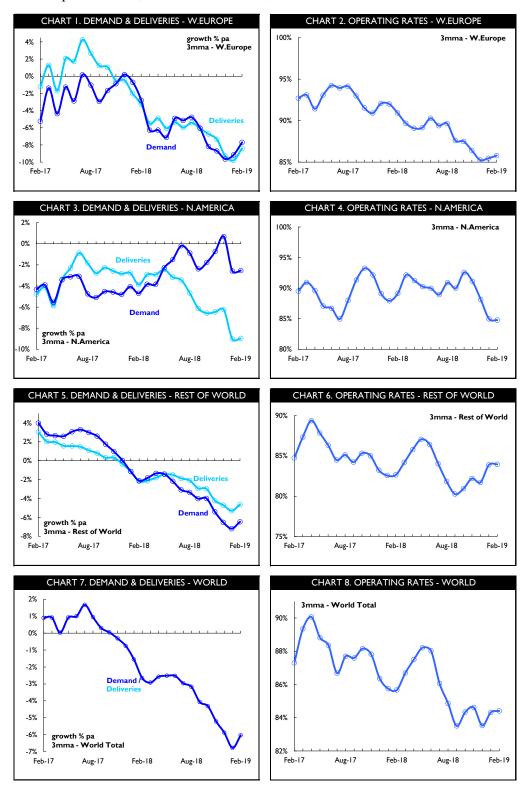
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8. Fine Papers (Coated & Uncoated)

FINE PAPE	RS			EN Paper Indu	1GE stry Consultants
GLOBAL MONTHLY MONITOR STRICTLY CONFIDENTIAL				Month Year	2 2019
APPARENT Tendency DEMAND (3 months)	Current Month ('000 tonnes)	Growth %pa	Year-to-Date ('000 tonnes)	Growth %pa	Growth %pa Last 3 Months
W.EUROPE N.AMERICA CN / JP / KR OTHERS					
WORLD DELIVERIES/ SHIPMENTS					
W.EUROPE					
N.AMERICA CN / JP / KR					
OTHERS					
WORLD					
CAPACITY			1		
W.EUROPE					
CN / JP / KR					
OTHERS					
WORLD					
SHIPMENTS TO	Current Mon	th (Raw)	EMGE RATIO	- I month	Last 3
CAPACITY RATIO %	2019	2018	2019	2018	Months
W.EUROPE					
N.AMERICA					
CN / JP / KR					
OTHERS					
WORLD					





Fine Papers Charts (Coated & Uncoated)



9. Global Paper Prices

Prices stable in Europe and Southeast Asia, but variable in the USA

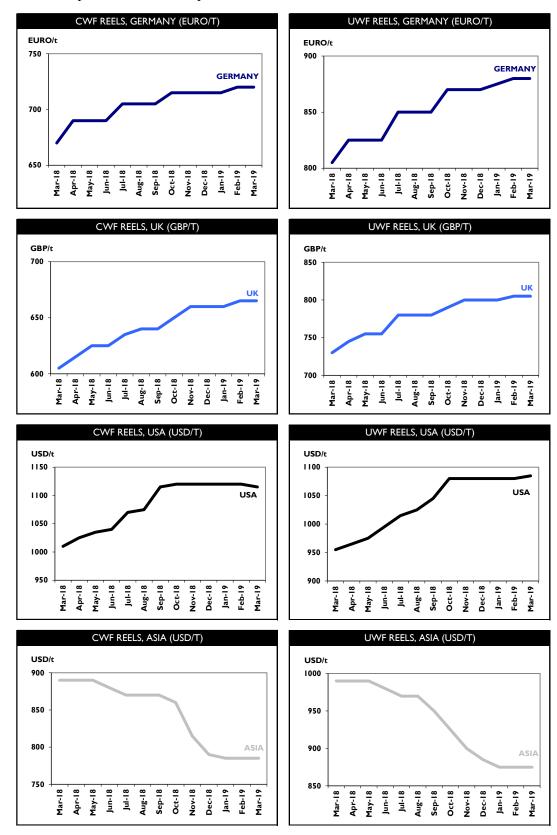
GLOBAL PAPER PRICES					
MONTHLY MONITOR STRICTLY CONFIDENTIAL				Month Year	3 2019
CWF REELS (100gsm), LOCAL CURRENCY	Current Month	Month-I	Month-3	Month-6	Month-12
GERMANY, EURO/t					
UK, GBP/t USA, USD/t					
SE ASIA, USD/t					
		_		_	
UWF REELS (80gsm), LOCAL CURRENCY	Current Month	Month-I	Month-3	Month-6	Month-12
GERMANY, EURO/t					
UK, GBP/t USA, USD/t					
SE ASIA, USD/t					
LWC (60gsm), LOCAL CURRENCY	Current Month	Month-I	Month-3	Month-6	Month-12
GERMANY, EURO/t					
UK, GBP/t					
USA, USD/t SE ASIA, USD/t					
SE ASIA, USDA					
SC MAGAZINE (56gsm), LOCAL CURRENCY	Current Month	Month-I	Month-3	Month-6	Month-12
GERMANY, EURO/t					
UK, GBP/t					
USA, USD/t					
SE ASIA, USD/t					

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In March 2019, paper prices were stable in Germany and the UK, while prices were mixed (with some up, some down, some stable) in the USA.

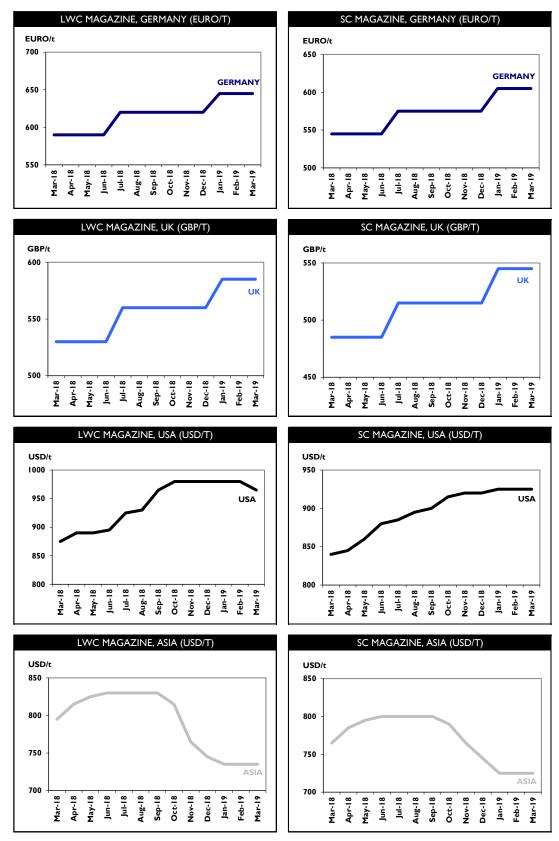
For Southeast Asia, our average prices are unchanged, although this is an average of multiple countries, where some prices increased (China), while others were unchanged in their local currencies (which translated into declines in US dollar terms, which is what we quote).





Global Paper Prices, Fine Papers (Coated & Uncoated)





Global Paper Prices, Magazine Papers (Coated & Uncoated Mechanical)

