

PAPER PRICE FORECASTS

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GLOBAL OVERVIEW – WHERE WE ARE TODAY

- Printing/Writing Paper demand has continued to decline, dropping by -2% (on a 3-month average basis to August 2011), which was around the same as the previous 3 months.
- World Newspaper demand, meanwhile, also remains negative, although the decline slowed from -2% to -1% in the 3 months to August 2011. Demand drivers (newspaper circulation and advertising) are considerably weaker than this in most markets.
- The continued declines are in line with generally negative paper demand drivers, especially in mature markets, such as newspaper and magazine circulation and advertising, postal volumes, office paper consumption, etc.
- There are still several pockets of growth, e.g. in some developing markets, as well as magazine advertising in Germany and direct mail in some countries, but the negatives outweigh the positives.
- With demand weak, global Printing & Writing Paper Operating Ratios are deep in the EMGE "Oversupply Zone", i.e. the 3-month average (annual) to August was only 54%.
- Uncoated Mechanicals in particular are oversupplied both regionally and globally, as are most magazine papers. The North American Coated Mechanical sector on its own is the exception, showing balanced supply and demand (57% on a 3-month basis, due to capacity cutbacks (-17% lower capacity than a year ago). However, despite this, magazine papers (Uncoated Coated and Uncoated Mechanical papers) are still in the Oversupply Zone, not only in North America and Western Europe (both at 55% on a 3-month basis), but also globally (57%).
- Supply and demand of Newspapers, meanwhile, is theoretically balanced at the global level (Global Operating Ratio of 56%), and also in North America and Western Europe (Annual Operating Ratios between 50-55%).
- These Operating Ratios suggest weak pricing for magazine papers, while newspaper prices, in a declining market, could go in any direction, depending on costs, and the relative determination of mills and publishers.
- Currently, input costs have generally stopped rising and in several cases (e.g. pulp, newspaper) are now falling. Even oil prices have been on a pretty downward trend for 2 months.
- With underlying demand weak and costs easing, pulp markets are on the oversupplied side of balanced, the short term outlook looks to be generally against price rises. However, there will be exceptions to that statement in cases where there are major capacity changes, as we discuss in the report.

GLOBAL OVERVIEW – FORECAST CYCLE TO 2014

- We continue to predict an economic recovery in the short-term, although we have delayed the timing from late 2011 to early 2012, due to current worries about government debt and possible country-level debates causing weak consumer and business sentiment.
- However, governmental and central bank measures (such as big base-cash injections), which have already started, are expected to ease worries and improve sentiment in 2011. This should boost paper demand drivers in 2011, such as advertising and publishing. In addition, the Olympic Games in London and the Euro 2012 football championships in Poland/Ukraine, as well as the US Presidential Election in November 2012 will also boost editorial paper and circulation.
- Following this, we predict several major developments that will all have a negative influence on paper markets:
 - The rise in paper prices will prompt some publishers to reduce their consumption further.
 - The completion of the Olympic Games and Euro 2012 football championships will also cause a sudden drop in consumption.
 - The Presidential election in the very highly-indebted USA will most likely lead to a period of sharp cutbacks in government spending and monetary tightening (higher interest rates), especially as we expect the current Obama administration will want to avoid that as much as possible before the election. This will raise unemployment and slow US growth and reduce their demand for imported goods, which will ripple out to the rest of the world in 2011.
- These factors are forecast to slow economic growth, leading to falling costs, as well as weaker paper demand and oversupply. This is predicted to cause paper prices to fall in 2011.
- The slowdown after the US election is expected to last at least a year (as the current slowdown already has), before the global economy has successfully reacted to the situation and a recovery can begin.
- As part of the recovery process, we expect China to stimulate economic growth in response to the slowdown, helping to improve global consumer and business confidence, and driving global growth (including paper demand) in 2011 progress, and more strongly into 2012.

CHANGES SINCE THE LAST FORECAST

- The general shape of our forecast cycle is actually not greatly changed from our previous forecast, but we have updated our forecast, and having to include some changes. These include:
 - The predicted recessionary to begin in early 2012 instead of late-2011.
 - The increase in Western European newspaper prices (based on cost increases) delayed until mid-2012, instead of early-2012.
 - US newspaper prices difficult to raise much over there, with falling circulation/advertising. News of other (Main of the World) etc.
 - Magazine paper prices in the earlier, partly due to industry-wide capacity closures (UPM), although the discontinuation of some printed magazine titles in the UK (eg Sky TV magazines) will undermine attempted price rises in Q4 2011.
 - US-based pulp prices to continue declining from early-2012 and no recessionary in late-2012. Also, a major short-cut of the supply chain in 2011, followed in 2011 by a surge in apparent demand and prices, as inventory is rebuilt in China and elsewhere.
 - No uptick in US newspaper prices late this year, as mill costs have been reduced and capacity closure is counter-balanced by the market at another mill.
 - US Mechanical Paper prices comparatively stable late this year, due to capacity closure.

CAVEAT

- Financial Crisis: If Governments and financial institutions fail to resolve the issues about the finances of Greece, Italy, Spain, Portugal etc, then this could easily result in a major financial crisis, this would mean major disruptions in demand, and would definitely undermine paper prices.
- Although this is not our base scenario, the risks remain that a financial crisis would turn into an economic deflation and widespread unrest, impacting Europe and the rest of the World.

W. EUROPE - NEWSPRINT 2012

- In our last Price Forecast, we predicted that increasing demand from late-2011, coupled with high costs, would enable newspaper producers to raise prices back to around 2009 levels (i.e. around Euro 340/c) in early-2012. However, since that forecast, several factors have developed in a way that would argue against a price increase early-2012. For example, newspaper costs have begun to fall, and energy costs are believed to have stabilised, in line with a more stable oil price. Also, we now expect a slight delay in our forecast demand recovery, due to sovereign debt worries currently lowering stock business and investment sentiment.
- As such, with the Western European newspaper market oversupplied and costs easing, the arguments in favour of a newspaper price rise are, in our view, rather weak. Price will be supported by the closure of a €10,000 spa newspaper market (L'Espresso will be Germany), but in an Eurozone spa market, this is not expected to have enough impact to push prices up in early-2012.
- As mentioned, however, we do predict that the Western European market will develop more favourably for prices from towards mid-2012, as better economic growth is predicted to cause a fresh rise in circulation and that, production costs, improved advertising, editorial and circulation are also expected, as they benefit not only from our forecast economic mid-recovery, but also the Olympic Games in London and the Euro 2012 football championships in Poland/Greece. These factors are forecast to lead to an improved newspaper demand trend, although this will mean a slower decline, rather than actual demand growth, but it is nevertheless expected to create a more confident mood.
- As such, we expect Western European newspaper prices to be stable in early-2012, but to increase in mid-2012.
- We are also forecasting that the gap between UK and Mainland European prices will persist or even widen, mainly because the market on the Continent (eg Germany) is in better shape, while the UK market is in a difficult position.
- On the one hand, we recognise that the weak British Pound sterling means that UK prices "feel" low to non-UK mills. However, in simple Pound sterling terms, prices also "feel" high for UK publishers, many of who cannot afford a rise in costs. In addition, UK demand is very weak, with newspaper advertising falling fairly evenly again and circulation falling too, even before it took a fairly big hit due to the closure of the News of the World in July. Other titles are also believed to be under threat, although for different reasons (financial), rather than cost-cutting.
- For simply, the UK market is struggling, and any rise in newspaper prices will leave publishers no option but to reduce their circulation and publish smaller size frequent/less newspapers. This will put mills in a difficult, having price talks, which we expect to mean smaller price rises, when they do happen. Unfortunately, this is a win-lose situation for all parties concerned.
- Taking all of these factors into consideration, our updated forecast is that Western European Newspaper prices will remain stable in early-2012, before rising in mid-2012 to Euro 325/c in Mainland Europe and to £245/c in the UK.

W. EUROPE – NEWSPRINT 2013-2014

- Following the price rise we are forecasting for mid-2013, the major influences on newspaper prices are expected to be negative:
 - The high newspaper prices in mid-2013 will mean many publishers will cut their consumption in response.
 - Advertising, editorial and circulation will fall back to pre-Olympic/Euro 2012 levels.
 - The predicted US-led global economic slowdown in 2013 will cause a drop in costs, as well as weaker newspaper demand and oversupply. This is predicted to cause newspaper prices to fall in both early and mid-2013, with Operating Ratios expected to average below 85% during that year.
 - Once the global economy has stabilised and successfully returned to the slowdown, the predicted slow recovery should improve the demand level in 2014 progressively and into 2015. However, just as in 2012, this will not mean actual newspaper demand growth in Western Europe, and in any case, it will not be in time to prevent Western European newspaper prices from falling again in 2014, we believe.
- **Exports:** The decline in prices that we have forecast for 2013 and 2014 is sensitive to any changes in costs, especially for wastepaper. Further rises in costs, e.g. with Chinese mills buying up low-priced wastepaper in a weak market, could push wastepaper costs back up even when the market fundamentals are weak. This could again force newspaper prices up, or at least prevent them from falling, even in the face of oversupply.
- **Exports:** Major raw closures, as always, have the potential to alter market conditions dramatically and suddenly, so any additional closures will inevitably cause changes to our forecasts. However, with negative demand trends forecast long term and elsewhere, the pace of capacity closures would have to be higher than the demand declines.

W. EUROPE – MAGAZINE PAPERS

- Our forecast for magazine paper prices in Western Europe is broadly similar to our forecast for newspaper prices, in terms of the shape of the cycle. But there is one major exception:
- We predict that prices for magazine papers will rise earlier than for newspapers.
- This is because the impending Coastal and Uncoated Mechanical paper capacity cutbacks at UPM's Rajahmundry and Alibada mills (more than 100,000 tpa) are expected to eliminate the current oversupply of magazine papers, dramatically affecting editors' and buyers' moods in favour of sellers. This will affect both the Coastal and Uncoated Mechanical paper markets.
- However, we believe this will not boost prices greatly until the closures actually take place. This is mainly because the recent disappearance of the UK's largest-circulation printed magazine (distributed to 7.3 million by TV continuously) will mean a soft market in the short term. European mills have announced price rises for Q4 2013, but we believe these will have only very limited success. However, once the UPM closures have taken place in 2014, we expect prices to rise more convincingly in 2014.
- Following this, we are forecasting rises and declines in price at similar times to the moves in newspaper prices, and for similar reasons, so we will not repeat all the detail of those arguments here.
- In summary, though, we predict that magazine paper prices will rise for some of 2013, as economic stimulus and European sporting events boost demand.
- Thereafter, slow pricing momentum initially, in the latter part of 2013, and this will be followed by price declines in 2014, as spending cuts in the USA prompt a new global downturn.
- In line with our predicted economic recovery as 2014 progresses, economic growth and paper demand are expected to improve during the course of 2014 and into 2015. We are forecasting rising paper prices rising again once the recovery starts to be felt. In this forecast, that specifically means higher prices from the second half of 2014.

USA - NEWSPRINT

- The decline in North American Newsprint demand (-4%, June to August 2011) and exports (-5%, June to August) is continuing. However, producers are keeping Operating Ratios fairly high (74%, June to August) through capacity cutbacks (-4% in August 2011, compared with a year earlier).
- Although there were some signs of pricing weakness in mid-2011 (a few marginal discounts, failure of a mid-year price rise attempt), mills more or less managed to keep prices under control through capacity discipline.
- We previously predicted that North American producers would close more capacity in late-2011, helping mills to nudge prices upwards again in Q4 2011. However, we no longer expect any new price rises before 2012. There are several reasons for this:
 - We were right about the capacity closure (the 170,000-tpa newsprint PM at NewPage's Port Hawkesbury mill stopped producing in September). However, the newly-bought unit (ex-Kalahari) East Millenoket mill is restarting production on a 115,000-tpa newsprint machine, which we expect will balance out the Port Hawkesbury closure.
 - The US dollar strengthened since our last forecast (encouraging imports and making exports more difficult).
- Combining all of these factors, short-term conditions now argue against any upward price movement.
- However, we expect an improving economic cycle to push raw materials costs up and help mills to start raising prices late in the Q1 2012 and move clearly from Q2 onwards.
- We predict that prices will rise to US\$ 405/t (48.8gsm) by late 2012. After that, the pricing up-cycle in this shrinking market is forecast to end following the US Presidential election in November 2012, when we expect big spending cuts to be announced.
- Our forecast is for falling newspaper pricing in 2013, which is predicted to see prices reach a new "floor" in early 2014. With a new cyclical upturn forecast in 2014, rising costs are again expected to prompt a new (temporary) phase of price rises.

USA – PUBLICATION PAPERS

- Demand volumes in North America remain solidly negative in both the Coated Mechanical (CM), through to August 2011) and Uncoated Mechanical Paper (UM) sectors, with Operating Ratios indicating a balanced market for Coated Mechanicals (CM), but considerable oversupply for Uncoated Mechanicals (UM). The magazine paper market overall is oversupplied, with Operating Ratios (through to August 2011) at 80%.
- In fact, the market is even more oversupplied than these Operating Ratios suggest, because North American Coated Mechanical producers had until recently been buying and storing more paper stock than they were selling, and building up mill inventories as a result. In the past couple of months, they have tried to reverse this, by selling off paper on the spot market at a discount.
- Uncoated Mechanical prices, meanwhile, have not been falling, although the weakening Operating Ratios did put and led to the previous increasing pricing trend (global operating ratios had been boosted by the fire at Norske Skog's Raunings, Norway mill earlier this year).
- However, although demand is falling and prices have stopped discontinued falling, we expect new developments in capacity to support prices in the short term. Specifically, the Pappi Neenah/Georgia mill of NewPage stopped MC paper production on the 100,000 tpa PM 1 in September. And, as mentioned earlier, LPM is closing more than 500,000 tpa of Coated and Uncoated Mechanical paper capacity at two of its European mills (Kozłowski and Alkibiak), North America is sensitive to European capacity developments, as it imports some 600,000 tpa of European Uncoated Mechanical Paper.
- The domestic closure (Pappi Neenah/Georgia) will have the biggest impact, and is expected to support Uncoated Mechanical paper prices in the USA in the short term. Coated Mechanicals should also benefit by extension, although to a lesser extent. As such, we are forecasting a rise in Uncoated Mechanical prices at the start of 2012, while the current decline in Coated Mechanical prices is predicted to slow initially in late 2011, and then stop and reverse.
- A combination of global supply tightening due to the LPM closures, coupled with a more positive market sentiment due to a forecast improved demand trend in 2012, is expected to enable mills to raise US prices not only for Uncoated but also Coated Mechanical papers in 2012. However, this forecast is clouded by uncertainty surrounding the outcome of the Newpage Chapter 11 proceedings.
- However, after mid 2012, we predict that the pricing momentum will stop, and together with the government spending cuts that we expect in 2013, we are forecasting renewed oversupply and a new downturn in prices, beginning late in 2012 and accelerating in 2013. In line with the forecast cycle we have explained earlier, we thus predict a new economic and paper market recovery in 2014, with prices rising again after reaching the "floor" in early 2014.

MARKET PULP

- We have again not significantly altered our pulp price forecast since our last forecast.
- As we predicted, NBSM pulp prices have been falling, undermined by falling paper production, as well as Chinese speculators storing their purchases once they recognized that prices had peaked.
- In the short term, with paper demand still falling, we forecast that pulp prices will decline to US\$600/t by Q4 2011.
- The better paper production trend (esp. Asia) predicted for 2012, as well as the availability of lower-priced pulp, are expected to cause increased Chinese buying and better underlying consumption, boosting pulp prices again.
- Average quarterly NBSM prices in 2012 are forecast to peak at US\$700/t in the third quarter of that year.
- However, the speculative pulp buying phase is again predicted to be only short-lived, and as global paper demand weakens again after mid-2012, we predict a renewed weakness in pulp prices after the summer of 2012 and into the new weaker paper market of 2013.
- In 2013, the already weakening demand trend is forecast to combine with large-scale growth in global pulp capacity to cause a continuation of pulp price declines to US\$515-530/t by the end of 2013.
- With underlying demand (paper) very weak and prices falling during 2013, this is predicted to cause a major clean-out of the global pulp supply chain.
- Thereafter, prices are then forecast to start rising strongly again after they bottom out at the end of 2013, with Chinese buyers spearheading a demand and price surge for market pulp in 2014.

PAPER PRICES

EURO

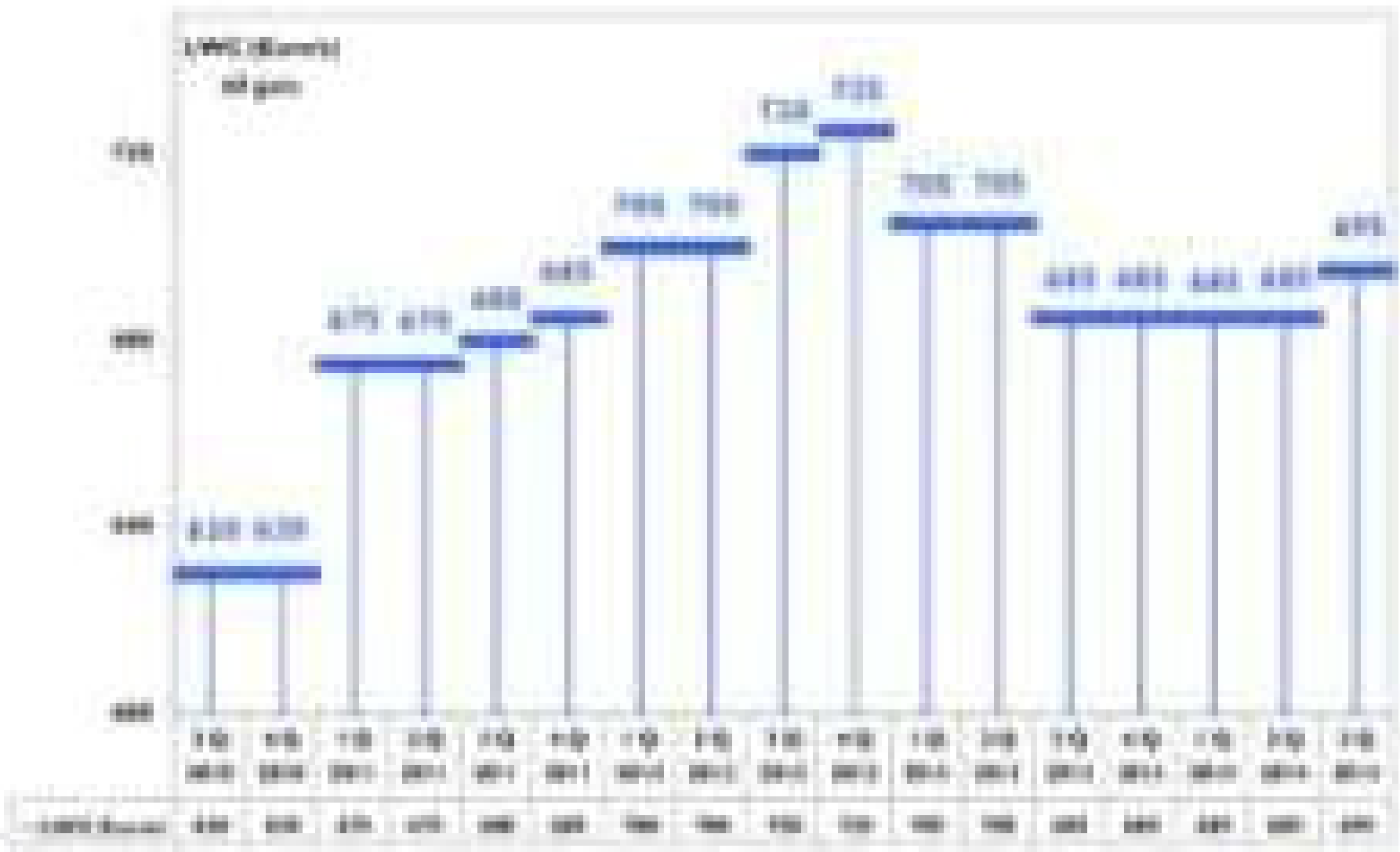
PRICE FORECAST SUMMARY (i) - EURO

	BENCHMARK (Euro)				Fin. Ratio (i)
	1M	3M	6M	1Y	
1 Q 2018	4.75	5.00	4.50	4.75	1.00
2 Q 2018	4.75	5.00	4.50	4.75	1.00
3 Q 2018	4.50	5.00	4.50	4.75	1.00
4 Q 2018	4.50	5.00	4.50	4.75	1.00
1 Q 2019	4.75	5.00	4.50	4.75	1.00
2 Q 2019	4.75	5.00	4.50	4.75	1.00
3 Q 2019	4.50	5.00	4.50	4.75	1.00
4 Q 2019	4.50	5.00	4.50	4.75	1.00
1 Q 2020	5.00	4.75	4.50	4.75	1.00
2 Q 2020	5.00	4.75	4.50	4.75	1.00
3 Q 2020	5.00	4.50	4.50	4.75	1.00
4 Q 2020	5.25	4.75	4.50	4.75	1.00
1 Q 2021	5.00	4.75	4.50	4.75	1.00
2 Q 2021	5.00	4.50	4.50	4.75	1.00
3 Q 2021	4.75	4.50	4.50	4.75	1.00
4 Q 2021	4.75	4.50	4.50	4.75	1.00
1 Q 2022	4.50	4.50	4.50	4.75	1.00
2 Q 2022	4.50	4.50	4.50	4.75	1.00
3 Q 2022	4.50	4.50	4.50	4.75	1.00
4 Q 2022	4.50	4.50	4.50	4.75	1.00

PRICE FORECAST SUMMARY (ii) - EURO

	GERMANY (€ bn)				Ex. Rate (€)
	LWC	IC	Non	Pub	
2010	622	518	439	685	1.31
2011	679	599	513	669	1.29
2012	711	613	528	619	1.31
2013	698	618	509	670	1.31
2014	690	609	490	663	1.31
2015	703	613	508	663	1.31
% change					
2010	0%	0%	10%	11%	0%
2011	9%	15%	17%	2%	0%
2012	9%	19%	19%	-1%	-2%
2013	-2%	2%	3%	12%	2%
2014	-1%	-1%	-2%	-1%	2%
2015	2%	2%	4%	1%	2%

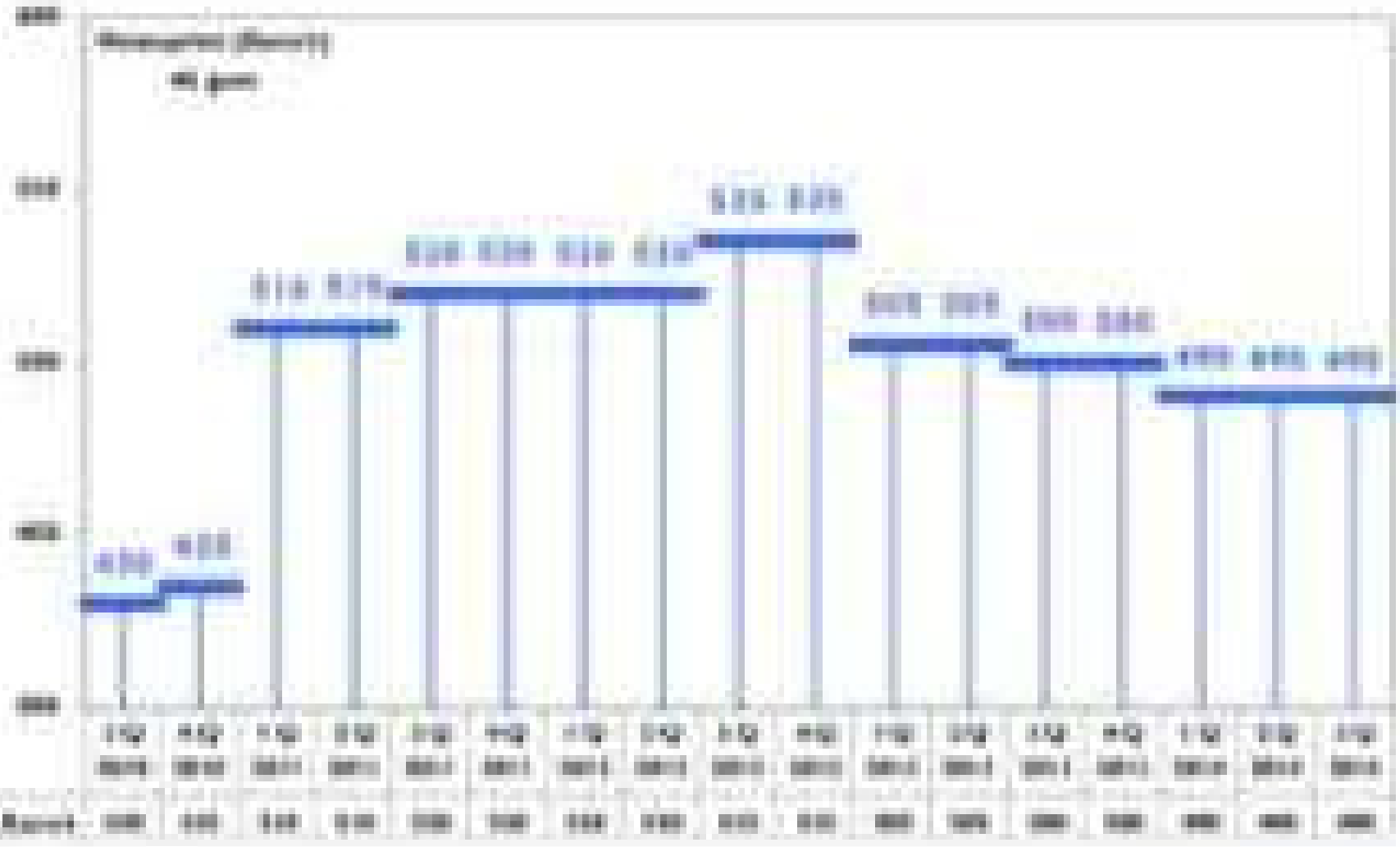
LWC 60 GSM - EURO/t



SC 56GSM - EURO/t (GERMANY)



NEWSPRINT 45GSM - EURO/t



PAPER PRICES

GBP £/t

PRICE FORECAST SUMMARY (i) – GB£

	LHV (GB£/MWh)				Ex. Price (p)
	EMC	NC	Max	Min	
1 Q 2010	515	475	550	370	1.20
2 Q 2010	515	475	550	410	1.19
3 Q 2010	520	480	550	440	1.20
4 Q 2010	530	490	550	460	1.21
1 Q 2011	540	510	550	470	1.20
2 Q 2011	540	510	550	480	1.20
3 Q 2011	550	510	550	490	1.21
4 Q 2011	550	510	550	500	1.20
1 Q 2012	560	520	550	510	1.20
2 Q 2012	560	520	550	520	1.20
3 Q 2012	570	520	550	530	1.20
4 Q 2012	570	520	550	540	1.20
1 Q 2013	580	520	550	550	1.20
2 Q 2013	580	520	550	560	1.20
3 Q 2013	590	520	550	570	1.20
4 Q 2013	590	520	550	580	1.20
1 Q 2014	600	520	550	590	1.20
2 Q 2014	600	520	550	600	1.20
3 Q 2014	610	520	550	610	1.20
4 Q 2014	610	520	550	620	1.20

PRICE FORECAST SUMMARY (ii) - GB£

	LHC (GBP 01)				Real Rate (%)
	LHC	BC	Alcoa	Pulp	
2010	5.13	4.83	3.92	5.87	0.50
2011	5.00	4.77	4.11	5.82	0.60
2012	4.99	4.80	4.41	5.73	0.50
2013	4.99	4.80	4.38	5.69	0.50
2014	4.99	4.80	4.11	5.69	0.50
2015	4.23	4.40	4.40	5.77	0.50
% change					
2010	-1%	-1%	-14%	-6%	-1%
2011	-1%	-1%	-2%	-1%	-1%
2012	-1%	-1%	-2%	-2%	-1%
2013	-1%	-1%	-4%	-4%	-1%
2014	-1%	-1%	-2%	-1%	-1%
2015	-4%	-1%	-4%	-1%	-1%

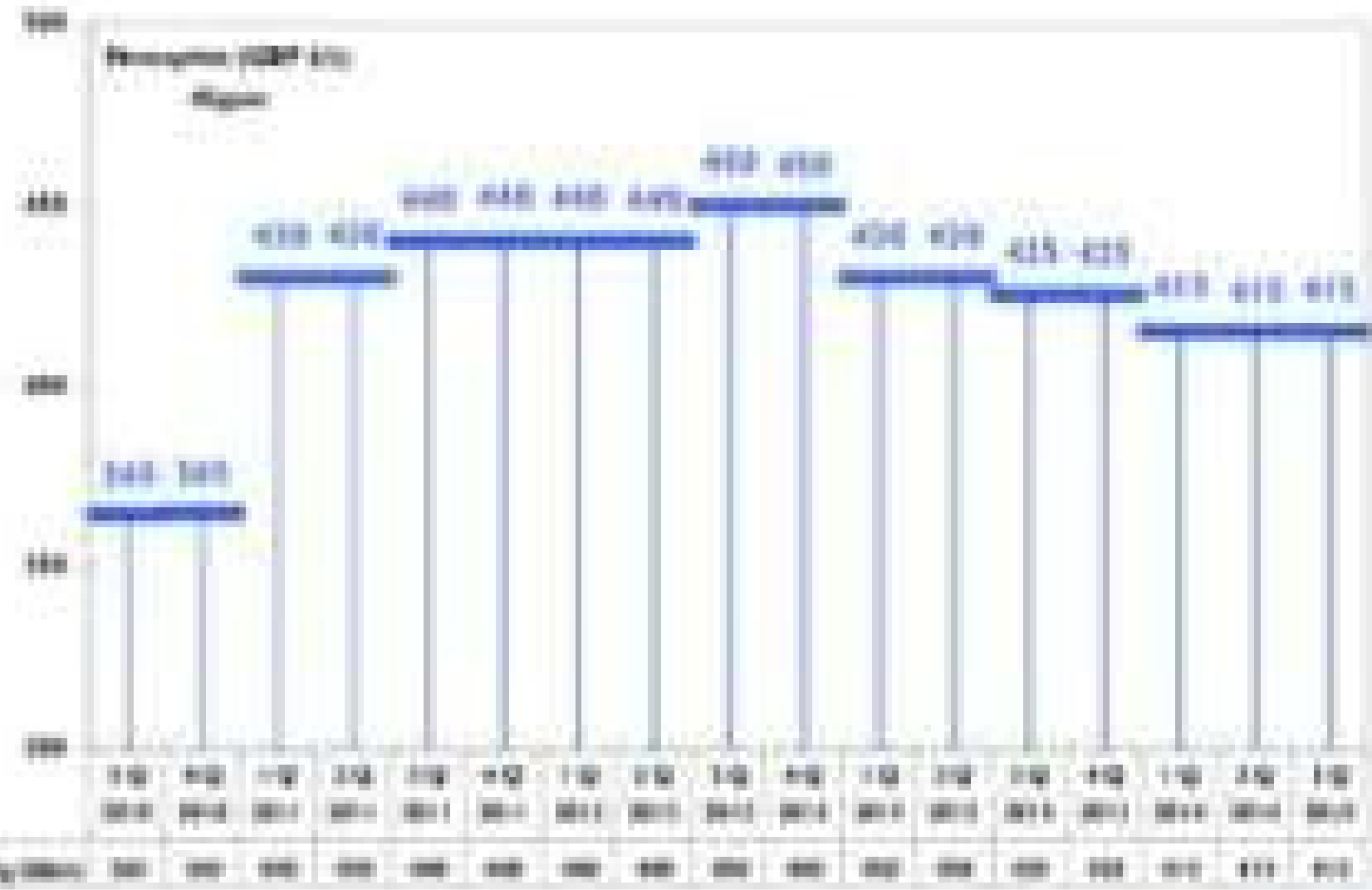
LWC 60 GSM - GBP £/t



SC 56GSM - GBP £/t



NEWSPRINT 45GSM - GBP €/t



PAPER PRICES

USD

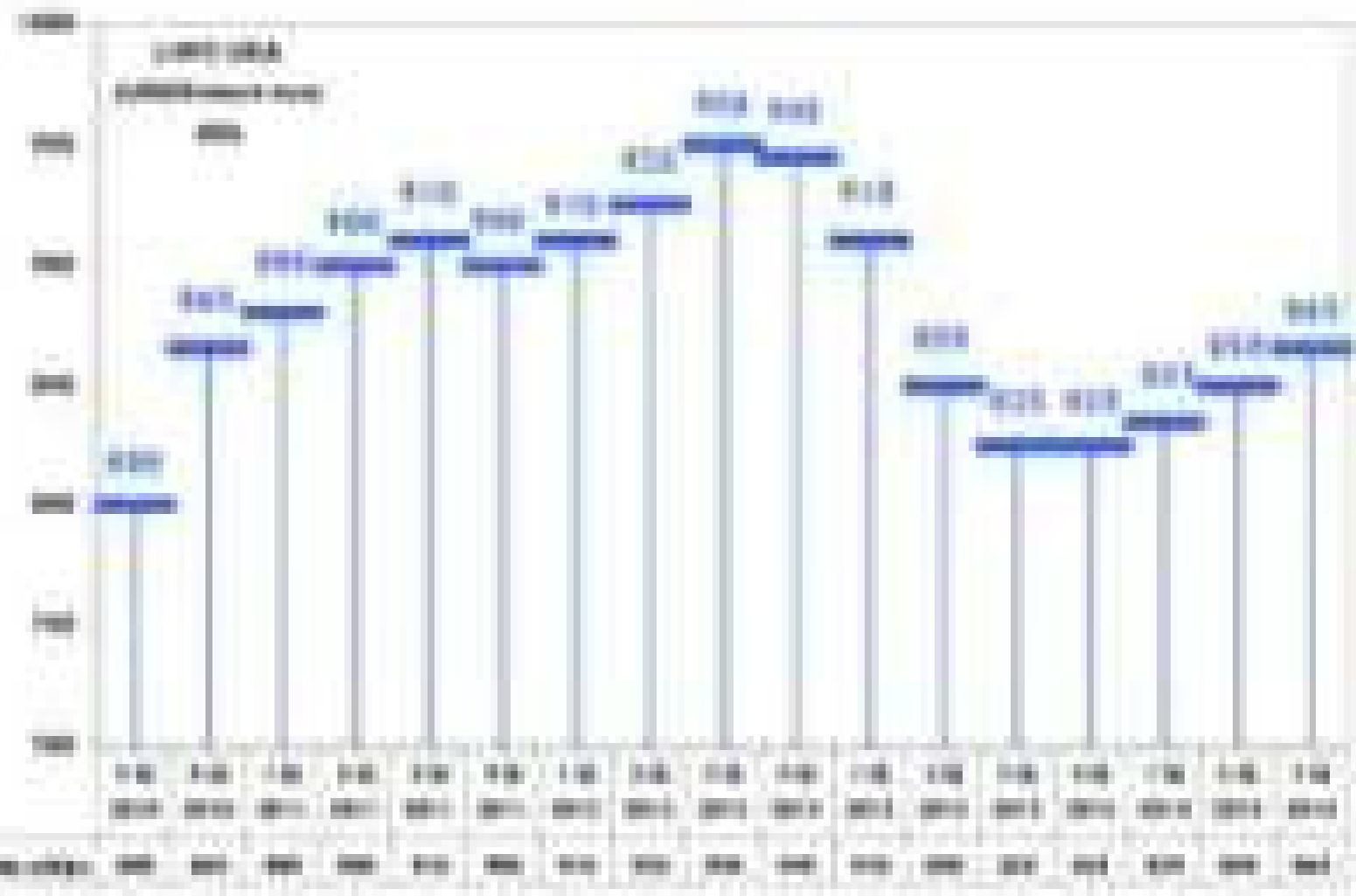
PRICE FORECAST SUMMARY (i) – US\$

	2018		2019	
	2018 (Price)	2018 (Price)	2019 (Forecast)	2019 (Forecast)
	EMC	EC	EMC	EC
1-12-2018	775	745	815	800
2-12-2018	775	745	815	800
3-12-2018	780	740	820	805
4-12-2018	785	735	825	810
5-12-2018	790	730	830	815
6-12-2018	795	725	835	820
7-12-2018	800	720	840	825
8-12-2018	805	715	845	830
9-12-2018	810	710	850	835
10-12-2018	815	705	855	840
11-12-2018	820	700	860	845
12-12-2018	825	695	865	850
1-12-2019	830	690	870	855
2-12-2019	835	685	875	860
3-12-2019	840	680	880	865
4-12-2019	845	675	885	870
5-12-2019	850	670	890	875
6-12-2019	855	665	895	880
7-12-2019	860	660	900	885
8-12-2019	865	655	905	890
9-12-2019	870	650	910	895
10-12-2019	875	645	915	900
11-12-2019	880	640	920	905
12-12-2019	885	635	925	910

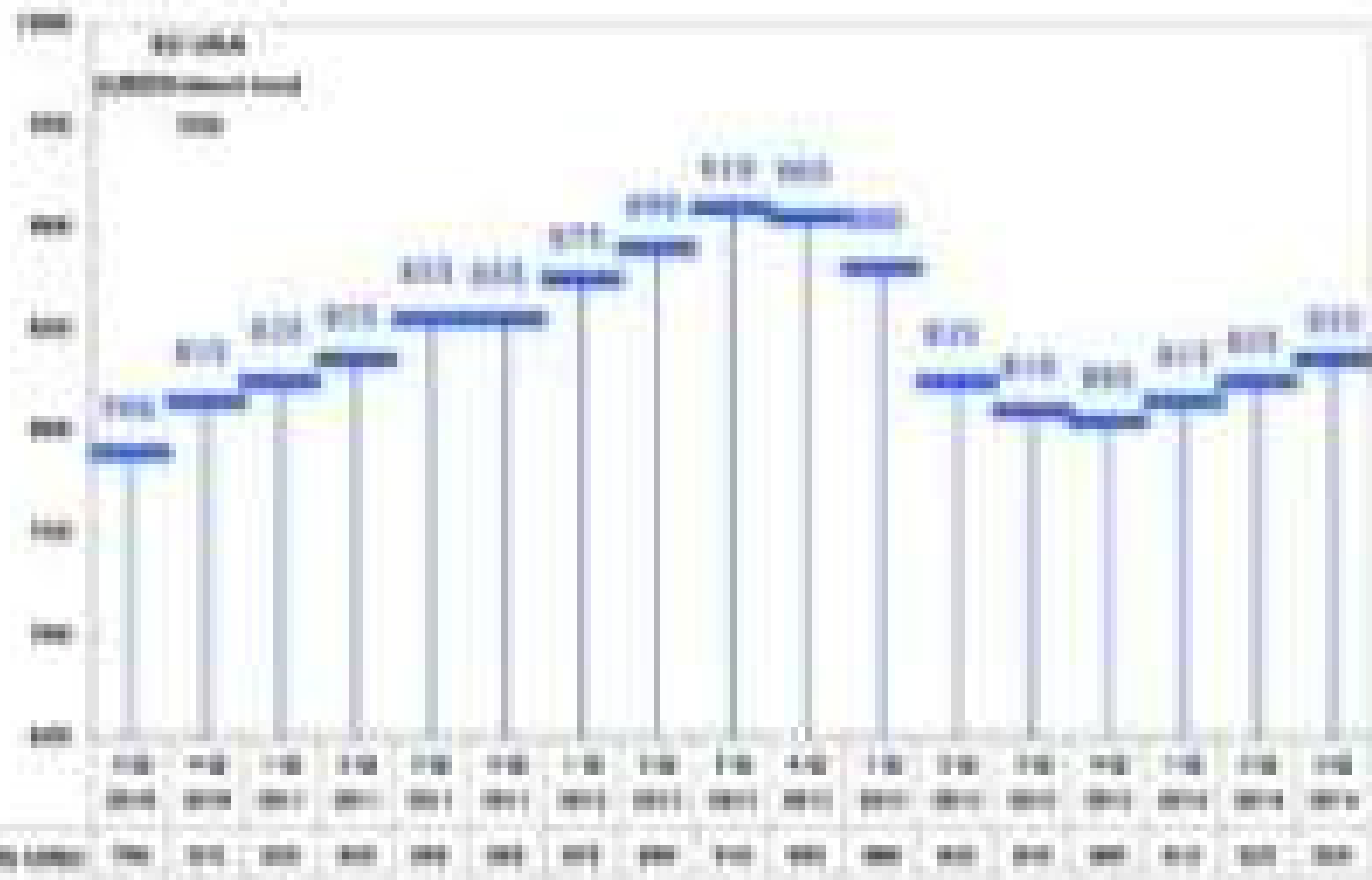
PRICE FORECAST SUMMARY (ii) – US\$

	USA		USA	USA
	USA (2010)	USA (2011)	(Simulated)	(Simulated)
	EMU	3C	News	Pop
2010	789	779	784	811
2011	878	847	826	833
2012	931	891	863	881
2013	853	839	826	779
2014	840	821	800	767
2015	867	804	829	809
% change				
2010	-2%	-4%	4%	43%
2011	14%	3%	7%	-2%
2012	4%	4%	6%	-4%
2013	-9%	-2%	-2%	-14%
2014	-2%	2%	-4%	-7%
2015	3%	7%	3%	18%

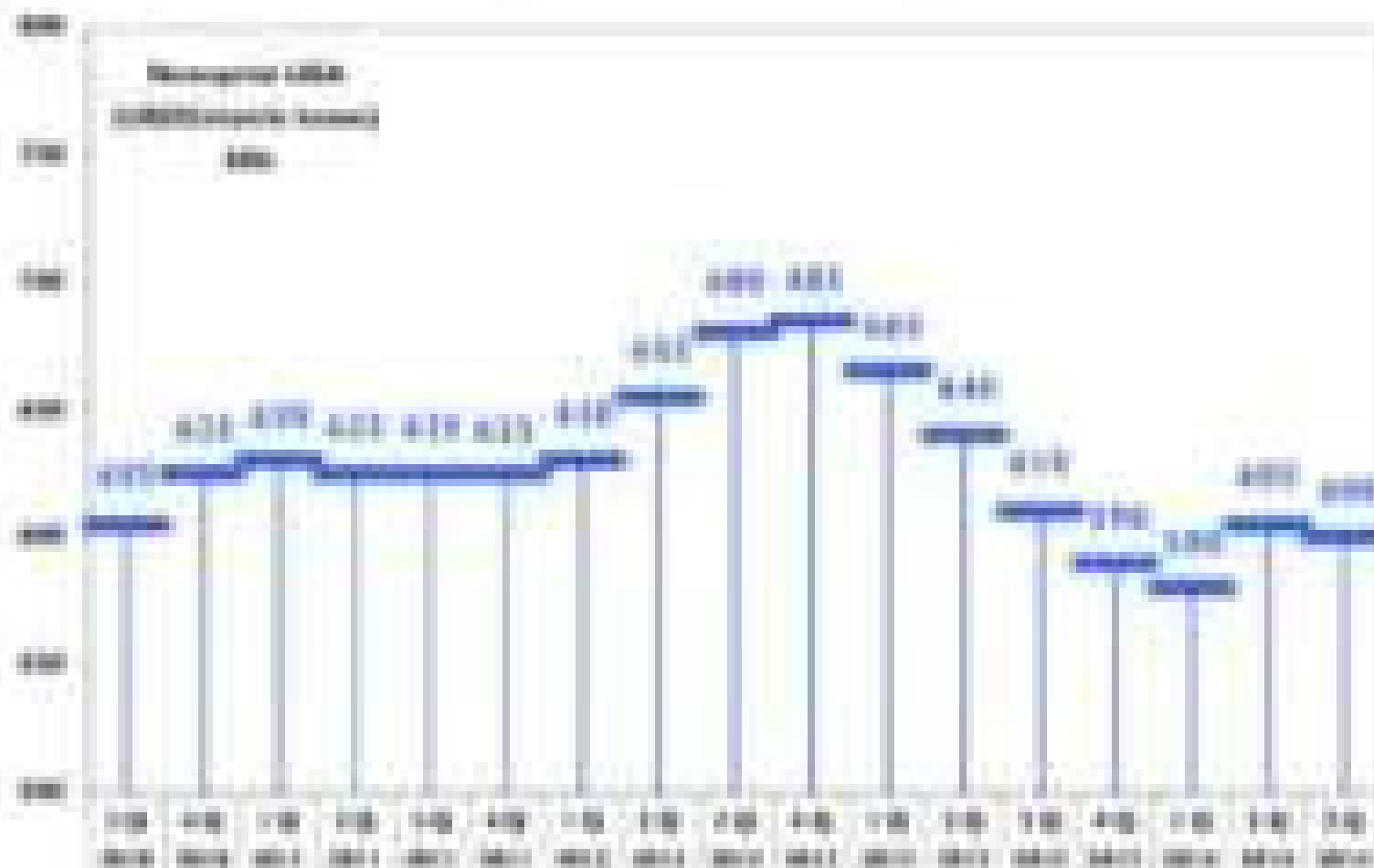
LWC / COATED #5 40LBS - USS/ST



SC-A 34LBS - USS/ST



NEWSPRINT 30LB (48.8GSM) - US\$/MT

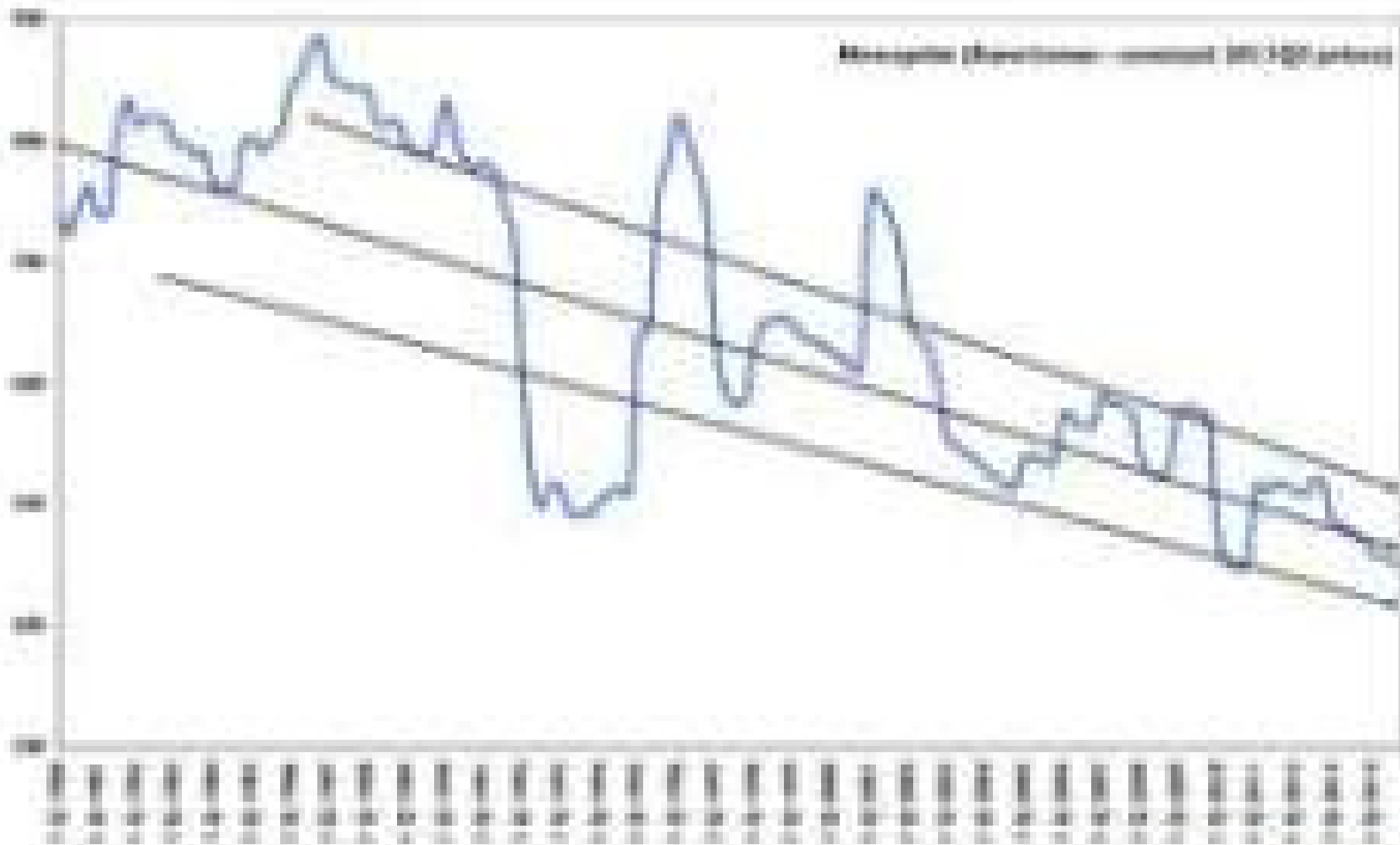


NBSK PULP - US\$/MT

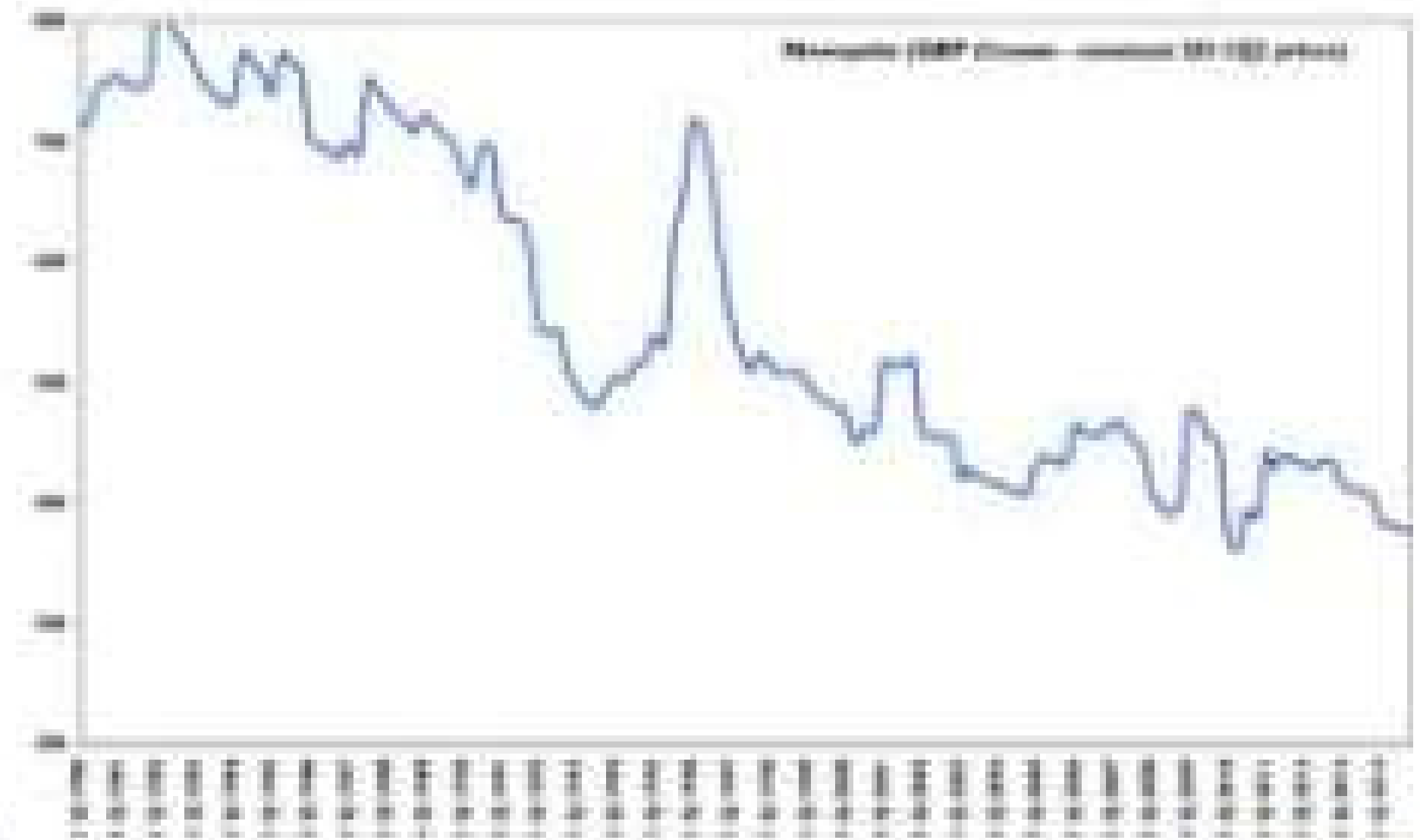


LONG TERM PRICE FORECASTS

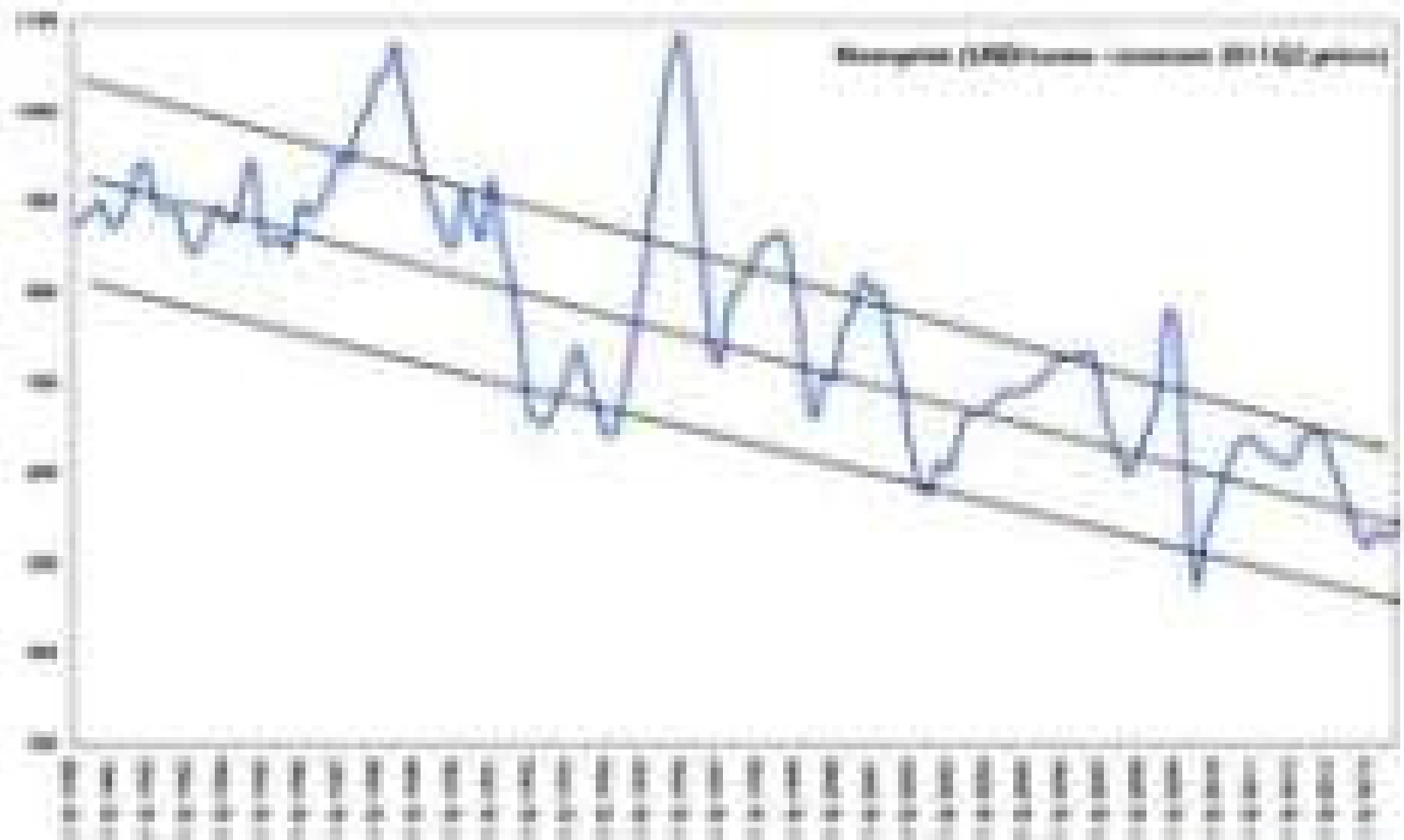
NEWSPRINT 45 GSM - EURO/t



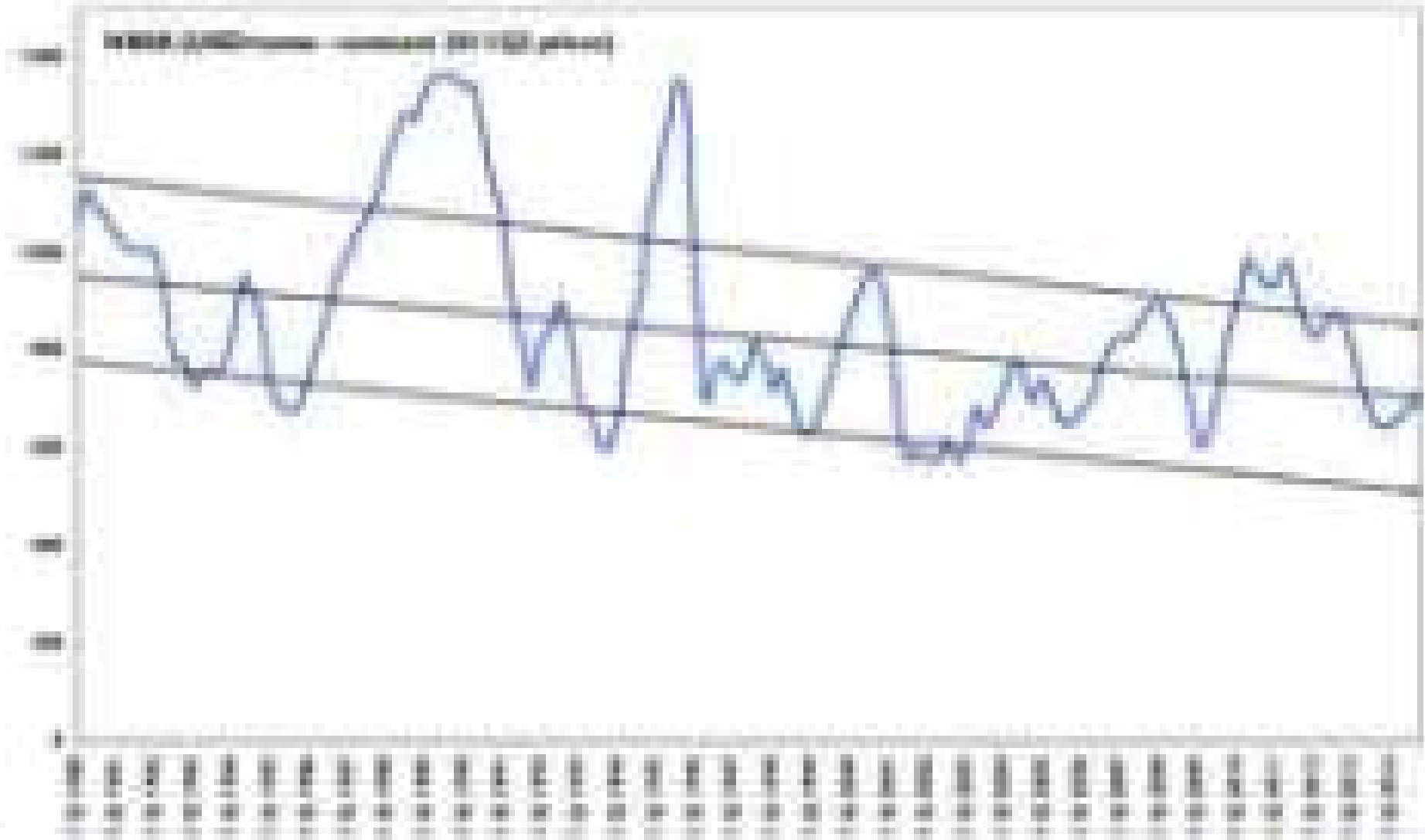
NEWSPRINT 45 GSM - GBP £/t



NEWSPRINT 30LB - US\$/MT



NBSK PULP - US\$/MT



EXCHANGE RATES

