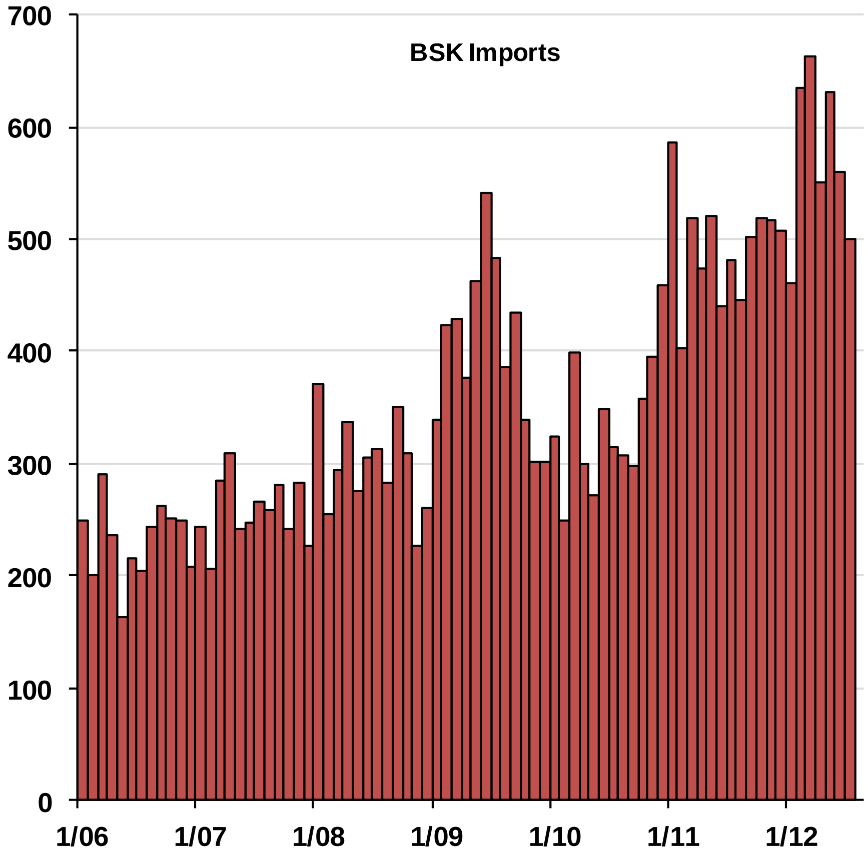
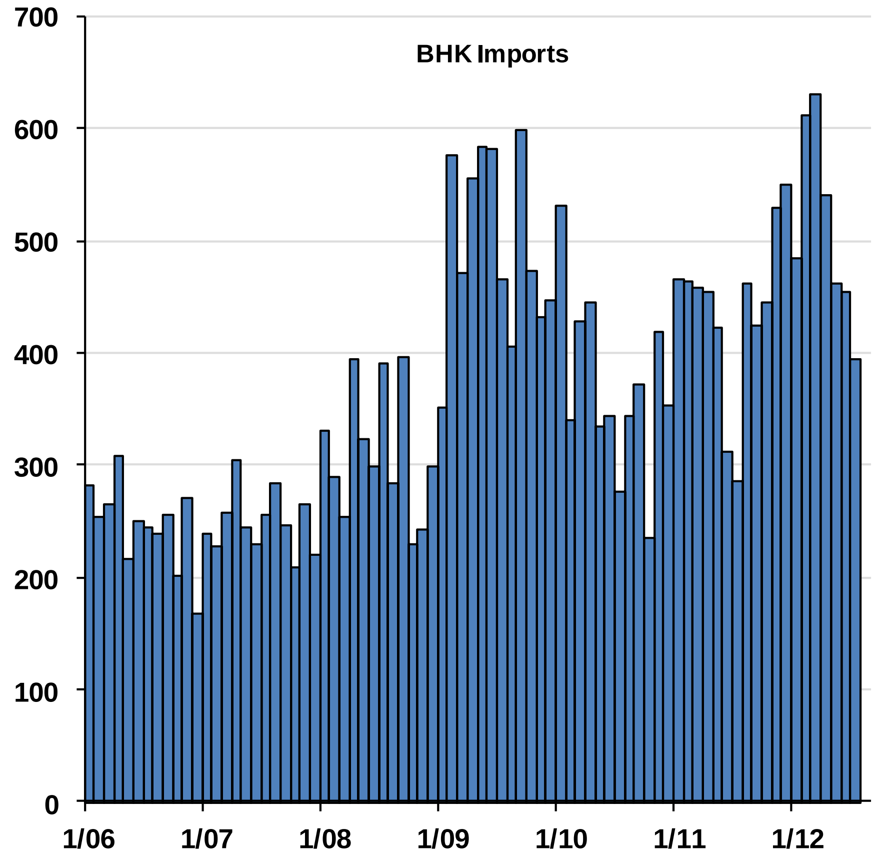
Outlook for World Market Pulp, With a Focus on China

Kurt Schaefer, VP Pulp & Recovered Paper

Pulp Imports into China Have Been Surging

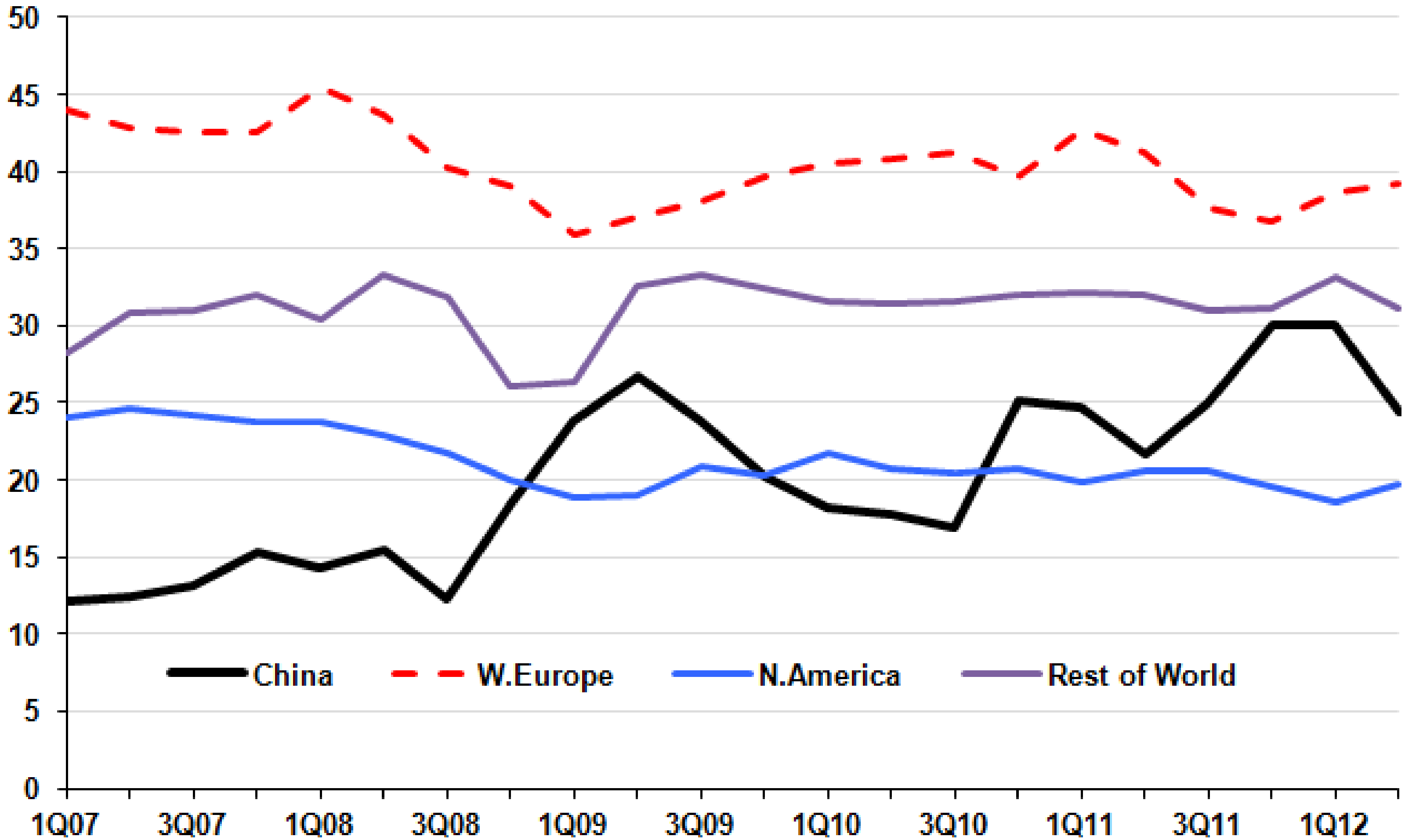
BSK and BHK Imports (000 tonnes/month)





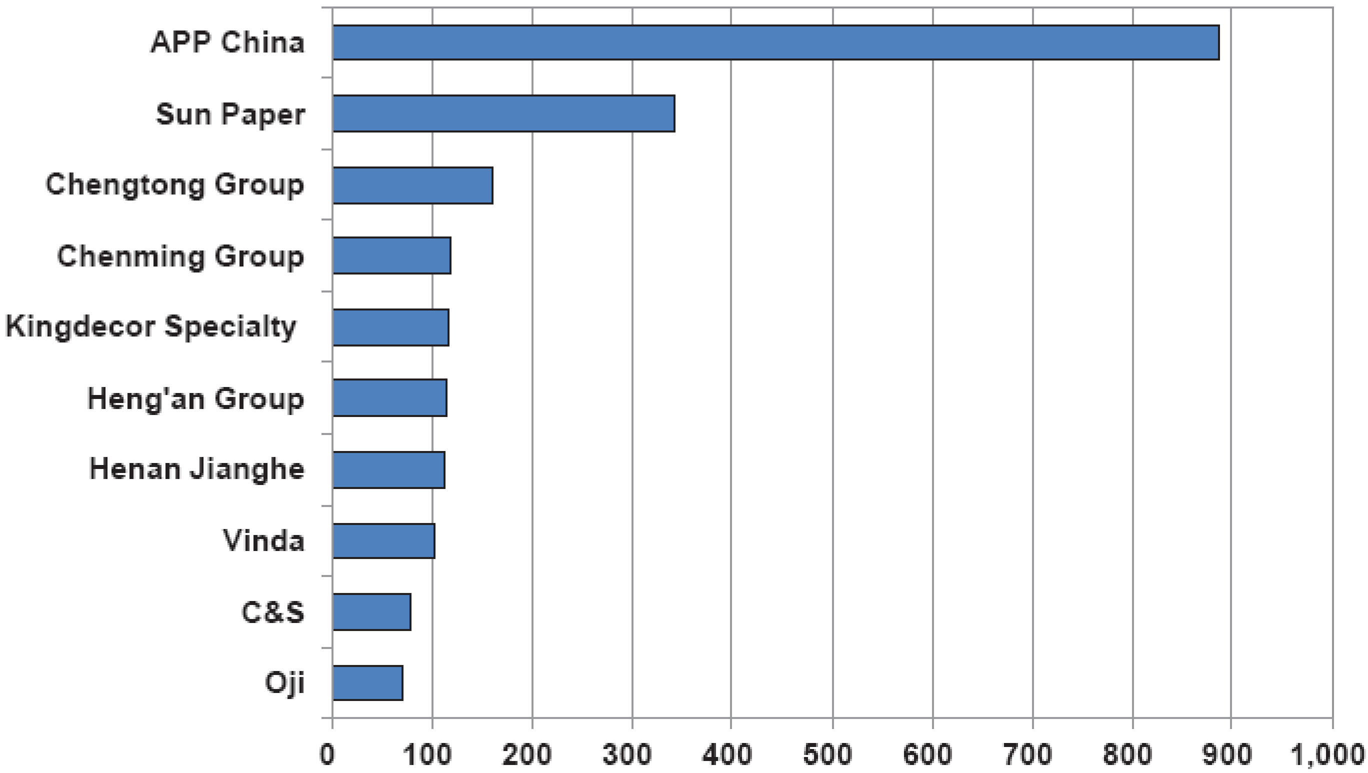
Pulp Demand Has Been "Flat or Down" for Regions Other Than China

World-20 Daily Shipments (thousand tonnes per day)



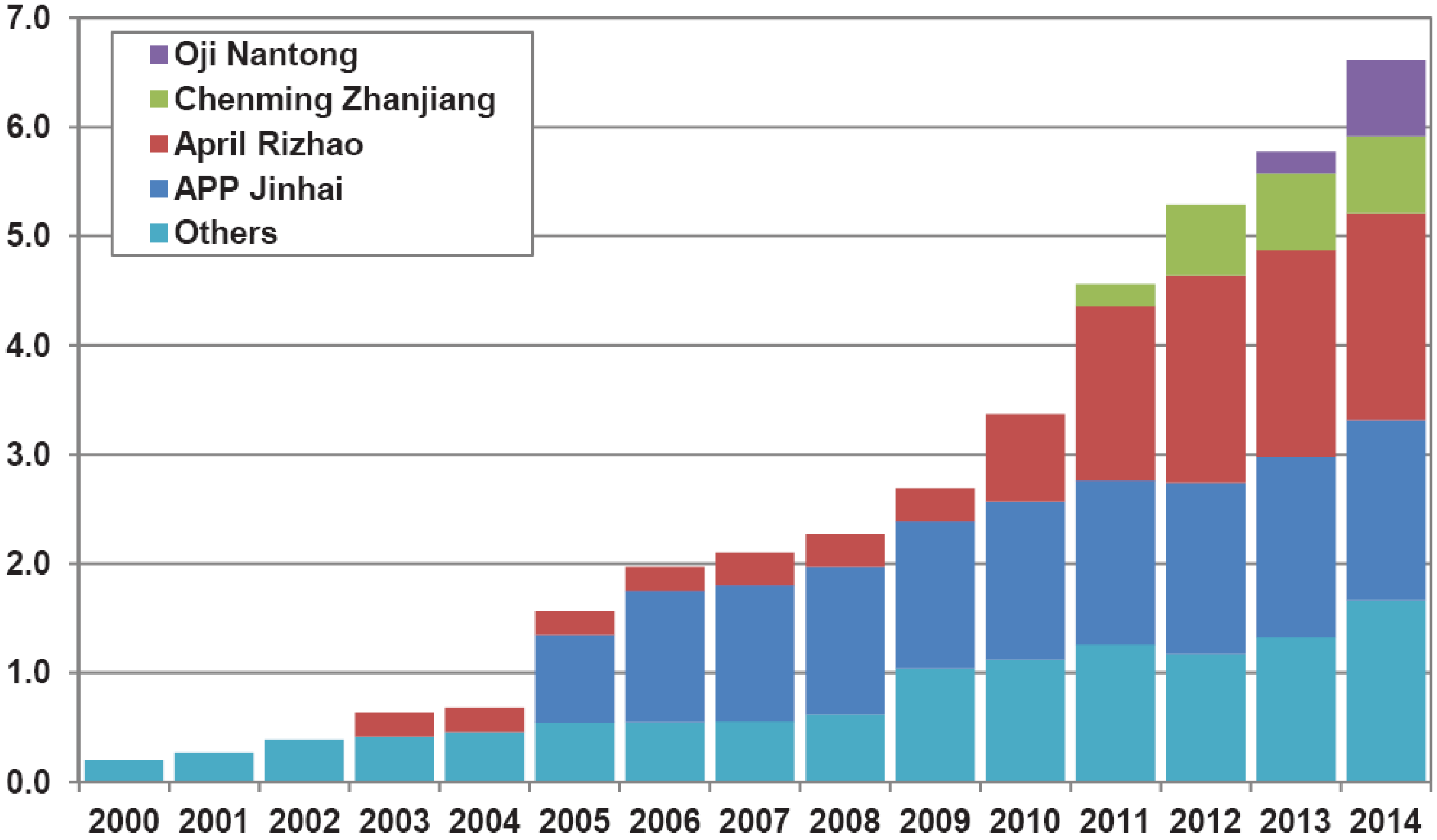
Top Paper Company Importers of BHK, 2011

Thousand tonnes per year



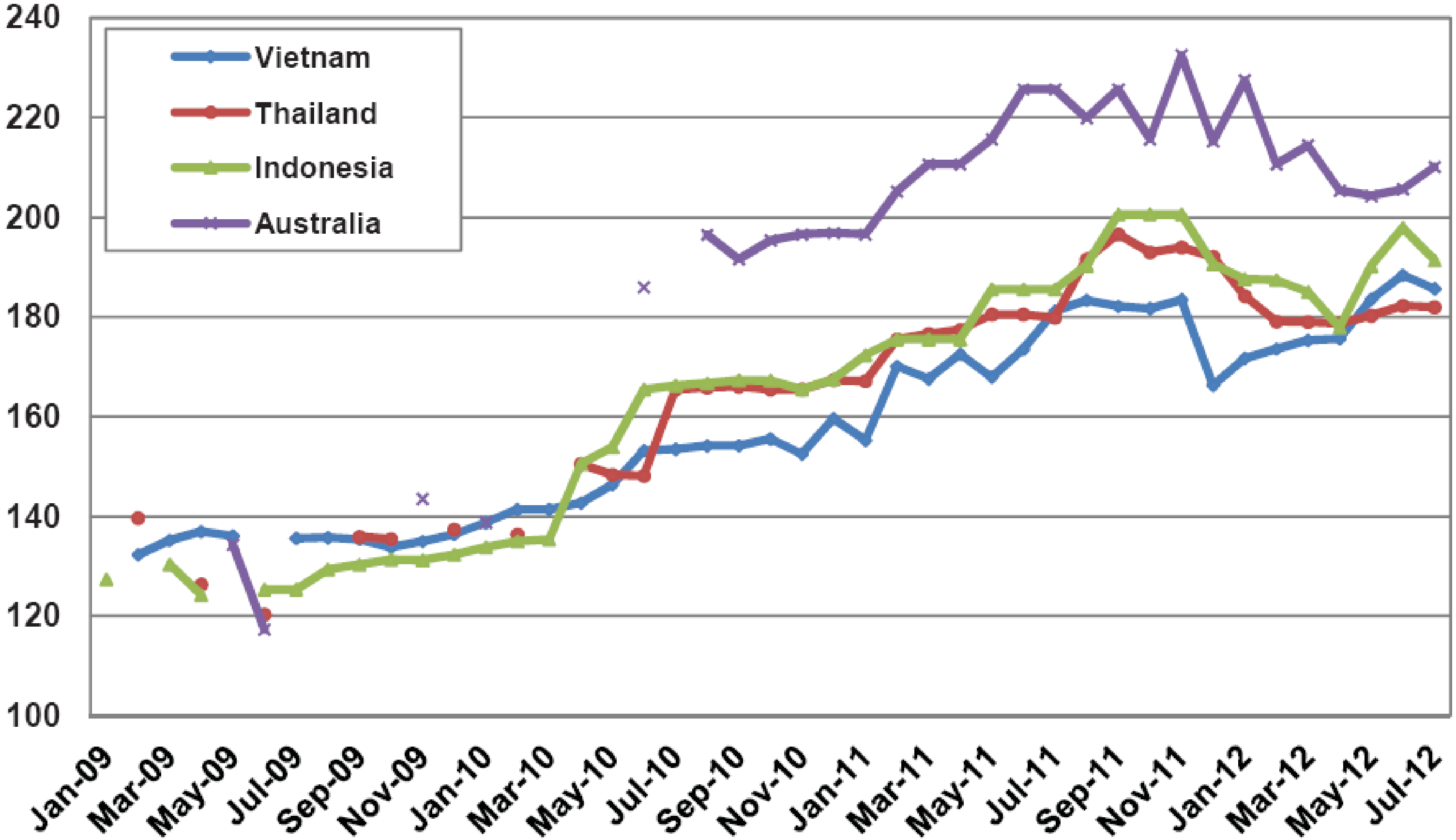
Development of BHK Capacity in China

Million Tonnes per Year



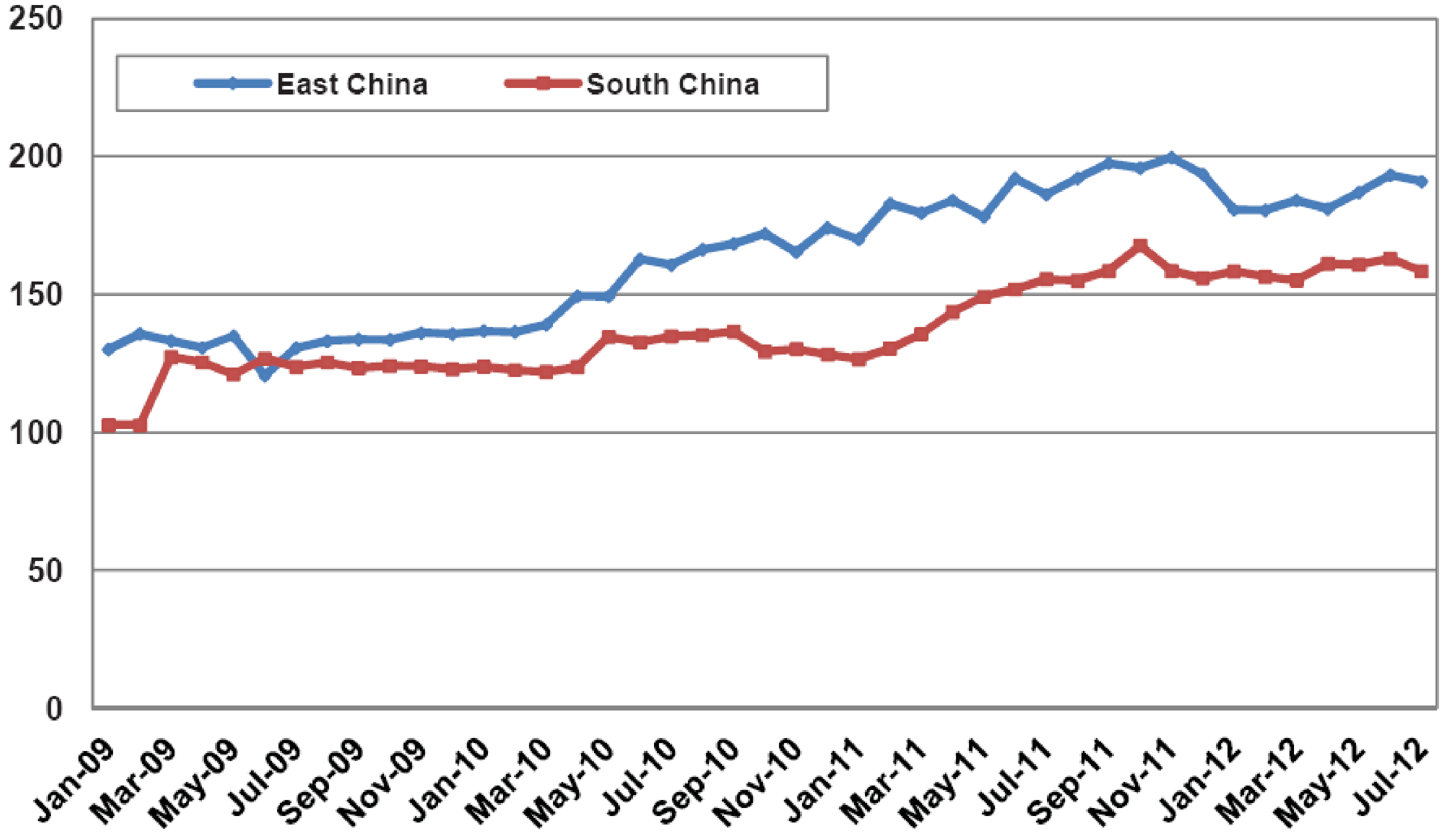
Rizhao Hardwood Chip Import Prices

US Dollars per BDMT



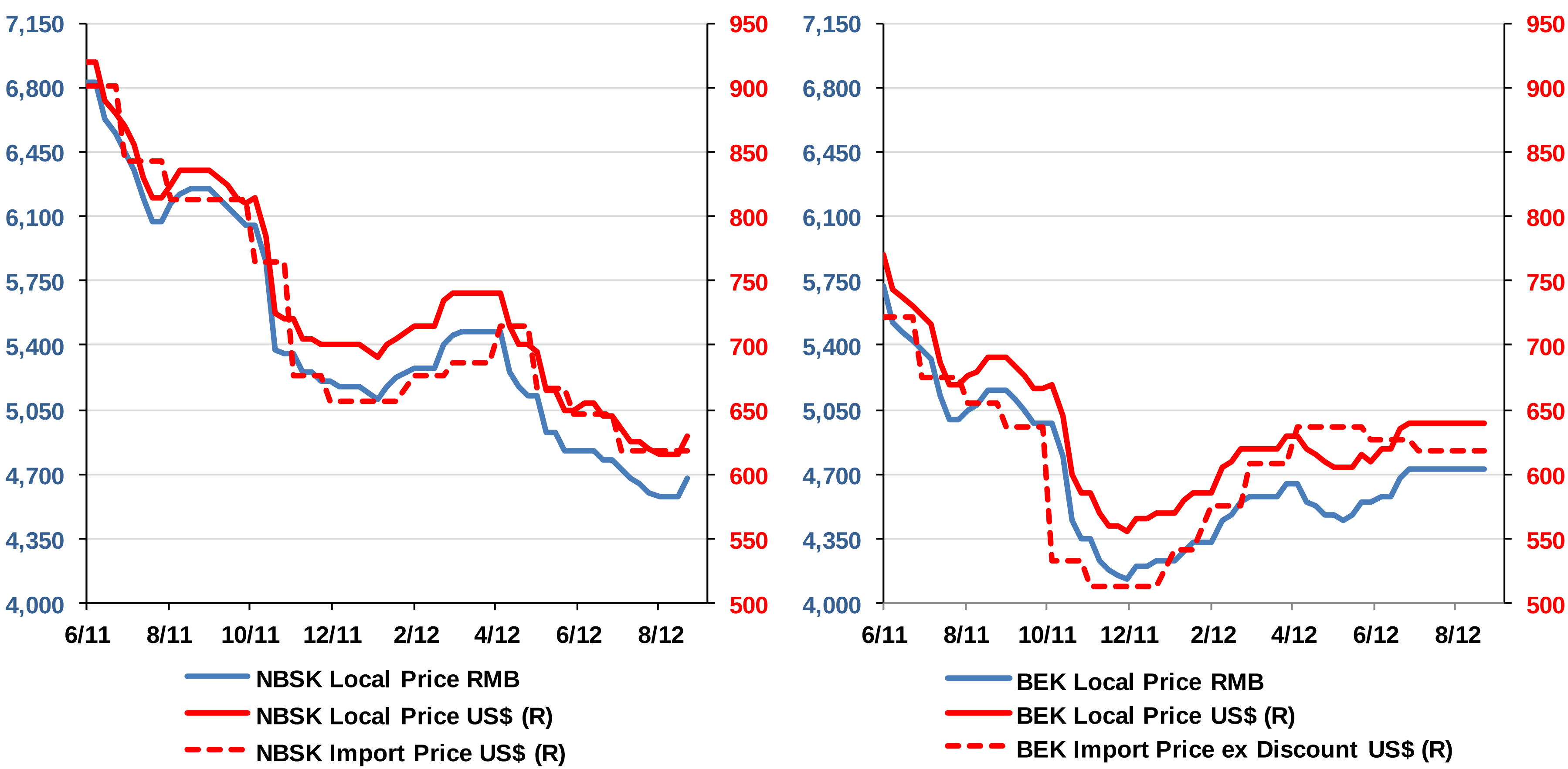
China Hardwood Chip Price Indexes

US Dollars per BDMT



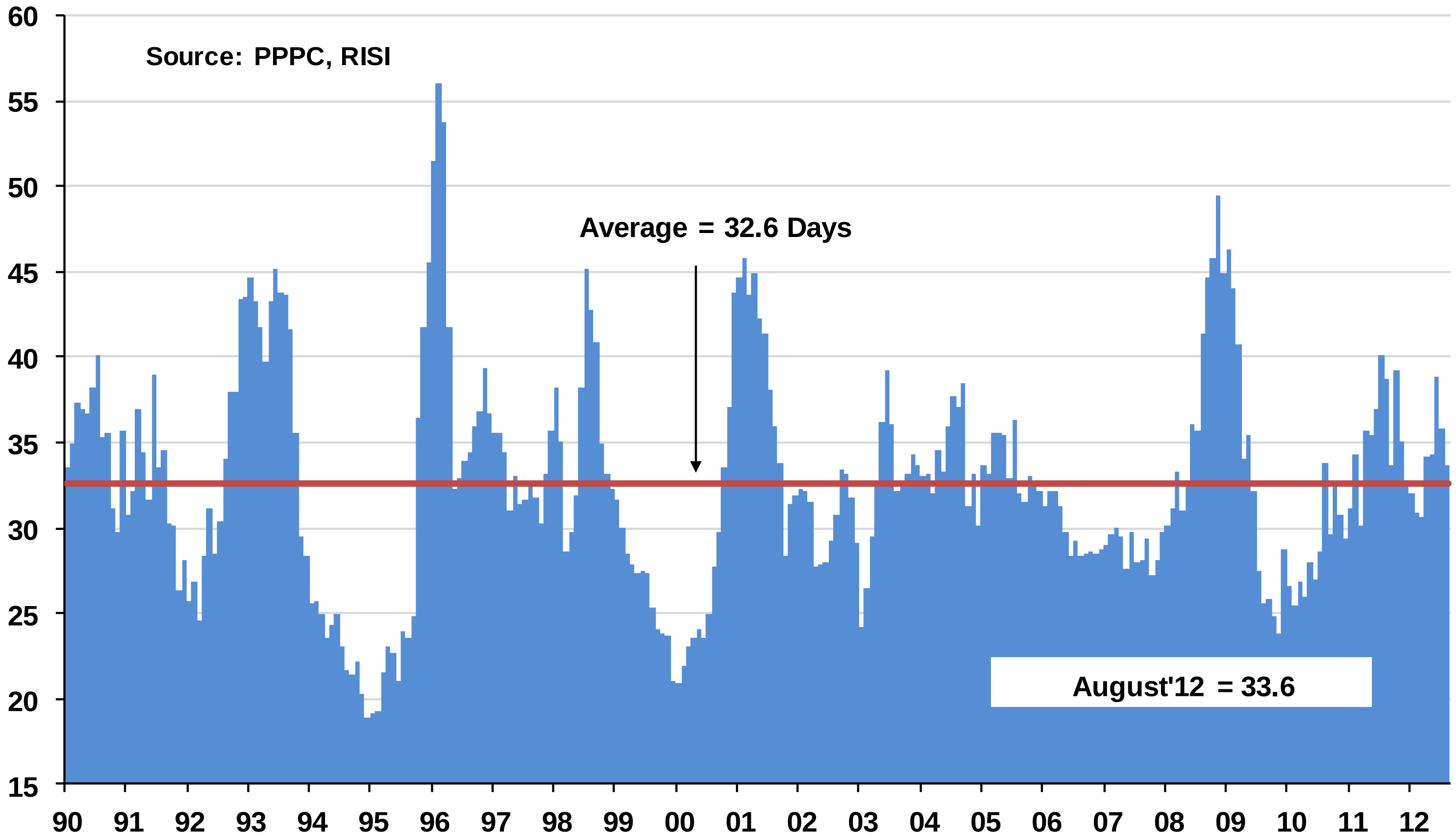
In China, Local Prices Tumbled, Import Prices Followed

(US$ and RMB/Tonne)

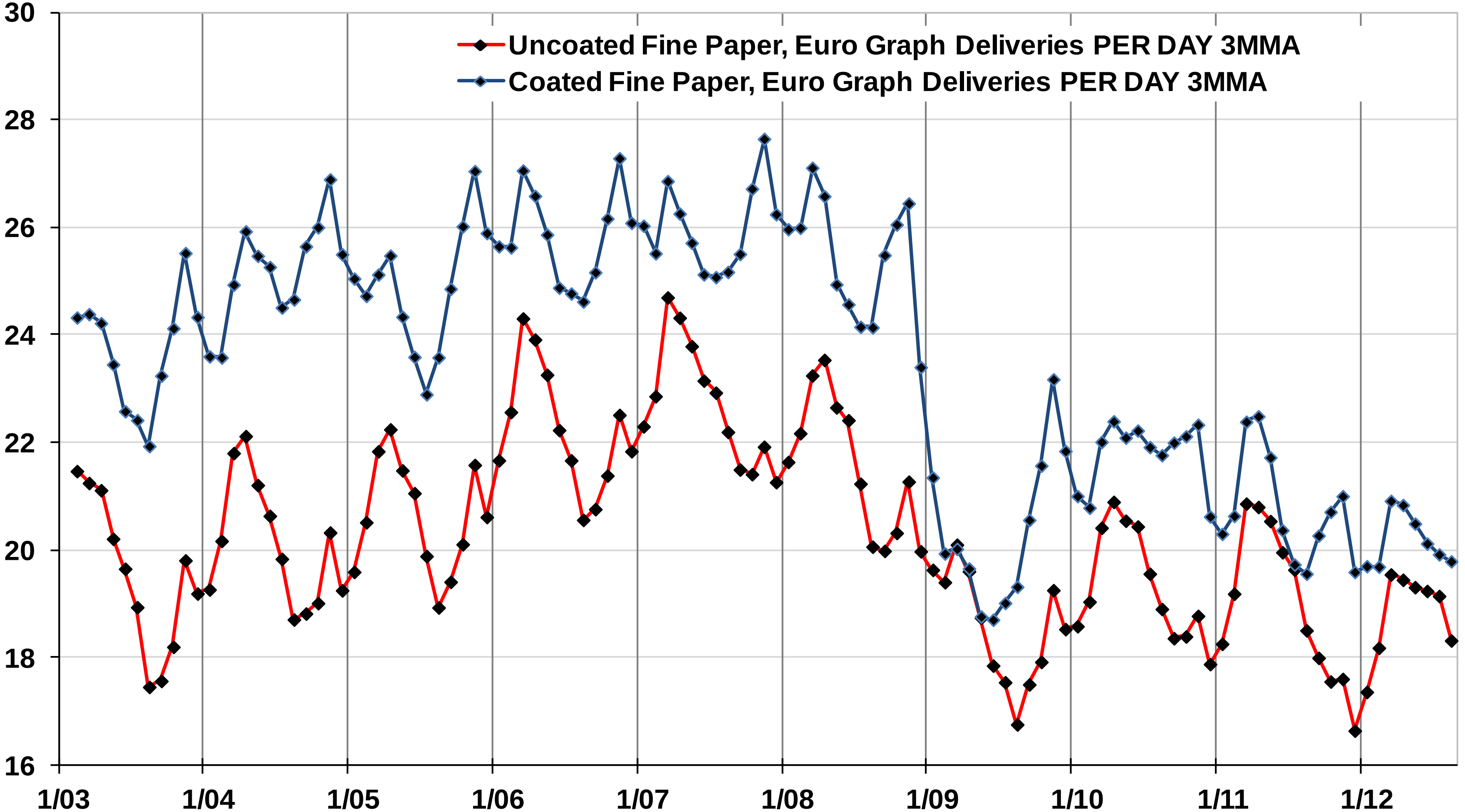


Overall, Producer Pulp Inventories Are Just Above Normal

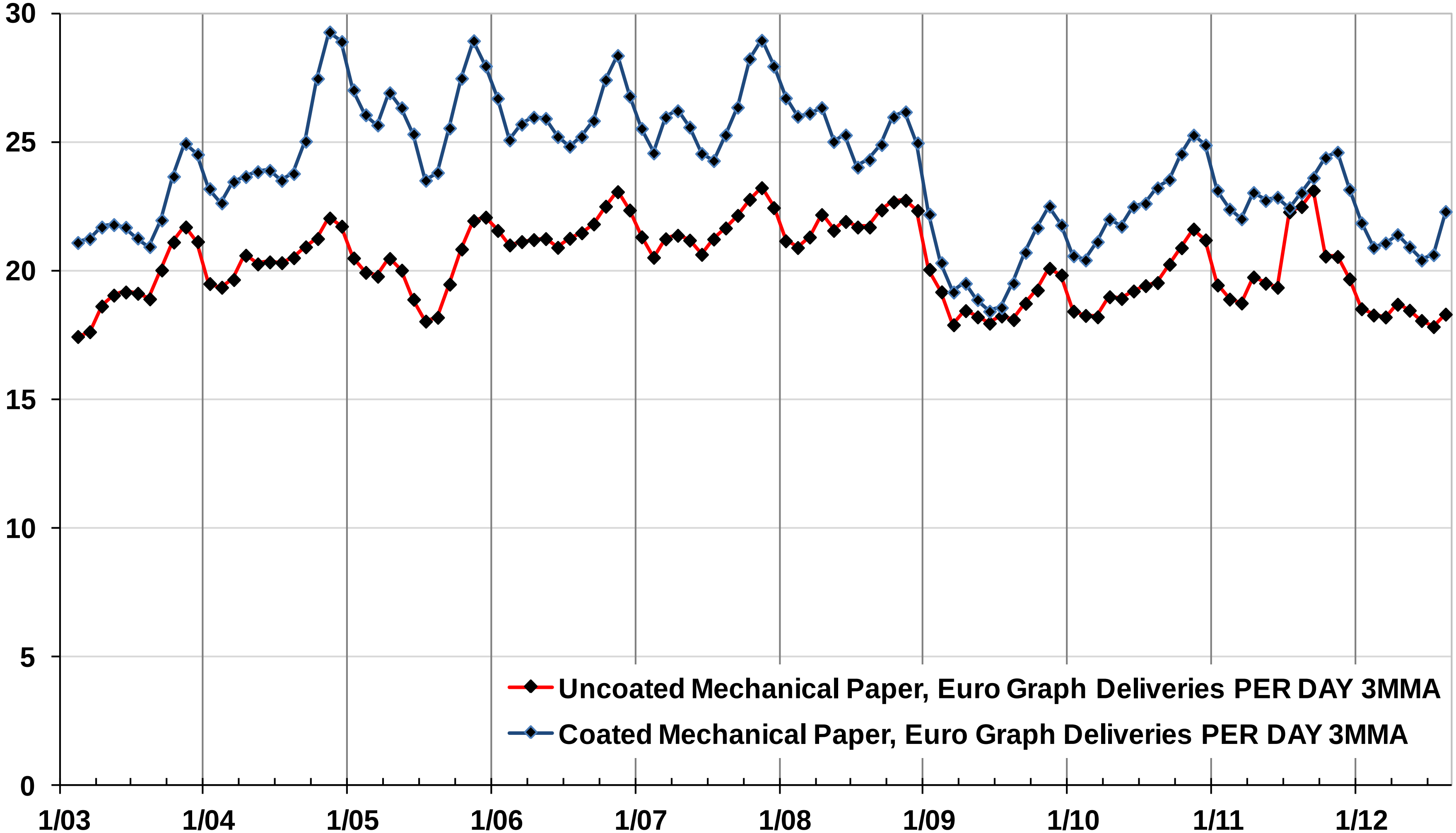
Seasonally-Adjusted Days of Supply, World-20 (PPPC, RISI)



Woodfree P&W Demand in Europe Saw a Strong First Half of 2012



Mechanical P&W Demand in Europe Has Been Remains Weak in 2012



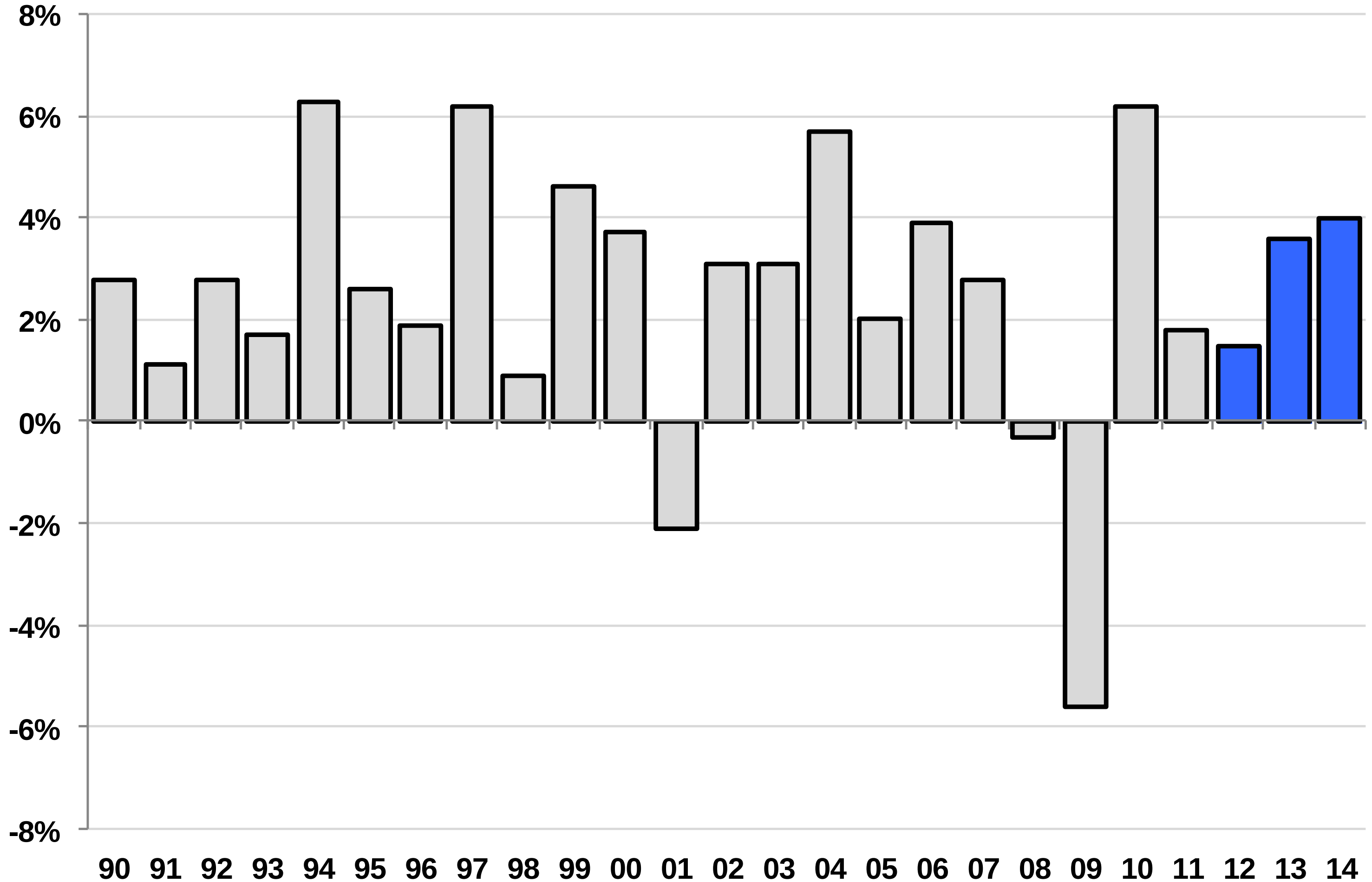
Recent Developments (Supply)

- Terrace Bay (350,000 BSK): Aditya Birla Signs Agreement to Purchase and Convert to Dissolving Pulp in 2016. Plan to produce paper grade pulp in the meantime (October 2012)
- IP Franklin (270,000 BSK - fluff): Started in late June
- Eldorado (1.5 million BHK): November
- Ilim Bratsk (net 500,000 BSK): Start up Delayed to Year End or perhaps Later
- Russian Wood Export Tariff Has Been Lowered on Wood to Europe as Russia Enters the WTO

World Outlook

2012 Is Another Weak Year for Global Paper and Paperboard Production

% Change, World Demand for Paper and Paperboard



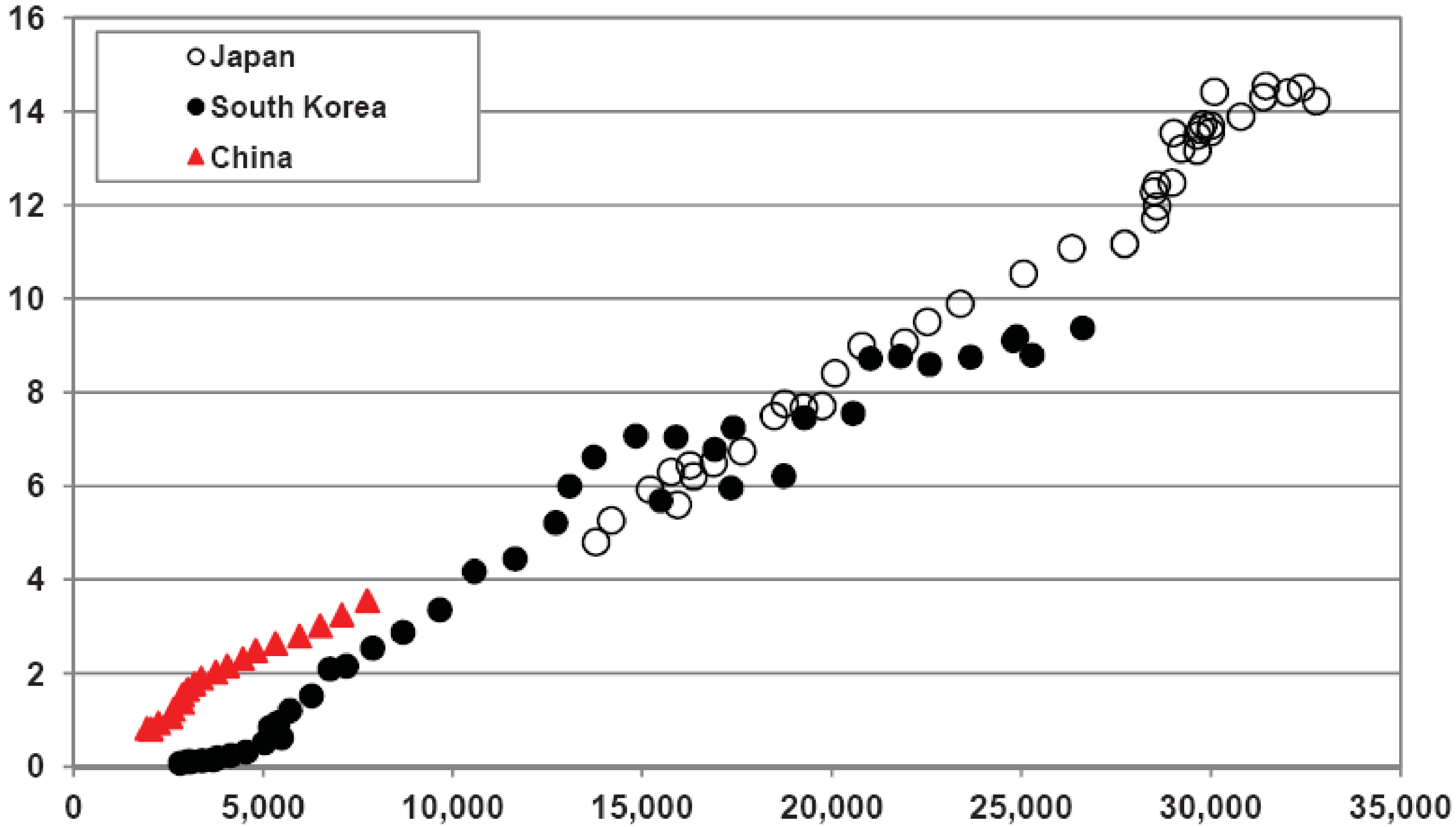
World Production of Tissue Papers

Million Tonnes

	2010	2011	2012	2013	2014
North America	7.9	8.1	8.2	8.3	8.5
% chg	*1.4*	*1.6*	*1.4*	*1.5*	*2.0*
Europe	8.0	8.2	8.5	8.8	9.1
% chg	*4.0*	*3.1*	*3.8*	*3.1*	*3.2*
China	5.2	5.8	6.4	6.9	7.4
% chg	*9.5*	*10.9*	*9.4*	*8.7*	*7.1*
Total World	29.1	30.4	31.7	33.1	34.4
% chg	*4.2*	*4.3*	*4.5*	*4.3*	*4.2*

Per Capita Tissue Consumption

Kg/Person, per Capita Real GDP, US Dollars



Source: RISI, United Nations, Penn World Tables

World Production of P&W Papers

Million Tonnes

	2010	2011	2012	2013	2014
North America	22.7	21.5	20.6	20.3	20.0
% chg	*2.1*	*-5.3*	*-3.9*	*-1.6*	*-1.4*
Europe	35.9	34.9	33.7	33.2	33.5
% chg	*8.1*	*-2.9*	*-3.3*	*-1.5*	*1.0*
China	22.6	24.6	26.1	27.7	29.2
% chg	*7.5*	*8.8*	*6.4*	*6.1*	*5.5*
Total World	110.3	109.6	109.8	111.9	114.7
% chg	*5.8*	*-0.7*	*0.2*	*1.9*	*2.5*

Additional Market Capacity from Integrated Producers

- US South Integrated Producers Shift to Market Pulp
  - Domtar (Plymouth, 220k BSK/Fluff) --Late 2010
  - Domtar (Ashdown, 100 BSK/BHK) -- July 2011
  - MeadWestvaco (Evadale, 180k BSK roll pulp) -- August 2011
  - International Paper (Franklin, 270k BSK/Fluff) -- June 2012

– We Are Also Seeing More Market Pulp Shipment from the Nordic Countries, Where Paper Production is Falling

Large Projects on the Horizon

- Major projects through 2014 add 5 million tonnes
  - BHK --- 4.3 million tonnes (not including Oji – China)
  - BSK --- 740,000 tonnes
- South America Projects Past 2013
  - Guaiba
  - Klabin
  - Fibria 3L
  - Veracel II
- Asia Projects for 2015-16 ?

But Conversions to Dissolving Pulp Will Take Papergrade Capacity Out of the Market

Announced conversion, thousand tonnes, including swing (*)

Mill	Country	Papergrade Capacity Change	DP Capacity	Year
Cambara	Brazil	-35 (Fluff)	25	2011
Lenzing*	Czech Rep.	-180 (SIT)	140	2011
Vida	Sweden	-30 (SIT)	30	2011
Tembec	France	-40 (Fluff)	25	2011
Sun Paper*	China	-250 (BHK)	200	2011
Fujian Qingshan*	China	-150 (BKP/UKP)	120	2011
Fortress Specialty	Canada	-260 (BHK)	200	2011
Hunan Juntai*	China	-350 (BSK/BHK)	300	2011
Jilin Shixian	China	-60 (SIT)	40	2011
Jilin Chenming	China	-60 (BSK)	40	2011

Continued….

Announced conversion, thousand tonnes including swing (*), previously idled (**)

Mill	Country	Papergrade Capacity Change	DP Capacity	Year
Sodra	Sweden	-170 (BHK)	150	2012
Lee & Man*	China	-165 (BHK/BSK)	140	2012
Stora Enso	Finland	-200 (BSK)	100	2012
Schweighofer	Austria	-160 (SIT)	130	2012
Paper Excellence**	Canada	-380 (BSK/BHK)	250	2013
Rayonier	USA	-270 (Fluff)	190	2013
Sappi	S. Africa	-250 (BKP/UKP)	210	2013
Sappi	USA	-420 (BHK)	330	2013
Fortress Specialty	Canada	-300 (BSK)	235	2013
Total		**3.7 million**	**2.9 million**	

2012-14 Forecast Key Points

- Weak economic growth means that China inventory swings are dominating other factors, especially for BSK, in 2012
- BSK demand will be stronger in the second half of 2012, BHK demand will be weaker.
- RISI is expecting a solid increase in Chinese BHK demand in 2013/14 and a strong economic environment in 2014 worldwide
- The market could very well absorb the next three pulp mills (Eldorado, Montes Del Plata, Maranhao) more smoothly than many are expecting.

Thank-you for your attention!

For more information:

World Pulp Monthly

www.risi.com/wpm

Just published:

The China Pulp Market: A Comprehensive Analysis and Outlook

www.risi.com/chinapulp