



# Global Regional Paper Consumption

December 2008 Focus Topic

# Coated Paper Consumption – developed regions

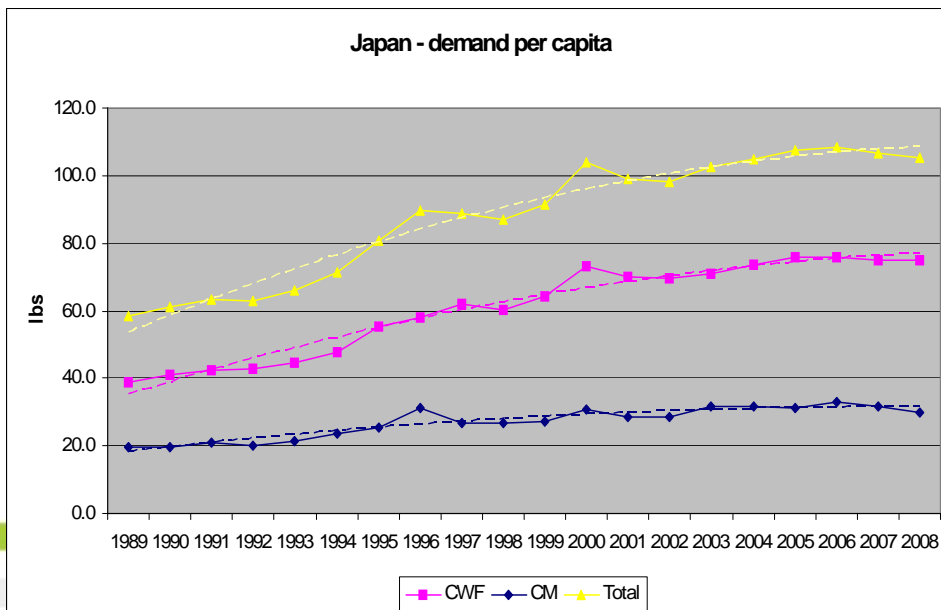
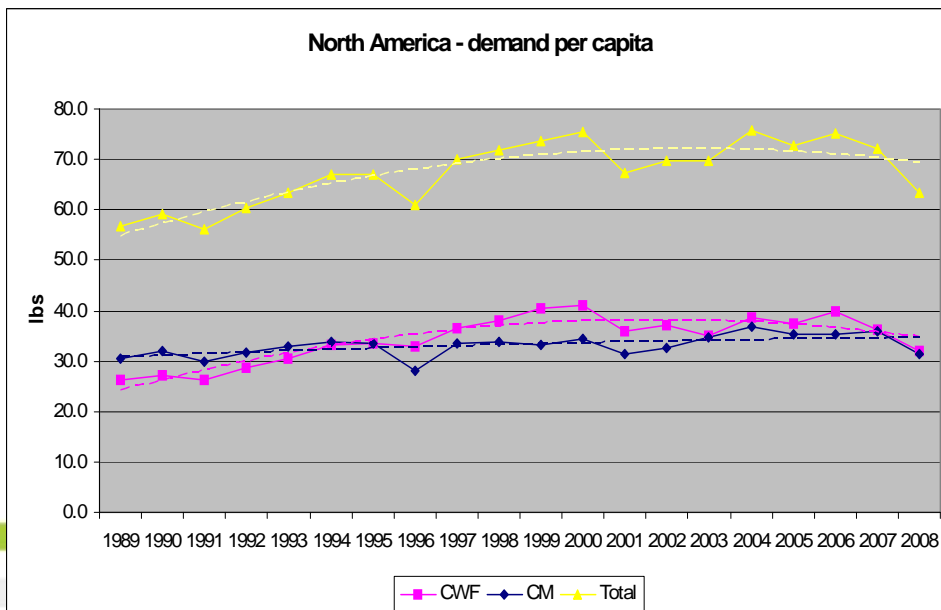
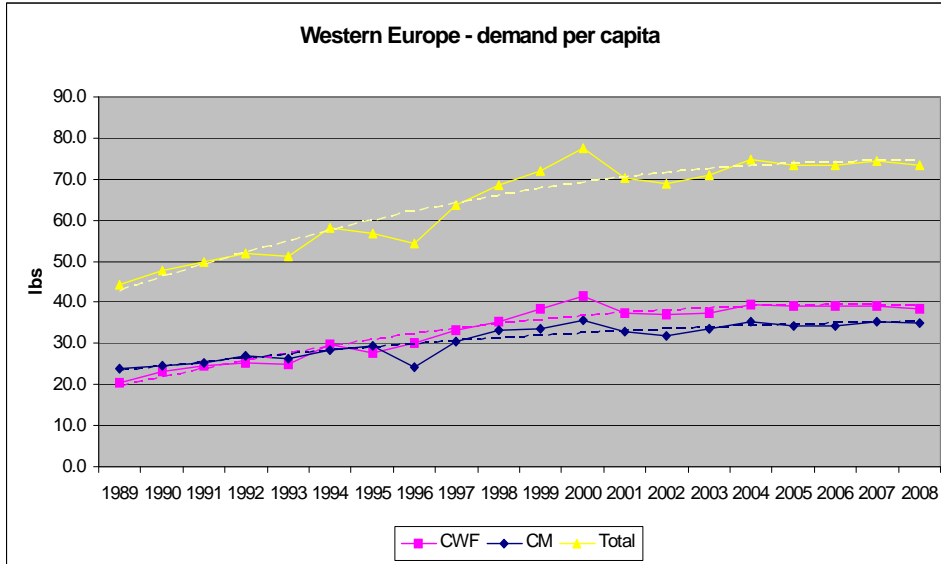


Source: RISI

The major developed regions of the world show the total coated paper consumption has leveled off in the range of 60 – 100 lbs/person/year.

In North America the consumption is actually showing reduction off a maximum in the mid '00s.

Western Europe is similar to North America in terms of CFS and CGW consumption. In Japan, as in other Asian countries, CFS has much greater consumption than CGW.



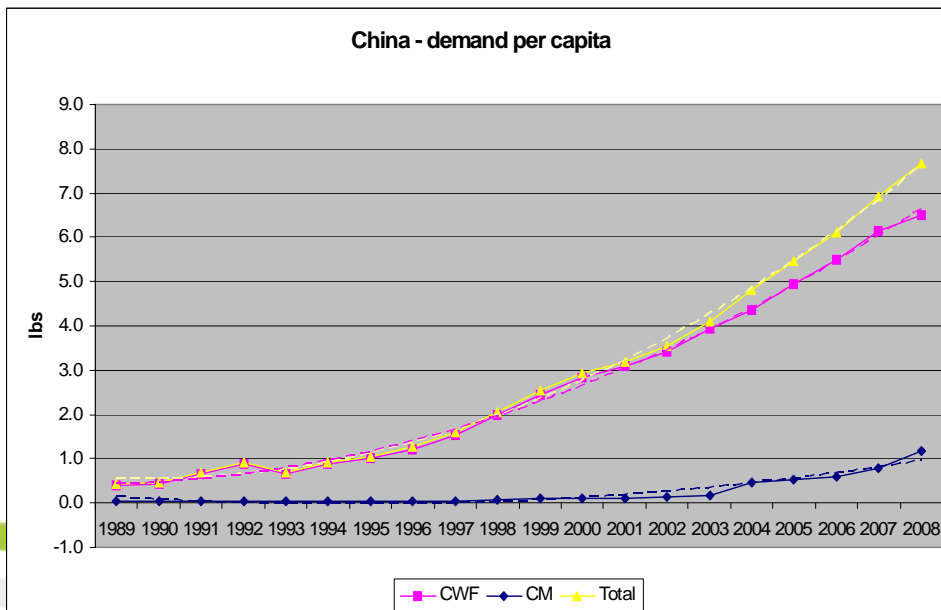
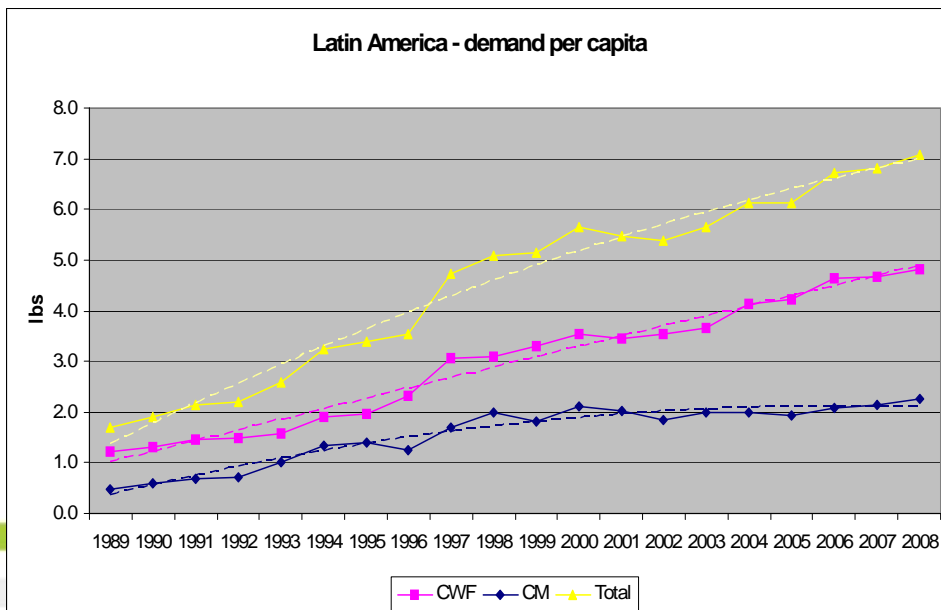
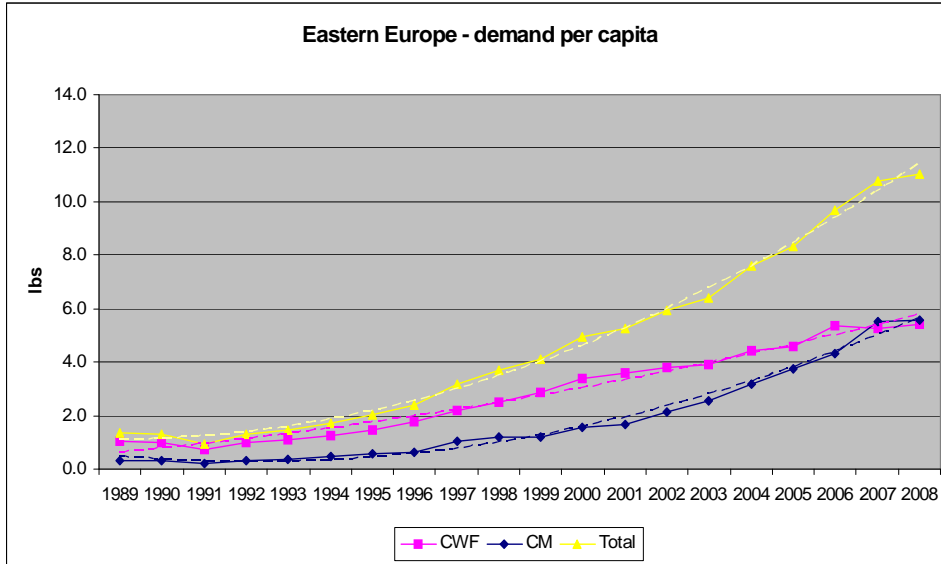
# Coated Paper Consumption – emerging regions



Source: RISI

For these major regions of the world that are still experiencing significant growth, the total coated paper consumption is either growing linearly or exponentially and is roughly 1/10 that of the regions on the previous slide.

While the consumption rates of CFS and CGW are similar in Eastern Europe, the usage of CFS is twice that of CGW in Latin America and six times greater for CFS than CGW in China.

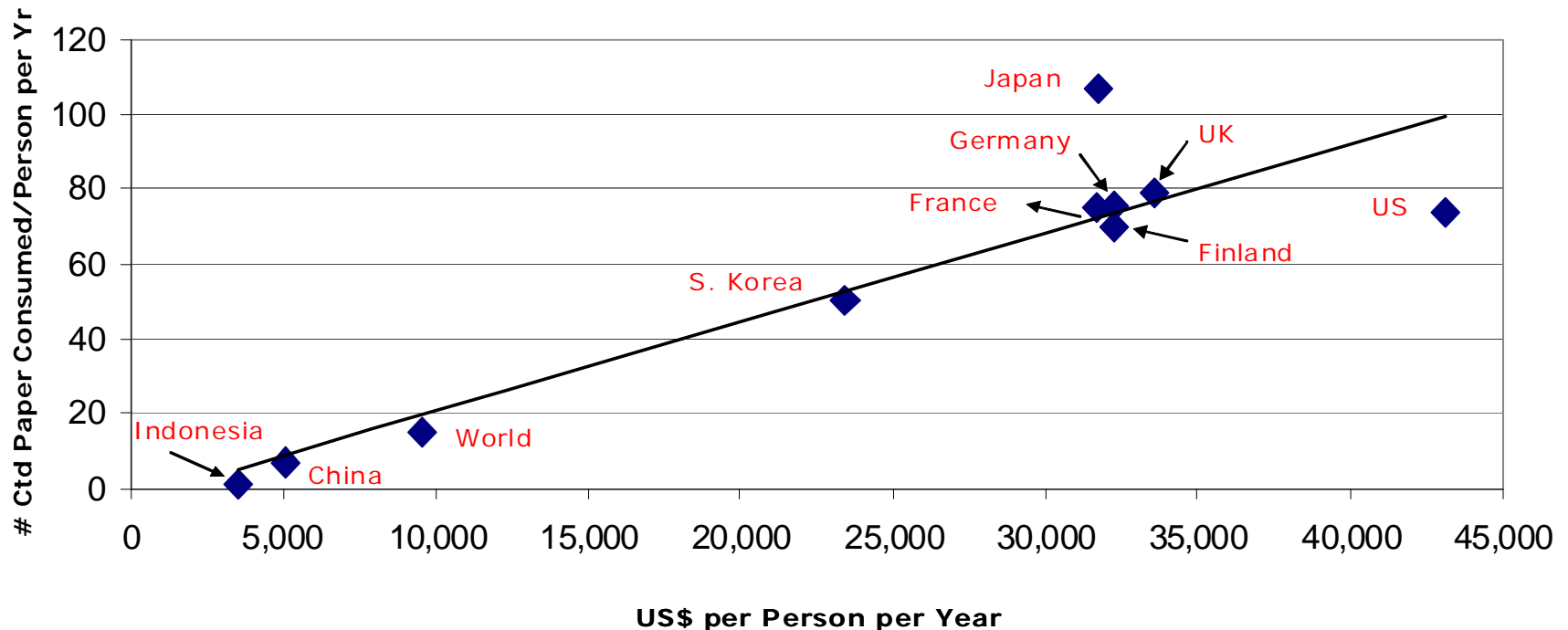


# Regional economic wealth vs. CTD Paper consumption per capita



For the countries and regions shown below, there exists a strong correlation between the wealth of the region and the amount of coated paper consumed. It can be assumed that as the emerging regions of the world are growing at near double digit GDP rates, the CTD paper consumed will approach that of the already developed regions of the world. Key factors influencing this trend are shown on next slide.

GDP per Capita vs. CTD Paper Demand per Capita



# Key Influencers impacting paper usage of growing regions of the world



There are a few key emerging trends that may impact the relationship that has existed between the wealth of a country or region with respect to the amount of coated paper they consume.

1. Do developing regions have equal access to coated paper products? Would the growth of coated paper consumption per capita experienced by other regions of greater wealth become constrained due to a lack of raw materials in areas of growth?
2. Are alternative forms of media developing at far greater rates? Are the raw materials required for these competing forms of media relatively more abundant and less expensive than paper production?
3. Is the increasing awareness of environmental issues such as recycling infrastructure, forest practices and carbon foot print of various media options influencing the rate of growth of CTD paper consumed vs. regional wealth?

# Growth of paper consumption for other grades of paper



Worldwide usage of paper products vs. growth of the world economy is very different for the key grades of paper produced.

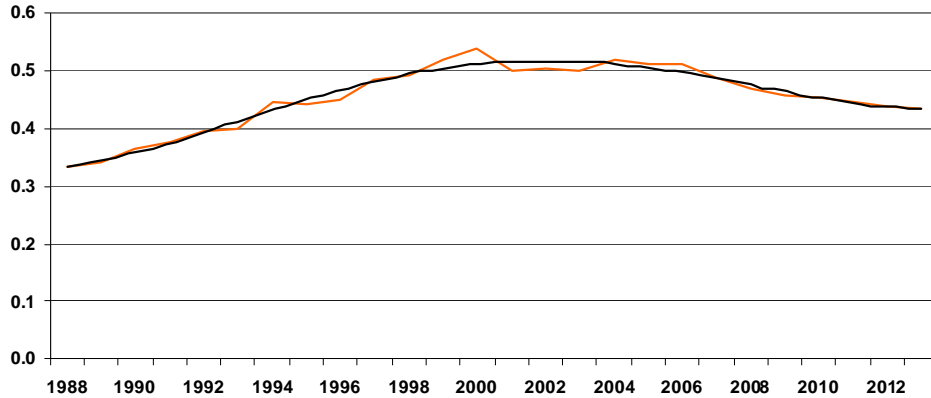
Looking at data from the last 20 years, and forecasting the next 5, the trends that emerge are:

- Coated Freesheet consumption peaked in the mid 00's and is showing signs of decline.
- Coated Groundwood consumption has been flat over the last 20 years but is also showing signs of decline.
- Uncoated Freesheet consumption peaked in the mid 90's and is on a linear decline.
- Newspaper consumption is on a linear decline through the period of study.
- Containerboard consumption rose rapidly through the 90's but appears to have leveled off through the 00's.
- Uncoated Mechanical consumption is showing slow and steady decline across the period of study.

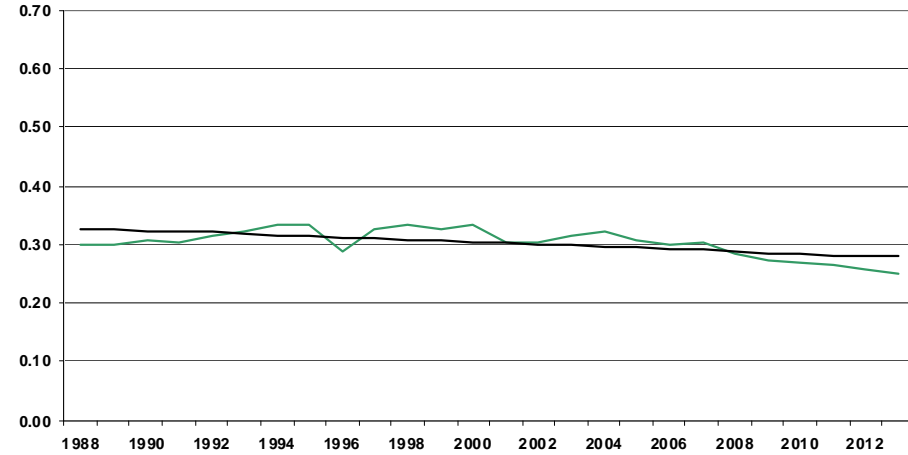
# Paper grade comparison



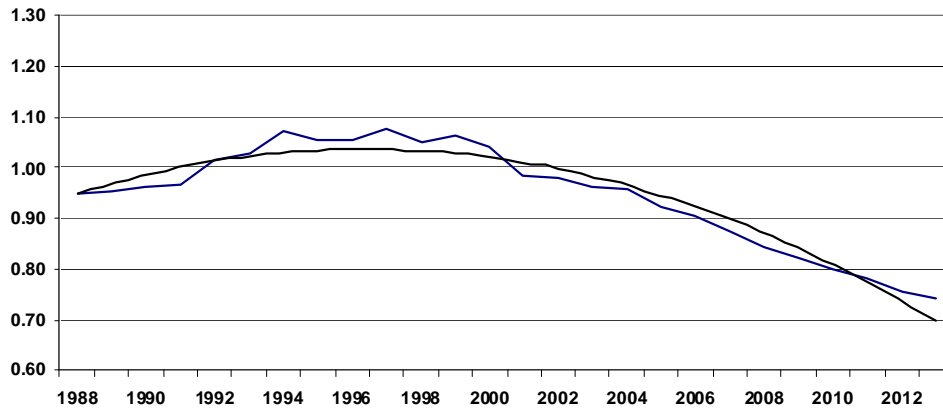
Coated Freesheet Tonnes Consumed per \$million of GWP



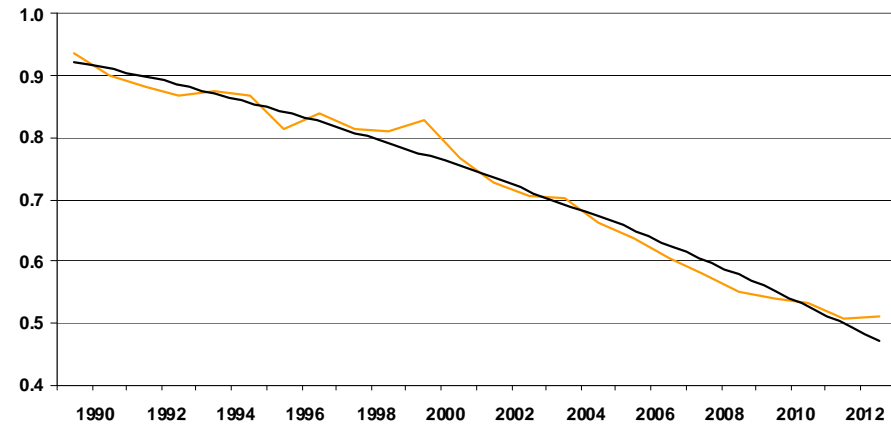
Coated Mechanical Tonnes Consumed per \$million of GWP



Uncoated Freesheet Tonnes Consumed per \$million of GWP



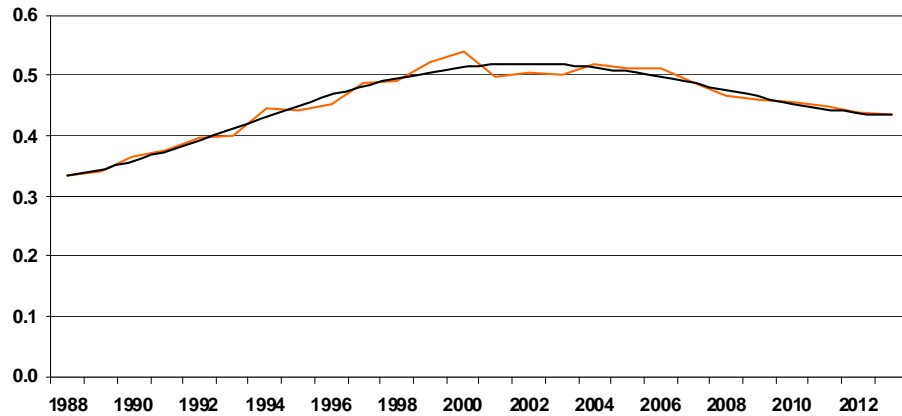
Newsprint Tonnes Consumed per \$million of GWP



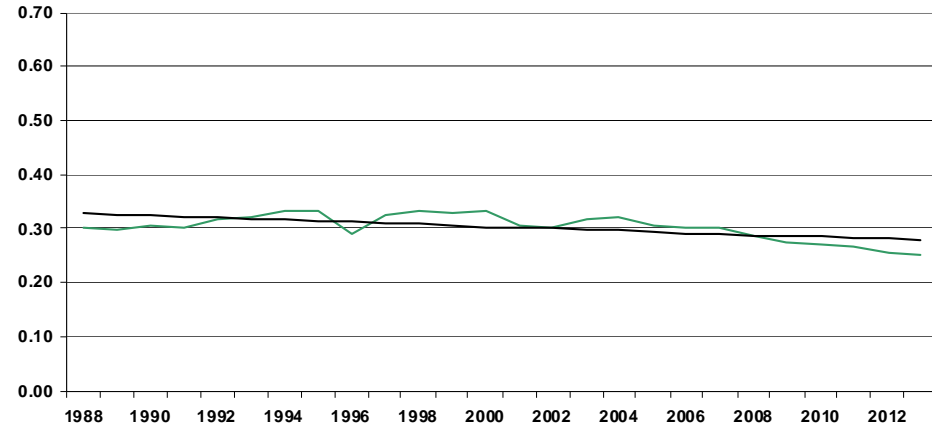
# Paper grade comparison



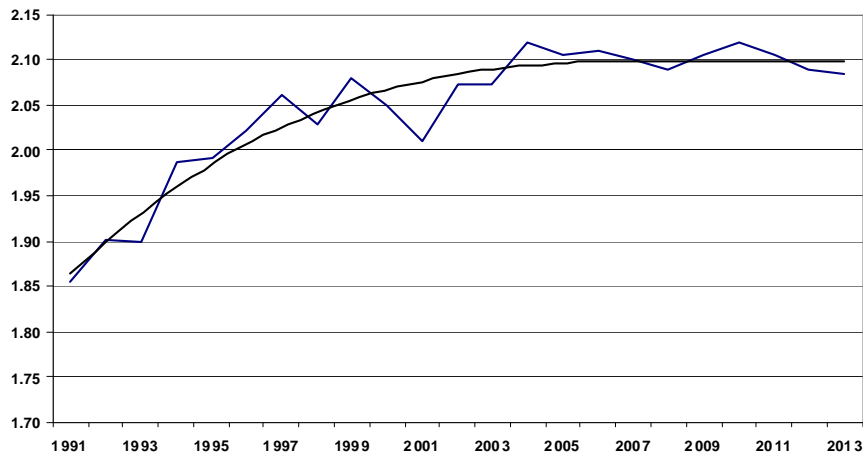
Coated Freesheet Tonnes Consumed per \$million of GWP



Coated Mechanical Tonnes Consumed per \$million of GWP



Containerboard Tonnes Consumed per \$million GWP



Uncoated Mechanical Tonnes Consumed per \$million of GWP

