

# Historical Impact of Recessions on Coated Demand

Focus Topic



Verso simple.

# What will the post recession demand be for CTD Papers?



The demand for coated products is depressed heading into 2009. It would seem that 3 key reasons for this are:

1. Economic recession
2. Demand swings associated with inventory fluctuations
3. Substitution (eg. grade substitution and electronic substitution)

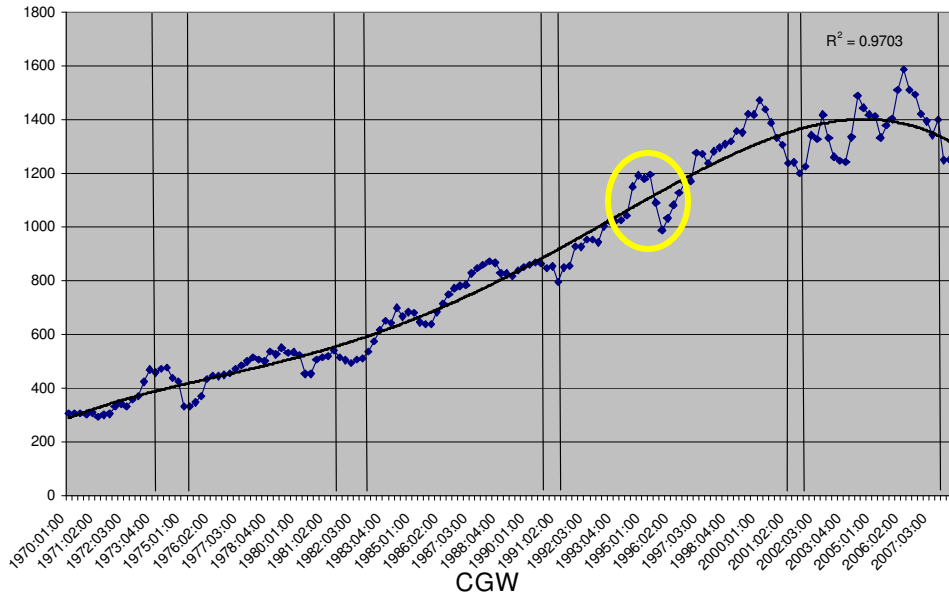
The first two dynamics have occurred throughout the past four decades to varying degrees. The third, substitution, arguably represents a fundamental shift in how consumers are targeted for messaging and merchandise advertising – a longer term trend.

The following slides attempt to show the impact on coated demand of previous recessions and demand driven inventory swings. The impact of substitution on coated demand is a topic for more in depth research to be studied in a future Focus Topic.

# Demand Indicator Trends



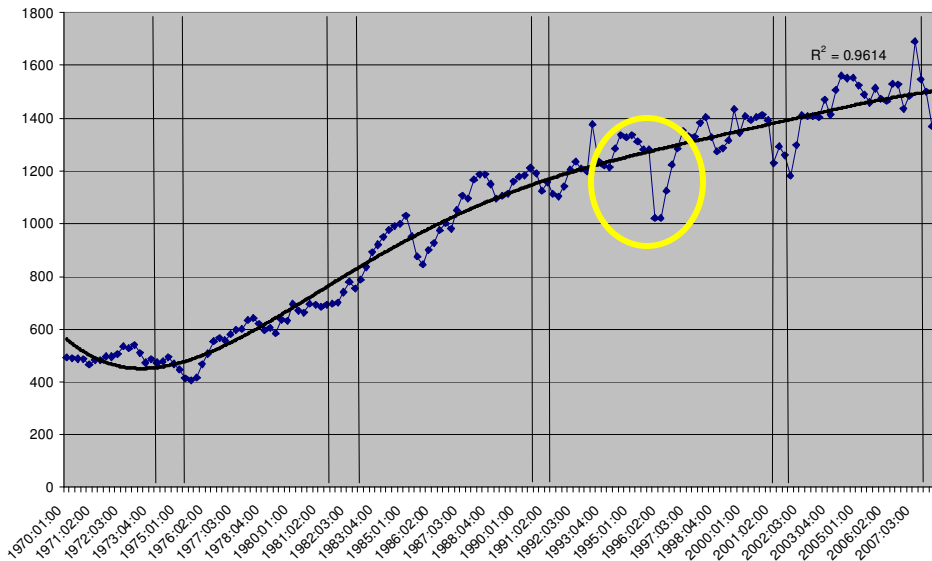
CFS



The demand trend charts to the left show the demand for CFS and CGW over the past four decades.

The vertical lines represent the beginning and end of the major recessions which took place during that period of time.

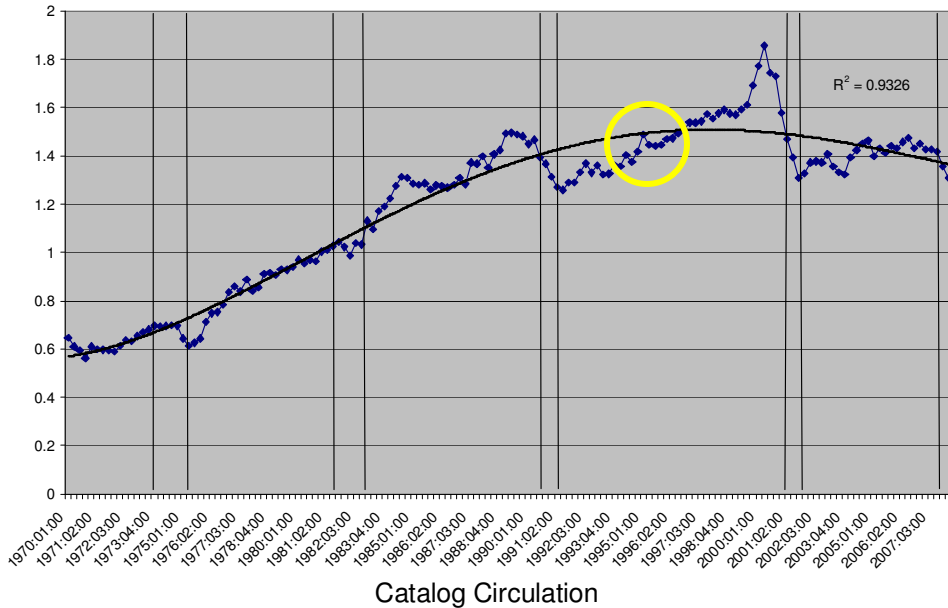
The yellow circle draws attention to the change in demand which was associated with the inventory build and draw down experienced in the Coated Papers market during the mid 1990s.



SOURCE: RISI

# End Use Indicator Trends

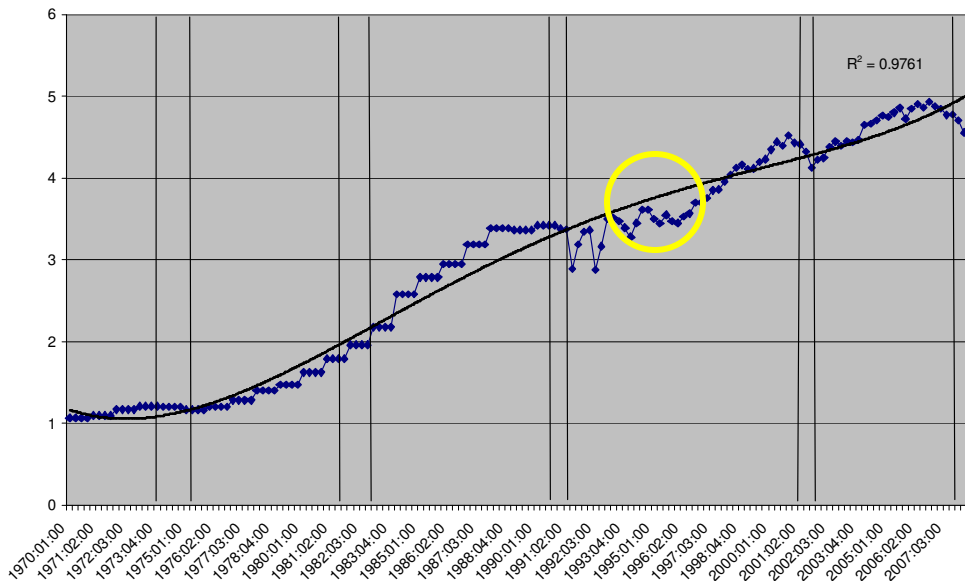
Pages



The end use indicator trend charts to the left show the impact of the recessions of the past four decades on the demand for magazines (Ad Pages) and catalogs (Catalog circulation).

Of note is that the change in coated demand caused by the inventory fluctuation of the mid '90s (previous page), does not appear to have been driven by a change in the end use indicators (within the yellow highlighted circles).

All of the recessions, on the other hand, appear to have had a measurable impact on end use indicators.



SOURCE: RISI

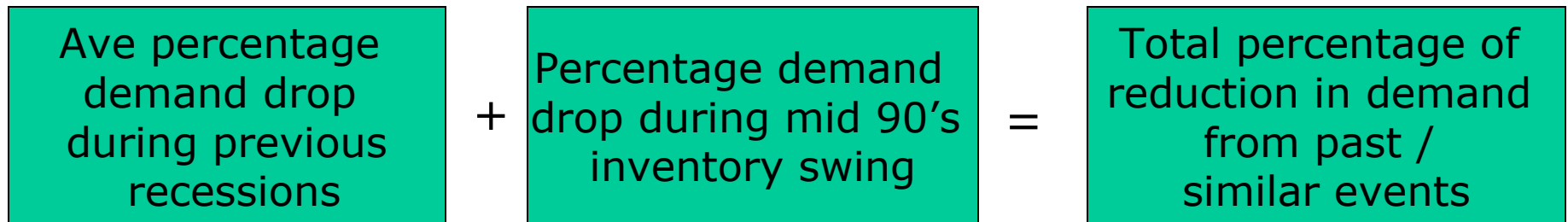
# Points of clarification prior to the analysis...



Before reviewing the following slides depicting the peak to trough demand drop for CTD papers and estimating what portion of the demand will return, it is important to keep a couple of points in mind:

1. In retrospect, reviewing AFPA monthly data, the most recent peak for US CTD demand (total US purchases):
  - CFS: October 2007 – 509.6K tons
  - CGW: August 2007 – 593.7K tons
2. This analysis uses monthly data therefore the peak to trough values are much greater in magnitude than if we were reviewing annual data where the peaks / troughs become “levelized”. As an example, the YOY change in US CTD demand from 2008 vs. 2007 is estimated to be:
  - CFS: '07 = 5,603K tons, '08 ~ 4,782K tons OR ~15% decline
  - CGW: '07 = 5,963K tons, '08 ~ 5,146K tons OR ~14% declineThe Peak to Trough values shown on the following slides are much greater since they represent monthly data.

# What is the expected drop in demand due to recession / inventory swing?



## CFS

|  |     |   |     |
|--|-----|---|-----|
| 9% (from last 3 recessions)<br>32% from '73-75 recession | 17% | = | 26% |
|--|-----|---|-----|

## CGW

|  |     |   |     |
|--|-----|---|-----|
| 9% (from last 2 recessions)<br>2% from '83-84 recession<br>17% from '73-75 recession | 24% | = | 33% |
|--|-----|---|-----|

# What portion of CTD demand will return?



The analysis from the previous page suggests, based on historical data, that a demand drop of

CFS = 26%, and CGW = 33%

will return following the conclusion of the inventory swing and the recession which we are currently experiencing.

The full magnitude of the demand drop from peak to trough for CFS and CGW after emerging from the current recession and inventory swing is unknown, but reviewing AFPA data through November '08 the total demand drop will be equal to or in excess of

CFS = 30%, and CGW = 43%.

# Conclusions



This analysis shows that based on historical market behavior, a significant amount of the current demand loss of CTD paper will return after emerging from the current recession and inventory swing condition.

A portion of the CTD demand lost to substitution (electronic media and other / lower quality paper grade options) may return as the economy emerges from the current recession and inventory swing condition. It remains to be seen how these types of substitution will impact end users business models and where the percentage of demand lost to substitution ultimate ends up.

The rate of increase in demand immediately following the trough of a recession (and the inventory swing of the mid '90s) is very rapid for the first 2-3 quarters. This "snap back" in demand has been in the range of 100-200K tons per quarter (400-800K tons on an annual basis) following these events over the last 4 decades.