

The Great Recycling Market Crash of 2008-2009

Jerry Powell

Resource Recycling

Portland, Oregon

www.resource-recycling.com

Resource Recycling
Portland, Oregon

What you'll learn today

A description of the market slump

An explanation of why it happened

The impact of the crash on various parties

A list of how the business of recycling will change

What happened

Global demand for secondary materials has fallen by a quarter to a third since last fall.

The misery index: closed paper recycling mills

Caraustar	Chattanooga, TN	60,000 tpy	07/08
Caraustar	Richmond VA	49,000 tpy	12/08
Caraustar	Charlotte, NC	62,000 tpy	03/09
Sonoco	Rockton, IL	11,000 tpy	12/08
Sonoco	Lancaster, OH	56,000 tpy	03/09

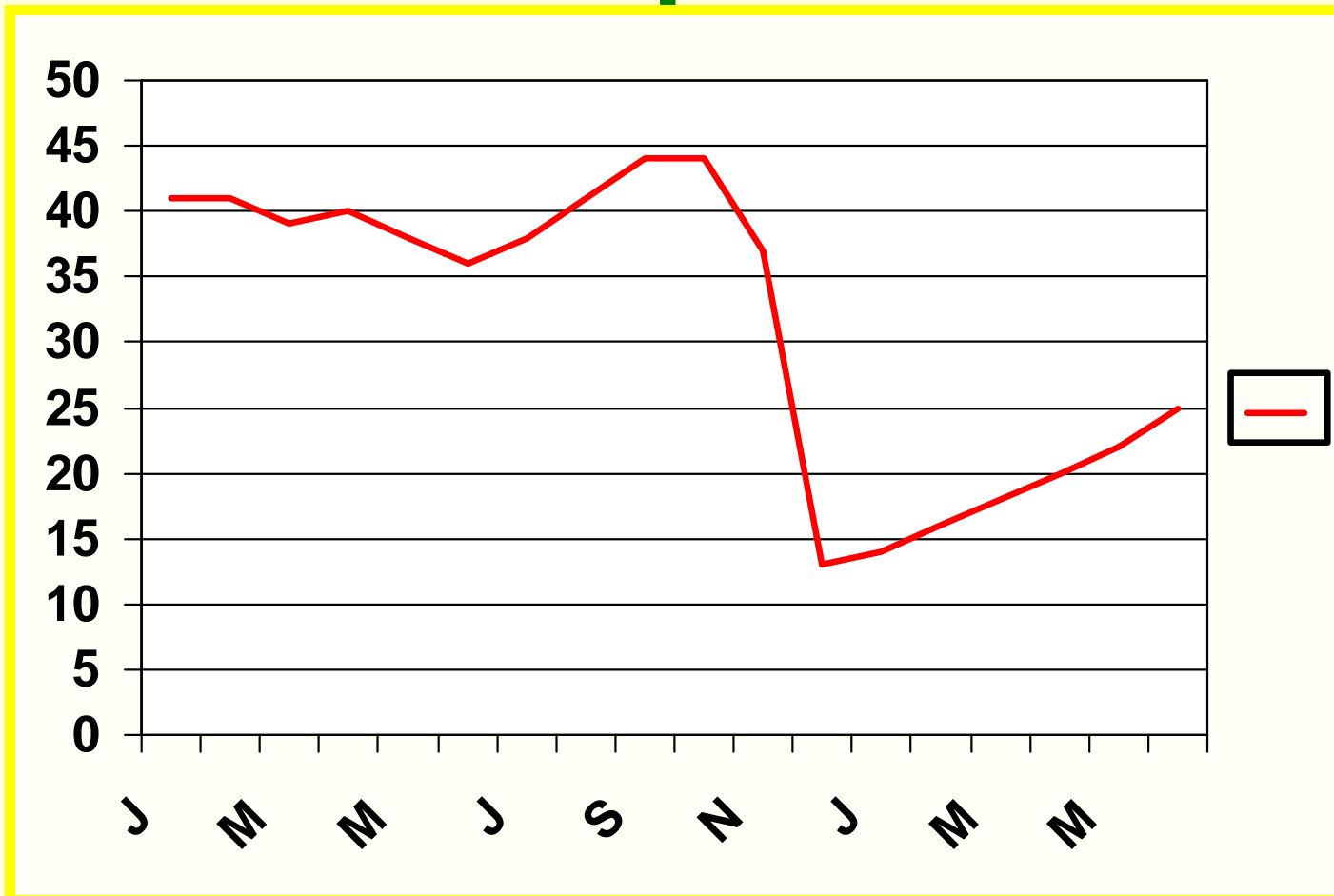
The misery index: bankruptcy filings

AbitibiBowater	Recycled paper mills
Aleris	Aluminum recycling
Caraustar	Recycled paper mills
Smurfit-Stone	Recycled paper mills
WeRecycle!	Electronics recycling

What happened

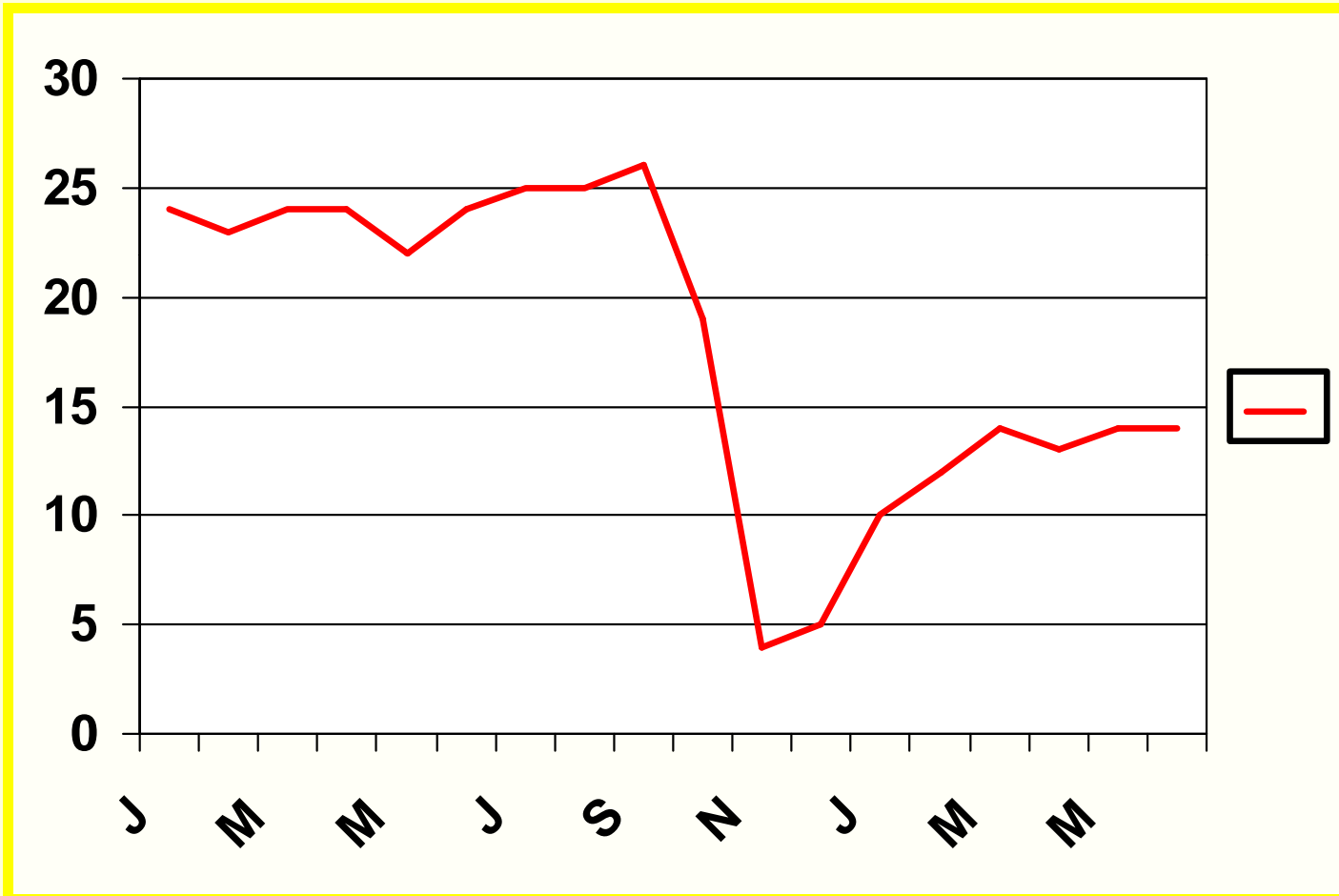
This has produced a price decline of one-half to two-thirds since the highs of last summer.

Homopolymer HDPE bale prices



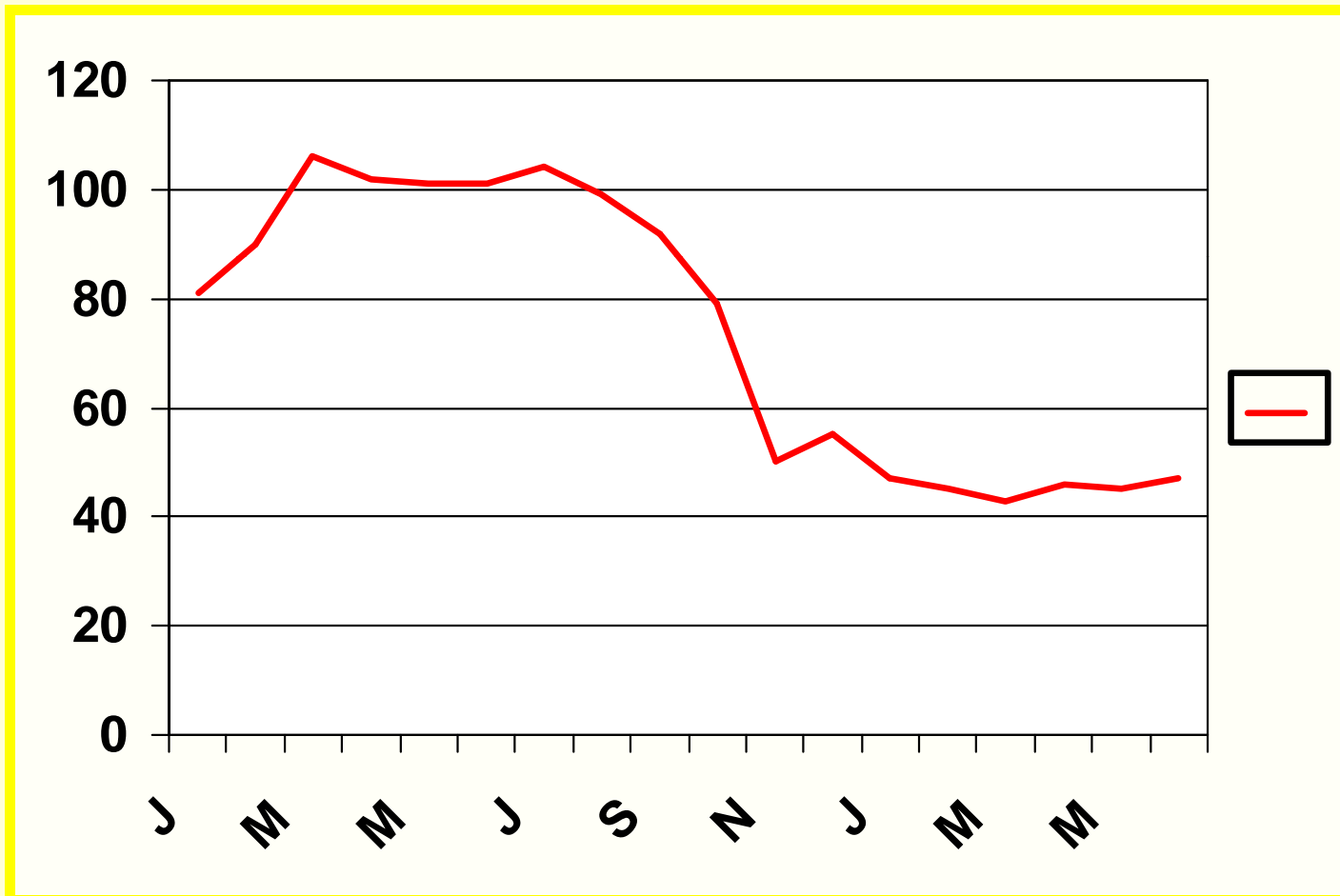
Resource Recycling
Portland, Oregon

PET bale prices



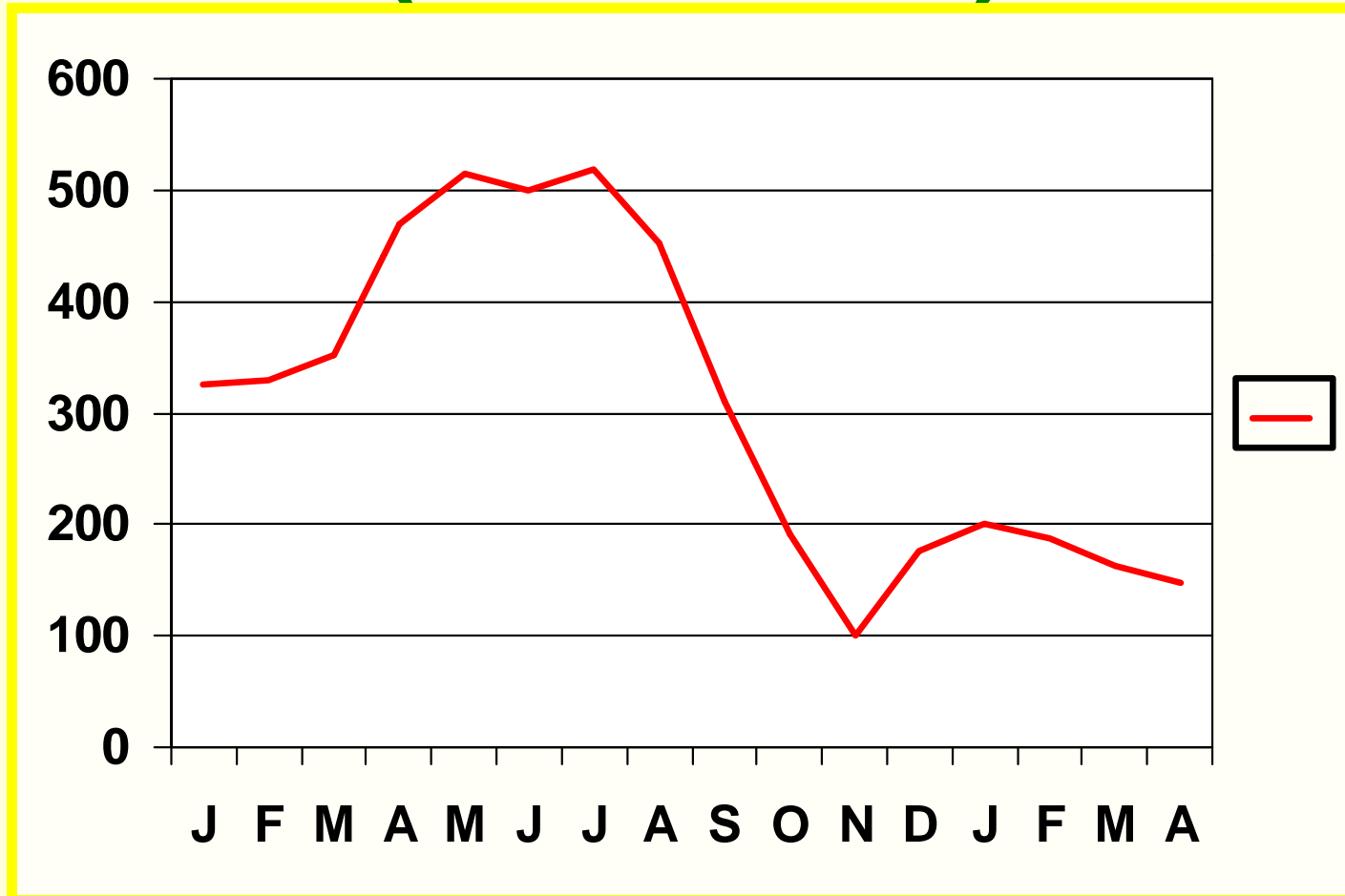
Resource Recycling
Portland, Oregon

Aluminum can prices



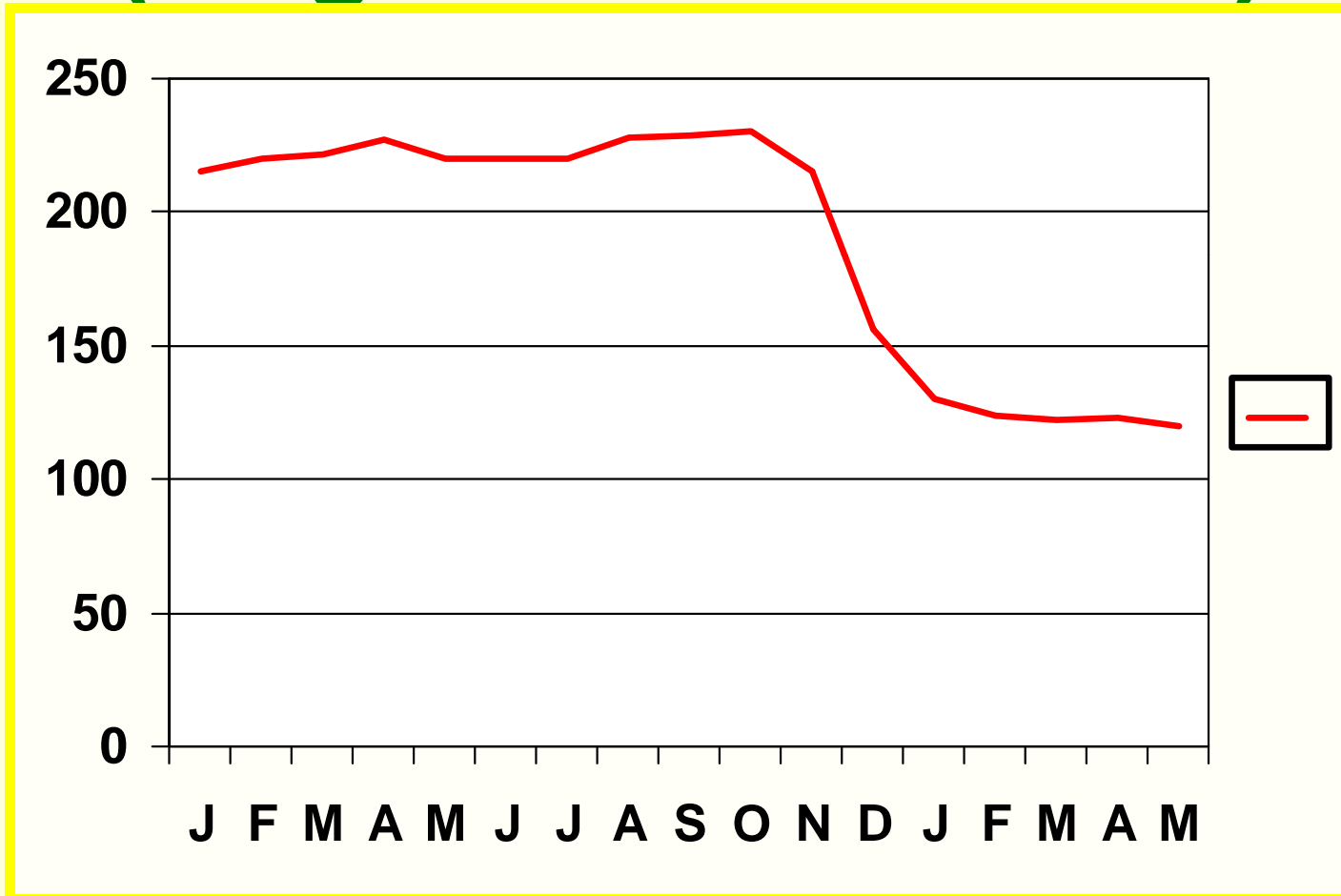
Resource Recycling
Portland, Oregon

Ferrous scrap prices (No. 1 HMS)



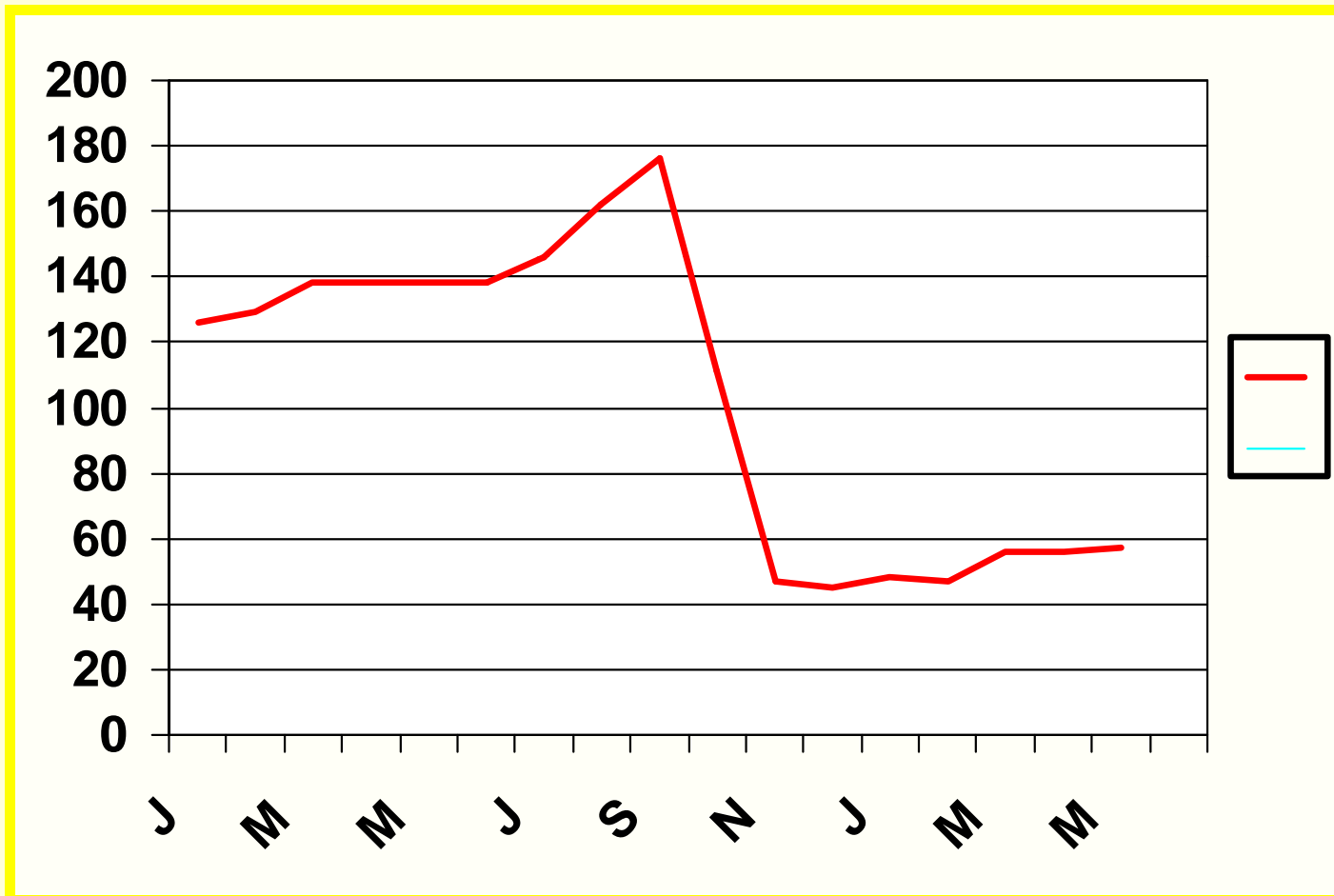
Resource Recycling
Portland, Oregon

Recovered paper prices (18 grades combined)



Resource Recycling
Portland, Oregon

ONP No. 8 price



Resource Recycling
Portland, Oregon

Impact on exports in the first quarter of 2009

<u>Material</u>	<u>Volume</u>	<u>Price</u>
Paper	- 14%	- 22%
Plastics	+ 15%	- 32%
Aluminum	- 40%	- 31%
Ferrous scrap	+ 12%	- 26%

Why it happened

It is important to note that a price correction was expected:

- summer prices were unsustainable**
- drop in oil from \$147 per barrel to under \$40 meant that recycling prices had to come down, especially for plastics.**
- the China Olympics shutdown resulted in a price bubble**

Why it happened

Exports of recovered paper in the months before the Olympics

<u>Month</u>	<u>Million tons/month</u>
April	1.47
May	1.49
June	1.59
July	1.59

Why it happened

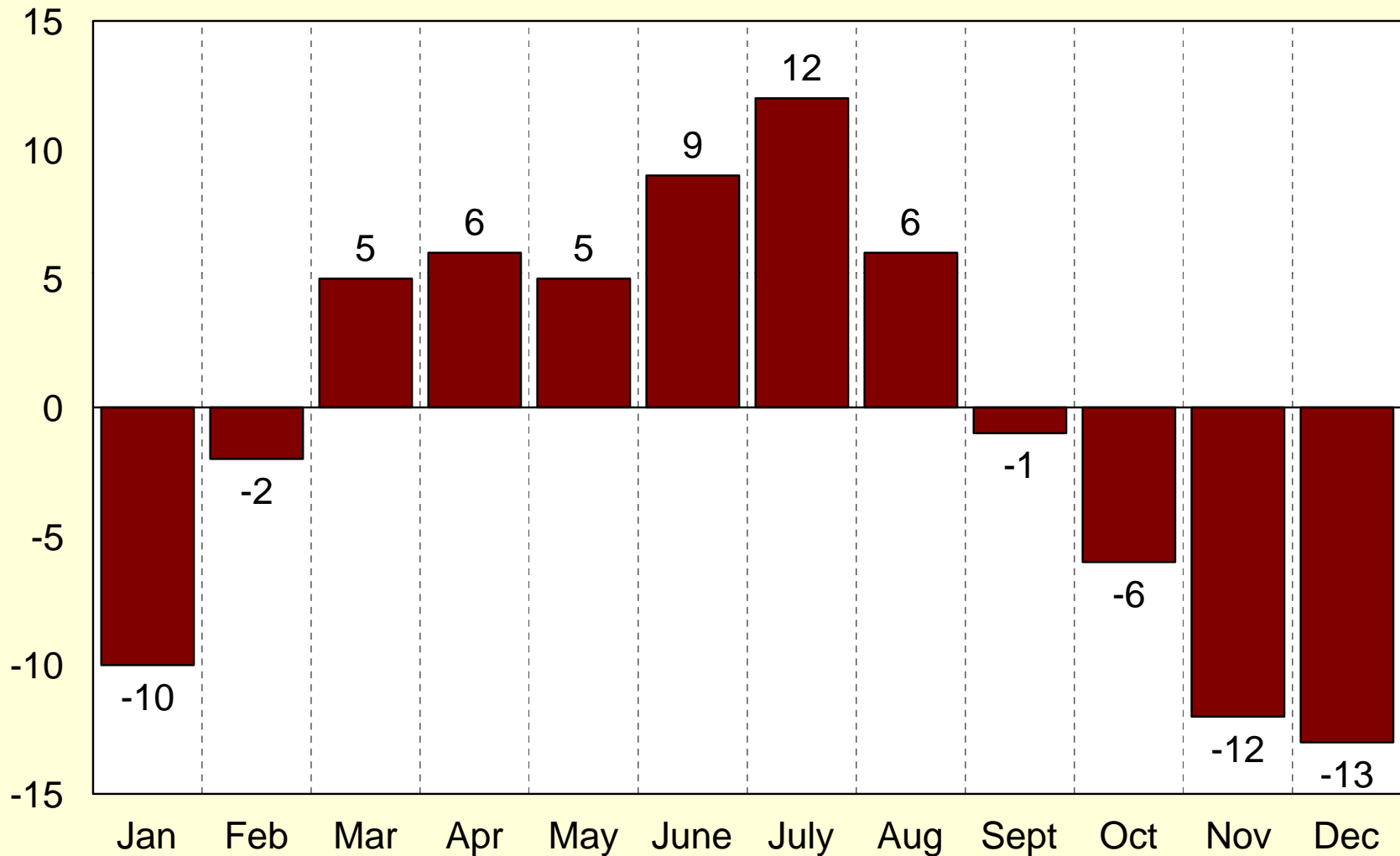
Prices for several recovered materials typically decline in the fourth quarter:

-- glut of summer- and fall-generated containers (PET and UBCs)

-- rising volumes of ONP and OCC as stores gear up for holiday sales

Cardboard (OCC) Seasonal Pricing

15-year (1993-2008) averaging of monthly prices as compared to annual average



Resource Recycling
Portland, Oregon

Why it happened

Sharp decline in demand for recycled products (steel, boxes, newsprint, etc.).

We got whacked like all other economic sectors. This has nothing to do with recycling, per se. A falling tide lowers all boats.

Why it happened

Thus, this is unlike previous recycling market crashes:

-- mid-1970s: Too little market demand; too few end-users

-- mid-1990s: Too much recycling collection activity

Why it happened

Crash of 1995:

- prices fell for about six months to about 15 to 25 percent of their high**
- pricing over the next three years was at about 50 percent of the high**

Why it happened

This crash is different. It's like a lane closure on the freeway:

- a decline in consumption**
- led to growing inventories of finished goods**
- thus, orders for bales, etc. slumped**
- causing inventories of bales, etc. to rise**
- and recycling prices then fell quickly**

Why it happened

This crash is different in another way. Globalization is a key element in the current market malaise, as all of recycling's growth in this decade, except for tissue production, is explained by rising foreign demand and cheap ocean freight rates.

Why it happened

The global shipping market has also changed drastically in recent years. The largest ships can now carry 5,500 40-foot containers, or as much as 137,000 tons of goods and materials, in each voyage.

Why it happened

<u>Material</u>	<u>2008 exports</u>	<u>Change in decade</u>
Aluminum	4.4 billion lbs.	+ 375%
Plastics	3.5 billion pounds	+ 357%
Ferrous	21.5 million tonnes	+ 292%
Paper	18.2 million tonnes	+ 143%

Why it happened

<u>Material</u>	<u>China's export share</u>
PET	97%
HDPE	79%
ONP	56%
OCC	53%

Resource Recycling
Portland, Oregon

The impact

The effect of the market crash varies widely among recycling industry members, and even within local regions. Each of the following variables help determine the impact. But beware: much of the supposed impact is still based on too much rumor and too few facts.

The impact

1: Smaller purchasing regions. With mills forced to buy less recyclables, buyers have reduced their purchasing circumference. As a result, distant suppliers, especially in rural areas, suffer. Thus, paper recycling markets in the Pacific Northwest and in the Southeast are faring better than elsewhere, for example.

The impact

2: A call to loyalty. Spot market players are finding it harder to sell materials in comparison to loyal suppliers.

3. Credit issues. Banks are not eager to make loans or issue LOCs. This is affecting the sale of recyclables. Cash payment is becoming more widely used.

The impact

4: Contract sellers win. This is not a good time to be a month-to-month seller.

5. Big suppliers win over little suppliers. This is a reflection of continued consolidation of the collection, processing and end use of recyclables.

The impact

<u>Big supplier</u>	<u>Million tons/year</u>
Casella	1.5
Greenstar North America	1.6
Republic/Allied Waste	3.3
Waste Connections	1.0
Waste Management	7.6

The impact

<u>Big consumer</u>	<u>Million tons/year</u>
Abitibi-Bowater	2.0
Cascades	2.1
Georgia-Pacific	4.0
International Paper	5.0
Rock-Tenn	2.0
Smurfit-Stone	2.7
Sonoco Products	1.5

The impact

6: It is best to sell to a consumer-owned local processing plant.

Materials from these mill-owned supply sites are often used first, with recyclables from independent suppliers being of a lower priority.

The impact

<u>Steel company</u>	<u>Processing plants</u>
Commercial Metals	36
Nucor	58
Schnitzer Steel	41
Steel Dynamics	27

The impact

<u>Paper company</u>	<u>Processing plants</u>
International Paper	33
Newark Group	11
Rock-Tenn	9
Sonoco	17
Smurfit-Stone	28
SP Newsprint	21

The impact

7: Some buyers are offering price support.
They know the cost of collecting and processing fiber, plastics and metallics, and they want a viable supply system to survive.

How business will change

- 1: Added moves toward **consolidation**.
2. Continued **foreign-market** strength, especially if oil stays low, as ocean freight rates will remain extremely cheap.
3. A bit more focus on **material quality**.
4. A resurgence in **market knowledge** by municipal program managers.

How business will change

5. More attention to **market development** efforts, including minimum recycled content requirements.
6. Yet, **investments** in U.S. mills will remain low.
7. Because **China** will still overhang the market, offering strong prices. But questions remain about our reliance on China.







How business will change

- 8: The **federal stimulus package** will aid recycling modestly:
- surge in sales of recycled metals due to \$48 billion in transportation projects and grants to improve the electric grid
 - boost in compost demand from transportation projects

How business will change

- 8: The federal stimulus package will aid recycling modestly:**
- lower costs for recycling businesses (tax credits, accelerated depreciation, etc.)**
 - 25 specific waste management and recycling projects are on the wish list (\$15 million for a MRF in Alaska, \$18 million to expand St. Louis' recycling system, etc.)**

How business will change

9: Communities and recycling businesses will try various **mitigation practices:**

- renegotiation of contracts
- stockpiling of materials
- rate relief
- charging a recycling fee
- reducing the materials collected
- landfilling

How business will change

- 10: The municipal waste recycling system will survive.** It is extremely important to note that current metal, paper and plastic prices are close to historic averages prior to this decade. We got drunk on the pricing in the past seven or eight years, and it's time to sober up.

Disclaimer

Any resemblance to real persons, living or dead, is purely coincidental. Some assembly required. Batteries not included. No warranty is made as to the accuracy of any prediction, opinion or conclusion. Contents may settle during shipping. Use only as directed. No other warranty expressed or implied. Do not use while driving a motor vehicle. No trans-fats. This is not an offer to sell or buy securities. Apply only to affected area. May be too violent for some viewers. For recreational use only. If condition persists, see your physician. Freshest if consumed before date on the carton. No postage necessary if mailed in Canada. For off-road use only. Colors may fade. One size fits all. Many suitcases look alike.

Resource Recycling
Portland, Oregon

Drop me a line

Jerry Powell

Resource Recycling

jpowell@resource-recycling.com

Resource Recycling
Portland, Oregon