

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
http://ageconsearch.umn.edu
aesearch@umn.edu

Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.

RESEARCH REPORTS

Food Processing Profits During Economic Stagnation

by

Anthony E. Gallo USDA/ERS

Processed food sales are presumably less affected by an economic slowdown than is the rest of the economy because food is a noncyclical commodity. But how well does the U.S. food manufacturing sector do during economic stagnation? How vulnerable are profits during a time of economic slowdown? These questions are important because the food manufacturing industries. despite slow volume growth, were profitable during the prosperous 1980s, both in terms of profit levels and returns on stockholders' equity, assets, and sales. The year 1991 is an excellent period to measure this profit performance in a recession because the recession was in effect the entire year. This research examines two basic questions: (1) how did food processors' profitability compare to other industries in 1991, and (2) how did food processing profitability compare to the 1987-1990 period--a time of economic growth?

Background

The economy in 1991 came to a grinding halt. Real GDP declined. Total employment fell by more than a million. The unemployment rate rose to 6.6 percent. Personal consumption expenditures adjusted for price increase, decreased for most items, including food. Food manufacturing product shipments, which rose 5½ percent in 1990, barely rose by 1 percent in 1991 so that

volume growth in food was slowed by the recession.

From the supply side, however, the economic slowdown was very beneficial to the food manufacturing industries. Profitability of food manufacturing is affected by price and wages, foreign exchange rates, and interest rates because the U.S. food manufacturing system is global, highly leveraged, and labor intensive. Wage and price stability held down costs. The PPI for intermediate food and feeds dropped 2.2 percent compared to a 4.6 percent increase in 1990. Both interest rates and the value of the U.S. dollar declined. Wage rates rose 2.4 percent, and average weekly hours dropped slightly from 1991.

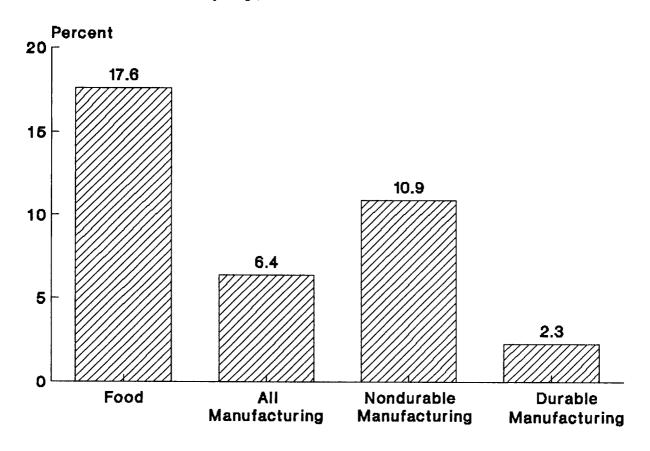
Profitability Performance

Within this scenario, food manufacturing was very profitable in 1991. By all profit measures, food manufacturers did better than any other industry in the American economy, except drugs, in 1991. Food manufacturing's profitability was spectacular as measured by after-tax returns on owners' equity, assets, and sales.

Journal of Food Distribution Research

February 93/page 87

After tax profits as a percent of stockholders equity, 1991



Return on Stockholders' Equity

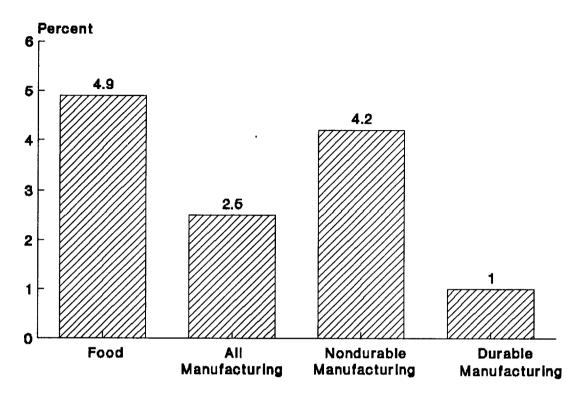
- This measure shows how well the industry performed on its profit return to its owners.
- Whereas all manufacturers averaged a 6.4 percent return on equity in 1991, food manufacturers had a return of 17.6 cents on

each dollar of owners capital. Nondurable manufacturers return was nearly 11 percent, while durable industries return was 2.3 percent. A higher level of leverage, contributed to food's return. Drug companies had a 26 percent return on stockholders' equity.

February 93/page 88

Journal of Food Distribution Research

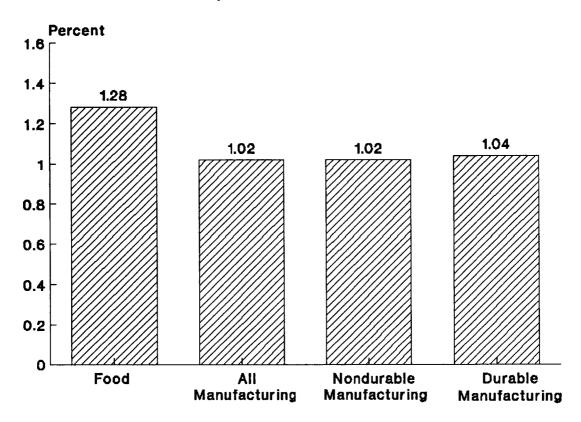
Fig. 2
After tax profits as a percent of of sales, 1991



Return on Sales

• Foods return on sales was above all manufacturers, nondurables and durable (Figure 2). The food manufacturing industries earned about 5 cents on each dollar of sales. Durable manufacturers were hit especially hard, earning less than 1 cent on each dollar of sales. Only drugs outperformed food with more than 15 cents earned on each sales dollar was bettered solely by drugs.

Fig. 3
Sales/Asset Ratio, 1991



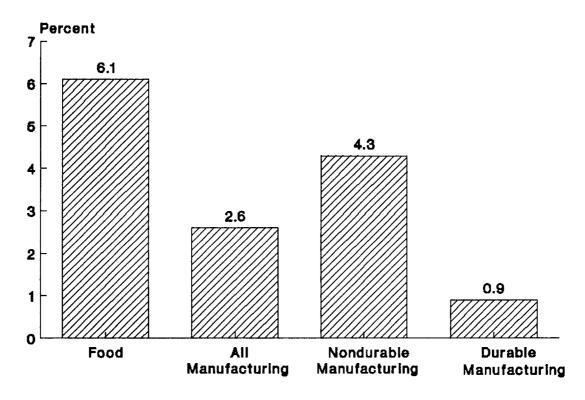
Return on Assets

- Food manufacturing has traditionally had the highest rate of sales revenue generated by assets, and this relationship continued through the recession.
- Every dollar in assets generated 1.28 in sales for food processors, overwhelming the highest in all manufacturing. Drug companies generated .80 in sales for each dollar of assets. All manufacturers generated \$1.02, while durable goods manufacturers generated \$1.04.

February 93/page 90

Journal of Food Distribution Research

After tax profits as a percent of Assets, 1991



 As a result, food processors had 6.1 percent return on assets. All manufacturers had a 2.6 percent return on assets, while durable manufacturers return was below 1 percent. Drug companies averaged a 13 percent return.

Income

Despite slow sales, income from domestic operations, the core of food processors' business, remained unchanged at \$34 billion between 1990 and 1991. This measure of profitability excludes all nonoperating income such as rents, dividends, interest, royalties, and foreign operations, and nonoperating expense such as interest. All manufacturing experienced a drop of 24 percent, nondurables a drop of 10 percent, and durables 50 percent (Table 1).

Table 1
Income from operations, 1990-91

Industry	1991	1990	Percent Change
	Bil		
All Manufacturers	131	173	-24
Nondurable	99	110	-10
Durable	37	62	-40
Food	34	34	0

For food firms with assets greater than \$25 million, income from domestic operations was \$32.3 billion while nonoperating income, was \$4.2 billion. Income from foreign operations was \$8.7 billion. All were essentially unchanged from 1990.

Table 2

U.S. Food Processors Source and Use of Earnings, 1991¹

Source	Amount	Percent
	Billion \$	
Income from domestic operations	32.3	71.5
Nonoperating domestic income ²	8.7	19.2
Income from foreign operations	4.2	9.3
Total	45.2	100.0
<u>Use</u>		
Interest	17.6	38.9
Dividends	7.6	6.8
Taxes	9.3	20.6
Retained	10.7	3.7
Total	45.2	100.0

¹ Excludes firms with assets less than \$25 million.

Because of the heavy increase in debt during the late 1980s to finance leveraged buyouts, interest payments now constitute the major use of earnings. In 1991, interest expense was down from \$20 billion to 17.6 billion, because of lower interest rates but still constituted 39 percent of the use of earnings. Taxes used up about a fifth (Table 1) of operational earnings. About \$7.6 billion was allocated to dividends and nearly \$11 billion was re-invested in the industry.

Comparison to 1987-90 Period

Compared to other industries, food processing profits were not as much affected by the economic slowdown (Table 3). Compared to the 1987-90 period, food processors' return on stockholders equity and assets was only slightly lower in 1991. After-tax profits as a percent of stockholders equity fell from 17.9 percent to 17.6 percent; all manufacturing fell from 13.4 percent to 6.4 percent. The return on sales for all manufacturing fell from 5.0 to 2.5 percent; for food manufacturing, the rate rose from 4.6 to 4.9 percent.

Conclusions

- In 1991, a recession year, food manufacturing's aggregate profitability when measured as a return on assets, stockholders equity, and sales was among the highest in all manufacturing, Only drug companies did better than the food manufacturing.
- Compared to 1987-90, food manufacturing's profitability dropped only slightly.
 The return for nonfood manufacturing dropped sharply.
- Earnings from core operations remained unchanged for food processors, but fell sharply for nearly all the rest of the manufacturing sector.

Endnote

¹Includes tobacco.

References

- 1. Gallo, Anthony E., Food Marketing Review, USDA, ERS. Selected issues.
- 2. Gallo, Anthony E., Aggregate Profitability in U.S. Food Manufacturing, FDRS Conference Report, 1991.
- 3. U.S. Department of Commerce, Bureau of the Census, *Quarterly Financial Report*. Selected issues.

² Dividends, interest, rent, royalties.

Table 3

After Tax Profit Measures: Selected Periods

Manufacturing Industry	Profits as a percent of stock-holders' equity		Profits as a percent of assets		Profits as a percent of sales	
	<u>1987-90</u>	<u>1991</u>	<u>1987-90</u>	<u>1991</u>	<u>1987-90</u>	<u>1991</u>
Food	17.9	17.6	6.3	6.1	4.6	4.9
All	13.4	6.4	5.6	2.6	5.0	2.5
Nondurable	15.4	10.9	6.4	4.3	5.7	4.2
Durable	11.3	2.3	4.9	0.9	4.2	1.0