

TOPICAL STUDY #11

THE RESTRUCTURING OF CORPORATE AMERICA IS BULLISH

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Economics

I. Introduction

We're bullish on the prospects for corporate America, particularly manufacturers. Since 1982, the managers of America's companies restructured their operations. They slashed their costs by reducing wage and salary jobs. They successfully renegotiated labor contracts that reversed at least two decades of give-them-what-they-want settlements. They adopted just-in-time techniques to reduce inventories. They shut down excess and obsolete capacity. They sold off divisions that weren't profitable.

Why did business managers do all this? To survive. In the 1970s, corporate managers could maintain earnings growth by raising prices. In that inflationary decade, price increases would stick.

From 1980 until recently, price increases generally didn't stick. Companies lost their ability to raise prices because of increased domestic and foreign competition. Industrial deregulation is one of the main forces behind increased domestic competition. The sharp 87% increase in the trade-weighted foreign exchange value of the dollar from July 1980 through February 1985 explains much of the increase in foreign competition. Also contributing to foreign competition is that many deeply indebted less-developed countries have increased their exports to the U.S. while cutting their imports.

To maintain earnings momentum in such a competitive environment, firms must sell more units and cut costs. Since most product markets are mature in the U.S., producers have to gain market share to sell more units. That's a very difficult task, especially because foreign goods have made such inroads into domestic markets.

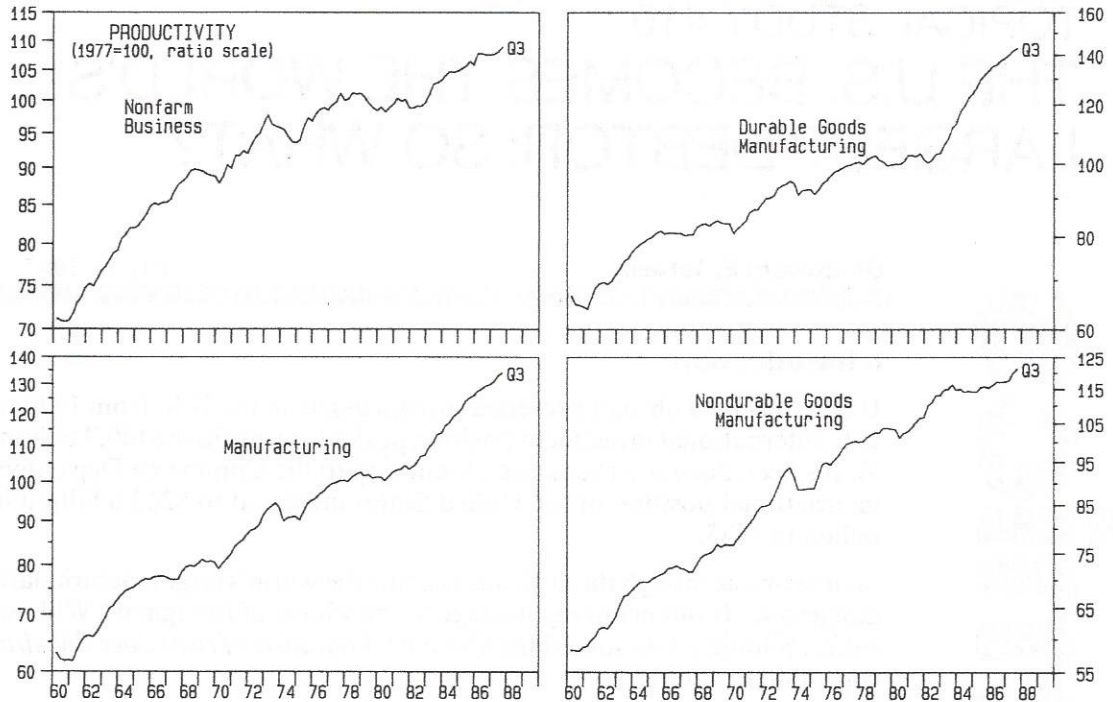
So cost cutting has been a key element of restructuring. *Ironically, cost cutting can be very costly.* Write-off expenses are nonrecurring, but when they do occur they can be a big drag on corporate profits. Also, pink slips are often attached to generous severance paychecks. As a result, after-tax book profits during each year from 1980 through 1986 fell below the 1979 total.

II. Productivity Gains Are Awesome

Nevertheless, cost cutting did pay off. This is most visible in manufacturing productivity, particularly in the durable goods sector. From 1960 to 1982 manufacturing productivity rose at a compounded annual rate of 2.4%. After 1982, factory productivity increased 4.8% per year.

Even more impressive are the efficiency gains in the production of durable goods. Over the past five years, from 1983 to 1987, output per man-hour soared 39%. That's how much durable goods productivity increased over the 19-year period from 1964 to 1982. The 7.1% compounded annual increases from 1983 to 1987 were more than 3 times greater than the 2.0% gains from 1960 to 1982. Now that's impressive!

There hasn't been a significant change in the trend of productivity in nondurable goods industries. From 1960 to 1987, the annual improvement was 2.7%.



III. Factory Unit Labor Costs Have Been Heading South

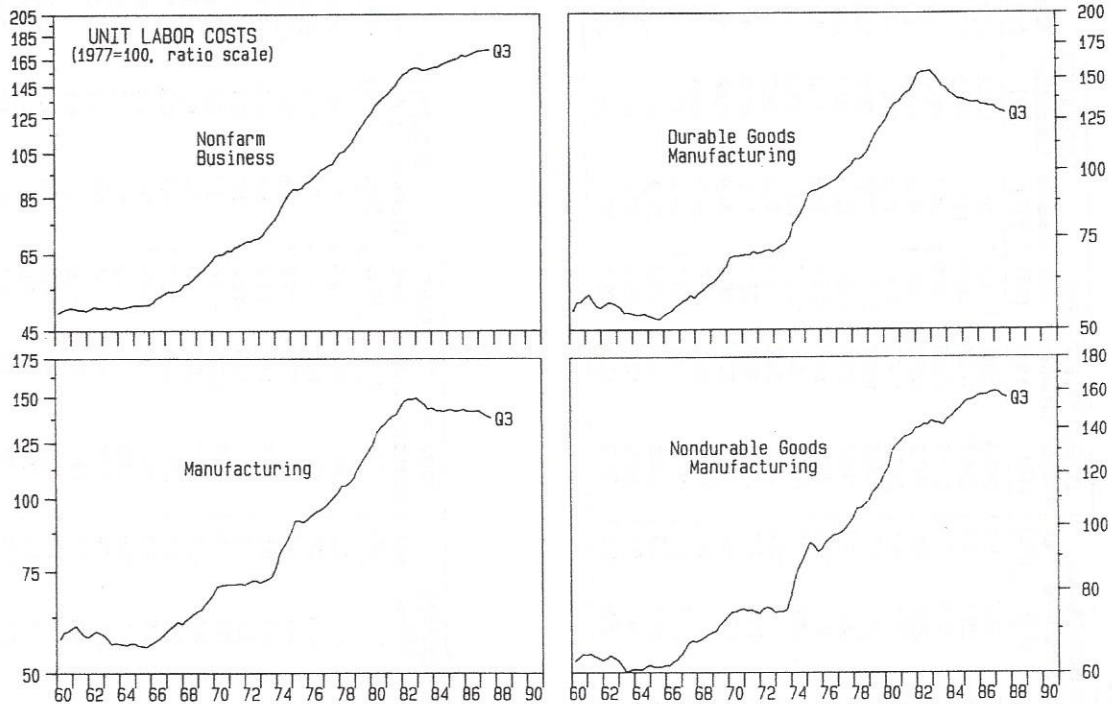
The dramatic rise in factory efficiency in recent years has reduced unit labor costs, which are equal to compensation per man-hour divided by output per man-hour, or productivity. Also, U.S. workers yielded to the competitive pressures in the global product markets: Wage inflation, as measured by the year-over-year percent change in the hourly earnings index for factory workers, plummeted from an all-time peak of 11% during October 1980 to 2% recently.

From 1960 to 1982, hourly compensation in manufacturing (which includes wages, salaries, and benefits) rose 6.7% per year. Since then, the compensation hikes have averaged only 3.5% per year while productivity soared 4.8%. So unit labor costs have actually declined 1.4% per year since 1982 after rising 4.3% per year from 1960 to 1982; in the durables sector, unit labor costs are down a whopping 17% since the final quarter of 1982.

Unit labor costs account for roughly 75% of total production costs. Clearly, restructuring has been a spectacular success for America's corporations. So why have reported profits been so disappointing? Because, as we stated above, the process of cutting costs is very costly. But once the targeted sunk costs and variable costs are sunk, profits can explode. Profits have started to soar in many industries this year.

IV. How Preparing For Bad Times Caused Good Times

At the end of last year, IBM, GM, and AT&T all announced major layoffs designed to cut costs. In retrospect, those announcements by the bluest of the Big Blues marked the completion of the restructuring process. At the start of this year, just about every major industry had gone through roughly five years of restructuring, as documented in the Business Review section of this study.



Apparently, enough was enough. There was no more fat left. In 1987, the restructurers were going to find out if their corporations could survive another year of fierce competition and disinflation without cutting into the muscles and bones of their businesses.

Then a miracle happened. Business was fabulous. Not good, not great, but fabulous. *Once the preparations for more bad times had been completed, wouldn't you know it, the good times started to roll.* Everyone had lean inventories, so they scrambled to rebuild inventories. Now, price increases started to stick. Everyone had reduced payrolls. Now, they needed to rehire. Everyone had closed their obsolete capacity. Now, many are operating at close to full capacity.

Preparing for bad times caused the good times. More precisely, restructuring was a response to deflationary pressures, *and it was also a cause of the deflation.* So the completion of restructuring was very stimulative. That's how the bust turned into a boom for so many industries this year.

In October, industrial production was up 5.1% above last year, the best performance since the end of 1984. During the first half of this year, manufacturing profits were up 20% from a year ago. Durable goods were up 23% and nondurable goods were up 17%.

V. The Low Dollar Is Icing On The Cake

At an annual rate, nondefense factory shipments increased \$119 billion during the first nine months of the year. Manufactured exports rose \$26 billion over this same period. Last year, such shipments were up only \$37 billion and such exports increased \$13 billion. Odds are that exports will become an even more important source of business for many industries in the year ahead thanks to the low foreign-exchange value of the dollar. Since the end of 1986, the dollar has dropped 14% on a trade-weighted basis.

According to the third quarter real GNP accounts, merchandise exports are up 18% from a year ago, the highest such growth rate since the third quarter of 1980.

Undoubtedly, import competition will also become less fierce as the low dollar forces foreign producers to raise their U.S. prices.

VI. So How's Business?

The following Business Review section puts just about all the available industry data together in a format which we hope will help you to make your investment decisions. The comprehensive six-panel charts show the trends in orders and shipments, inventories, production, employment, and prices for over 25 industries since 1982 on a monthly basis. At no extra charge, we also show you the semiconductor industry's book-to-bill ratio, the rig count, the volume index of truck freight, and commodity inventories. If you can think of anything else that we should add, let us know.

Here's a brief list of recent industrial developments which we think are noteworthy:

- 1) Payroll employment in durable goods manufacturing fell 473,000 from the end of 1984 through May of this year. Since May, jobs have expanded 181,000 in this sector.
- 2) Payroll employment in nondurable goods manufacturing fell 168,000 from mid-1984 through mid-1986. Since April 1986, jobs have expanded 224,000 in this sector.
- 3) Inventories are extraordinarily low. During September, the current dollar inventory-to-sales ratio was 1.96 for durables and 1.18 for nondurables. Five years ago, these ratios were 2.7 for durables and 1.4 for nondurables. In constant dollars, the ratio is 2.01 for durables and 1.19 for nondurables, close to record lows.
- 4) Over the 12 months ending October, the following durable goods industries registered new order gains exceeding 15%: electronic components, construction and mining, engines and turbines, and primary metals.
- 5) Over the 12 months ending October, the following nondurable goods industries registered double-digit shipment gains: paperboard containers, pulp and paper, basic chemicals, petroleum and coal, and rubber and plastics.
- 6) Over the 12 months ending October, the following industries raised prices by more than 5%: primary metals, paperboard containers, chemical products, petroleum and coal, and tobacco.

VII. What Could Go Wrong?

Business was also great during 1973 and 1979 and both years were followed by severe recessions. The risk today is that despite the stock market crash, business is too good and inflation returns. The Fed would then tighten, which could trigger a recession.

On an operating basis, U.S. corporations are probably as lean and as mean as they've ever been. Unfortunately, corporate balance sheets aren't as trim and fit. There is probably too much financial leverage, i.e., too much debt relative to equity. That can be very profitable during booms, but it can also be a disaster during recessions.

BUSINESS REVIEW

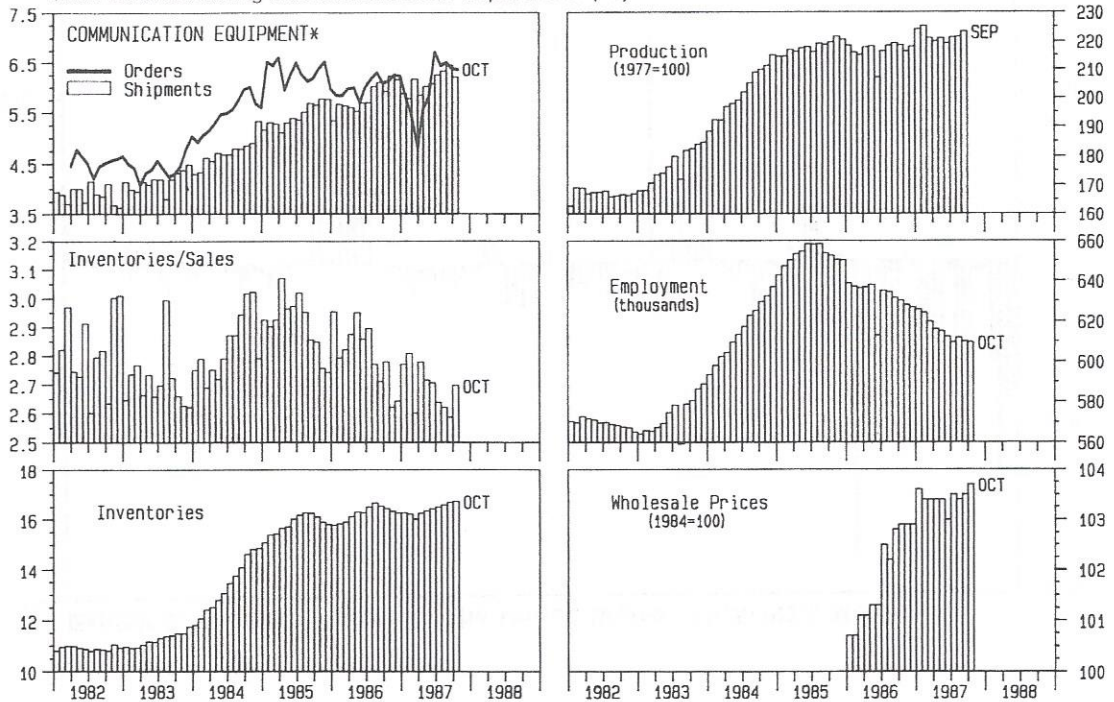
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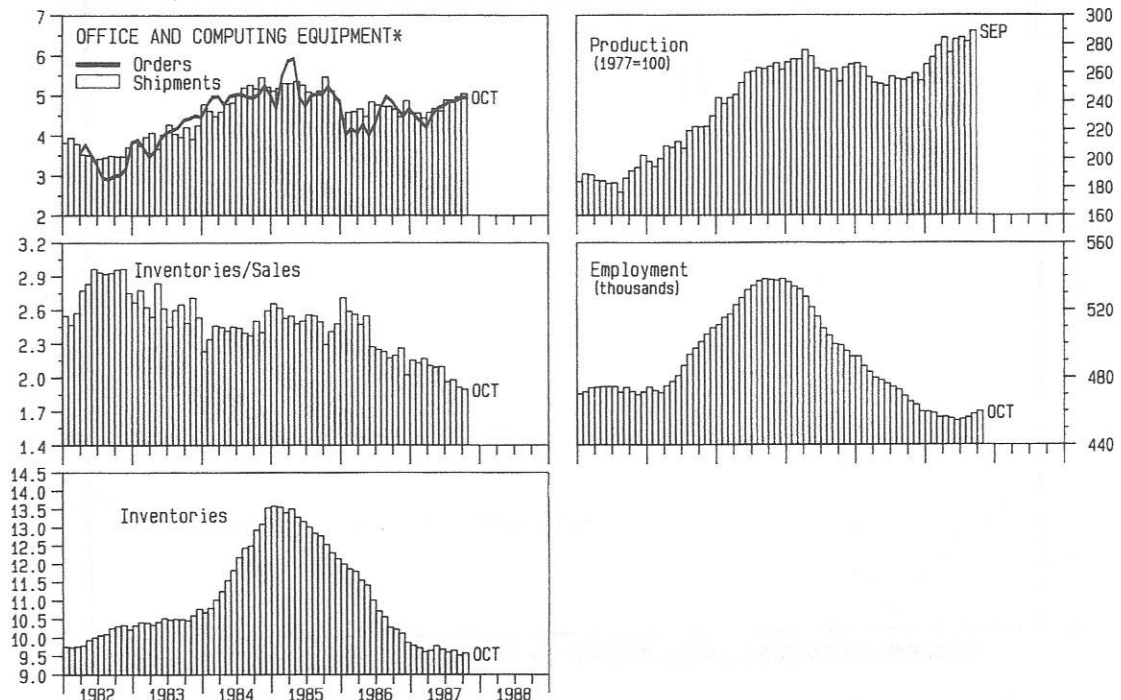
**Electrical
Machinery**

Exhibit 1: Communication Equipment: Boom Follows Winter Slump. After slumping 23% from December to March, new orders for communication equipment soared 40% from March to June. Orders have softened slightly in recent months, but remain 33% above their March level. Low inventory-to-sales ratios and strong orders should boost output and employment.



* All data are billions of current dollars, seasonally adjusted, unless otherwise indicated. Orders are smoothed using a three-month moving average.

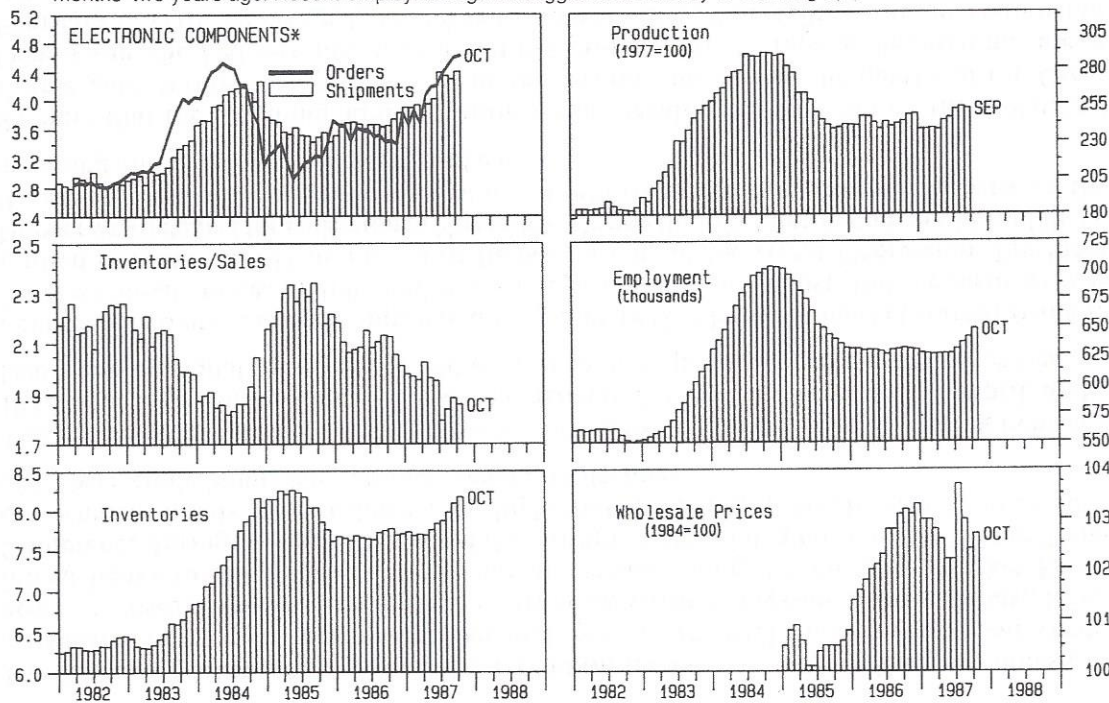
Exhibit 2: Computer Makers Have Low Inventories. Producers have \$9.6 billion sitting in stock. Inventories have fallen to record lows both in absolute terms and relative to sales. Not only did this industry restructure by slashing inventories, but they also cut payrolls by 80,000 since mid-1984. New orders are up 18% since March, so output should rise rapidly.



* All data are billions of current dollars, seasonally adjusted, unless otherwise indicated. Orders are smoothed using a three-month moving average.

Exhibit 3: Robust Orders And Lean Inventories Boost Electronic Component

Output. Orders for electronic components are up 36% since November 1986. Inventories are more manageable: The industry's inventory-to-sales ratio stands at 1.86 months' supply, down from 2.34 months' two years ago. Recent employment gains suggest the industry is cranking up production.



* All data are billions of current dollars, seasonally adjusted, unless otherwise indicated. Orders are smoothed using a three-month moving average.

Exhibit 4: Semiconductor Manufacturers Are Optimistic Again.

Orders are up 40% over the past year, and have more than doubled since September 1985. The book-to-bill ratio, the industry's leading indicator, has been above 1.0 throughout this year. A good sign. Orders slowed from May through September, but that's typical during the summer months. Bookings increased 3% during October, partially retracing the summer decline.

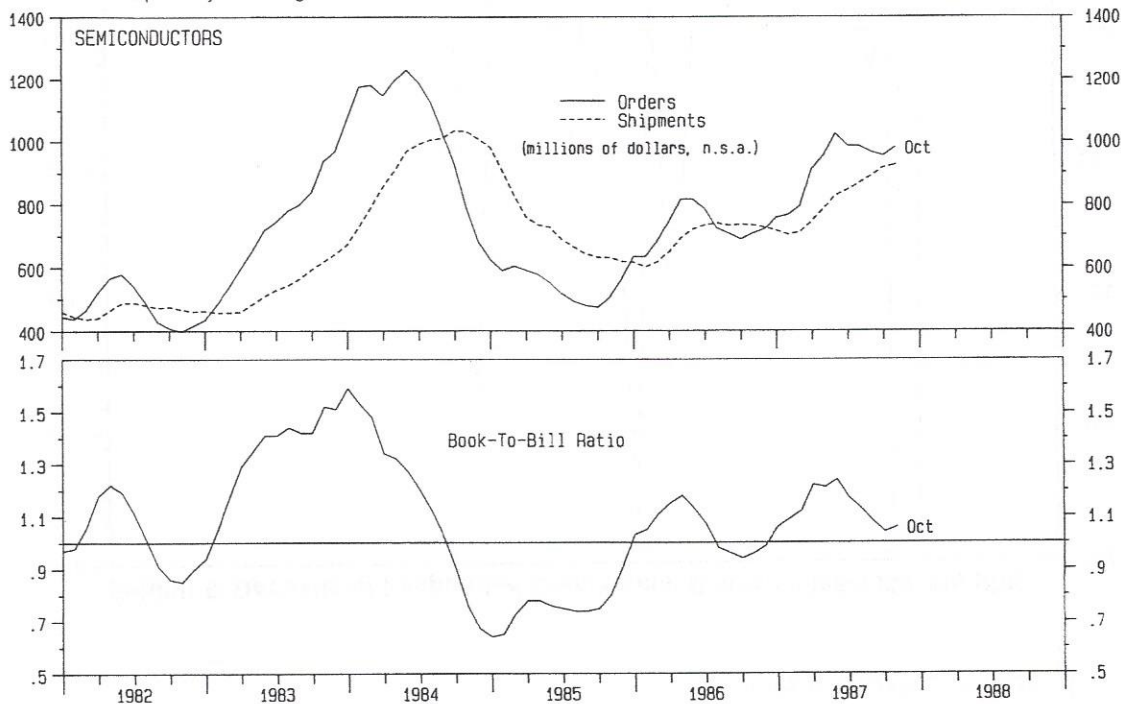


Exhibit 5: Lower Mortgage Rates Should Help Appliance Makers. Since the stock market crash, mortgage rates have dropped 100 basis points. Appliance makers should benefit nicely. However, appliance makers held their own during the recent runoff in mortgage rates. That's because payrolls are down 11% since 1984 and inventory-to-sales ratios are low.

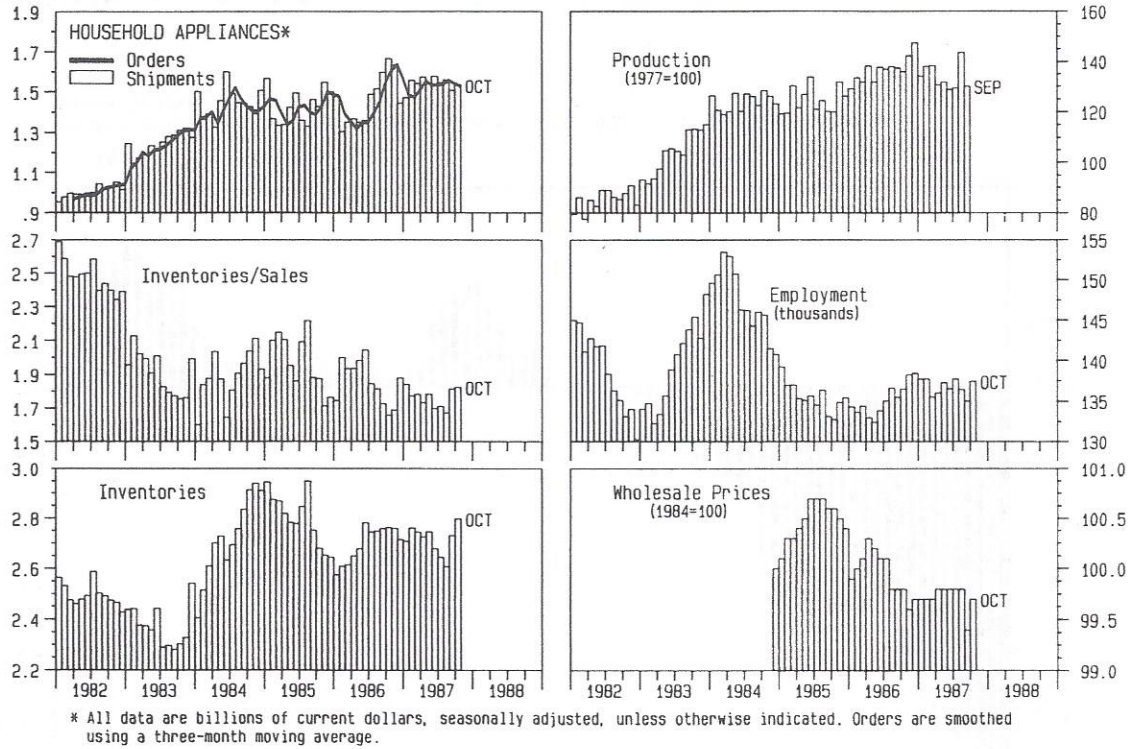
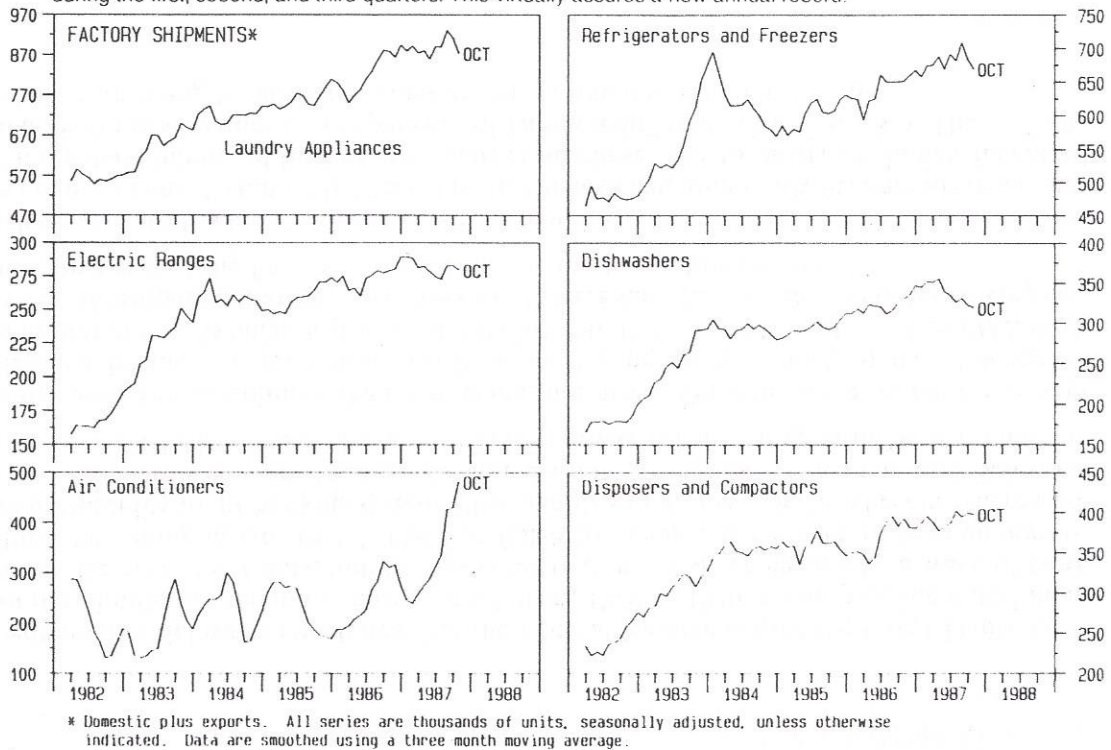
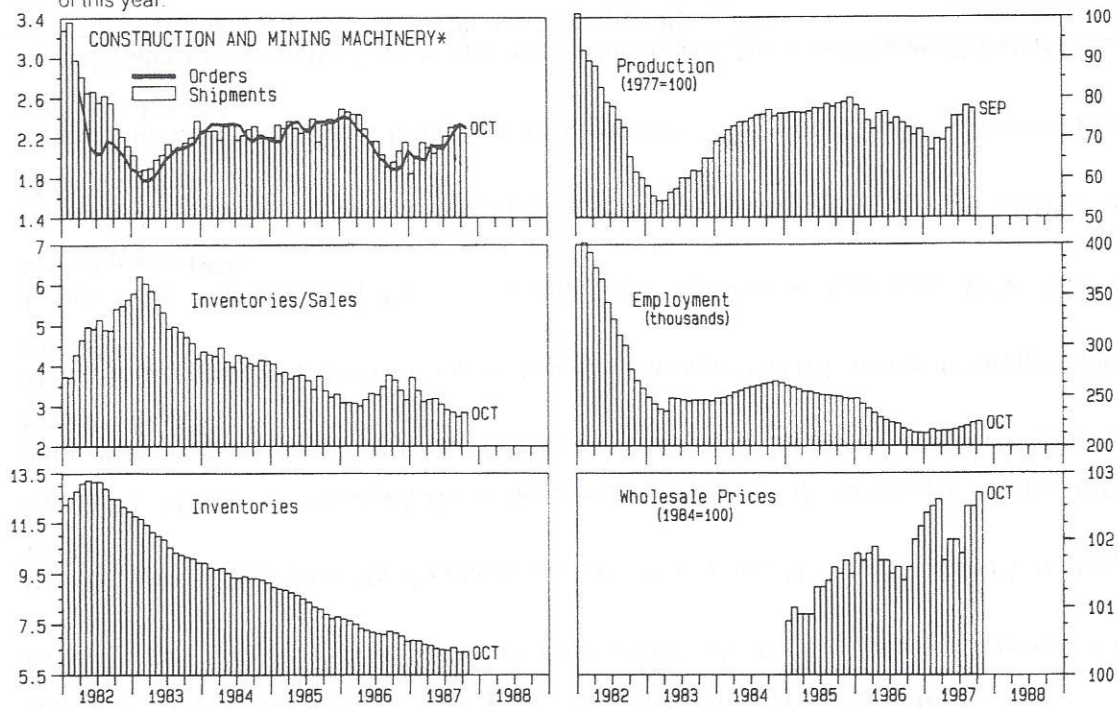


Exhibit 6: Record Appliance Sales. Shipments of major home appliances set new records during the first, second, and third quarters. This virtually assures a new annual record.



DURABLES
Nonelectrical Machinery

Exhibit 7: After A Long Slump, Producers Of Construction And Mining Machinery Are Fitter. So they can better profit from the recent upturn in orders, which are 16% higher than March. Restructuring has been an important force in this industry. Since 1982, employment has been cut in half. Inventories, both in absolute terms and relative to sales, are down sharply. Output has increased at an annual rate of 28% since February, after falling steadily from mid-1985 through the winter of this year.



* All data are billions of current dollars, seasonally adjusted, unless otherwise indicated. Orders are smoothed using a three-month moving average.

Exhibit 8: Higher Oil Prices Boost Rig Count. This industry has been one of the most depressed. The rig count is highly correlated with oil prices. Oil prices plummeted from \$31 per barrel to \$15 per barrel from November 1985 through November 1986. The rig count plunged 67%. Oil prices began to recover during the fourth quarter of last year, and so did the rig count. The rig count is up 75% since mid-1986.

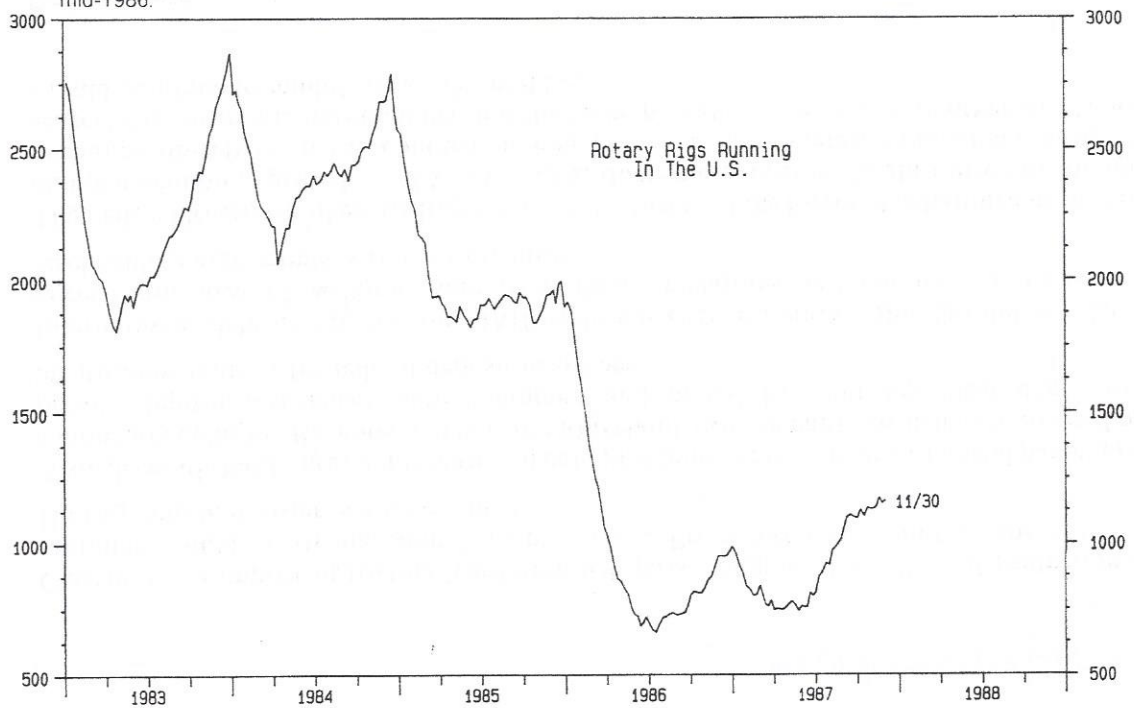
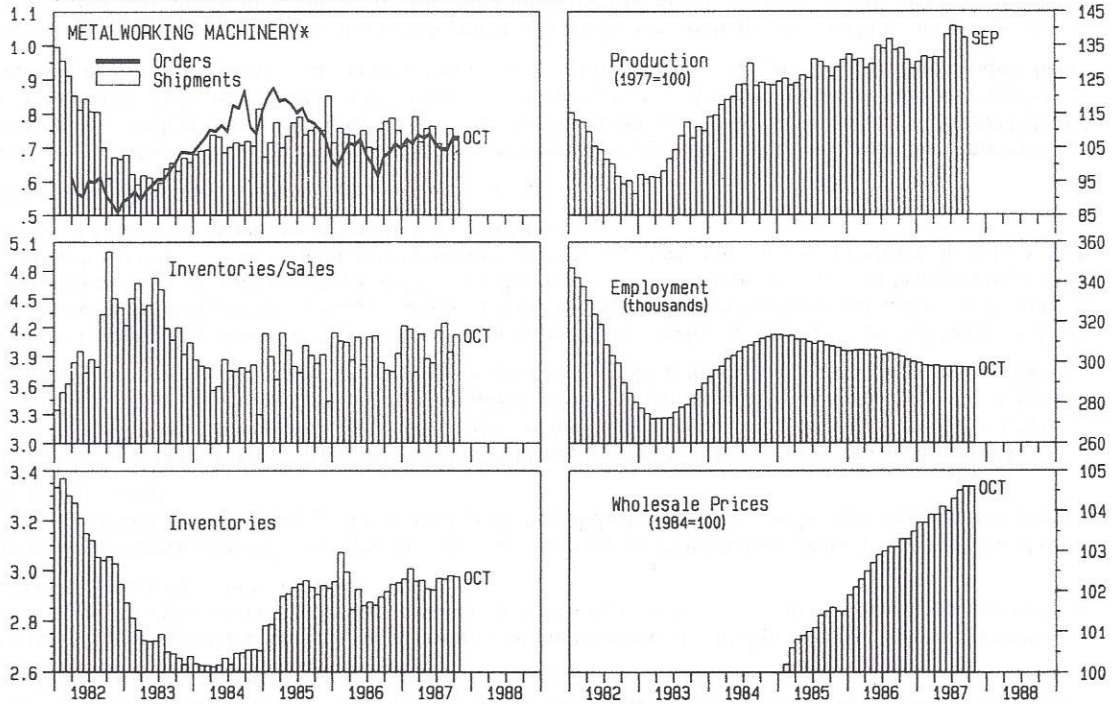


Exhibit 9: Lower Dollar Should Help Metalworking Machinery. And maybe it's beginning to take effect. October orders are 5.5% above August. Import competition over the past few years hasn't prevented producers from raising prices 3% since 1985.



* All data are billions of current dollars, seasonally adjusted, unless otherwise indicated. Orders are smoothed using a three-month moving average.

Exhibit 10: Machine Tool Makers Are Still Suffering. That's despite the 43% drop in the foreign-exchange value of the dollar since February 1985. However, recent data suggest machine tool orders may have bottomed.

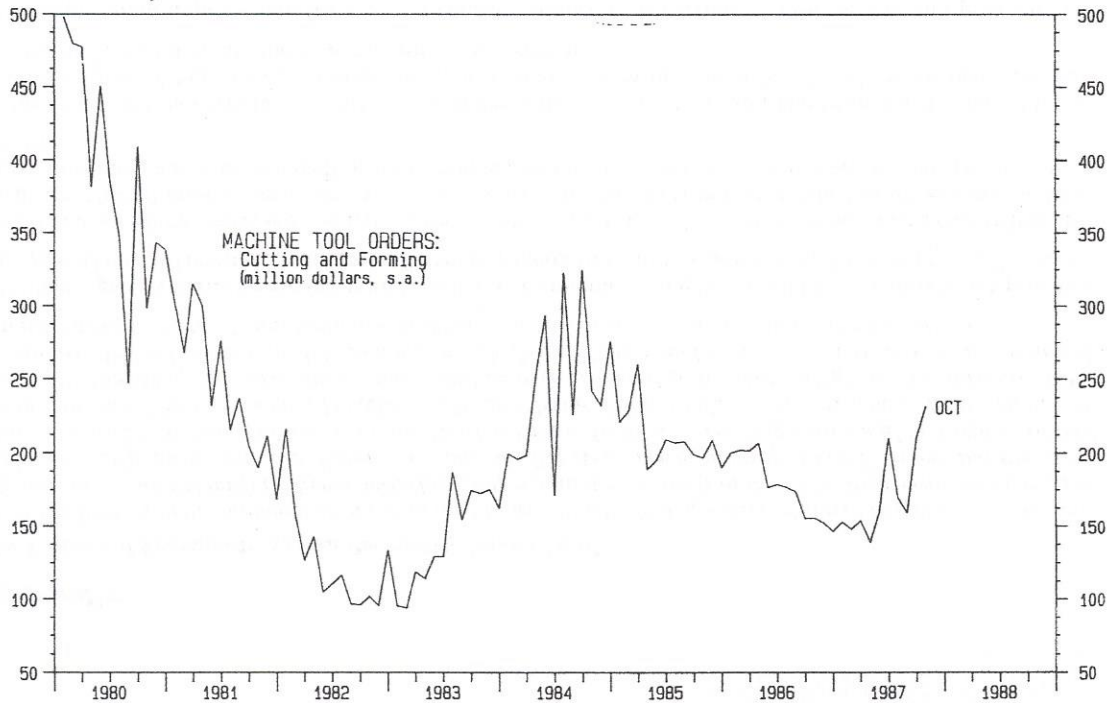
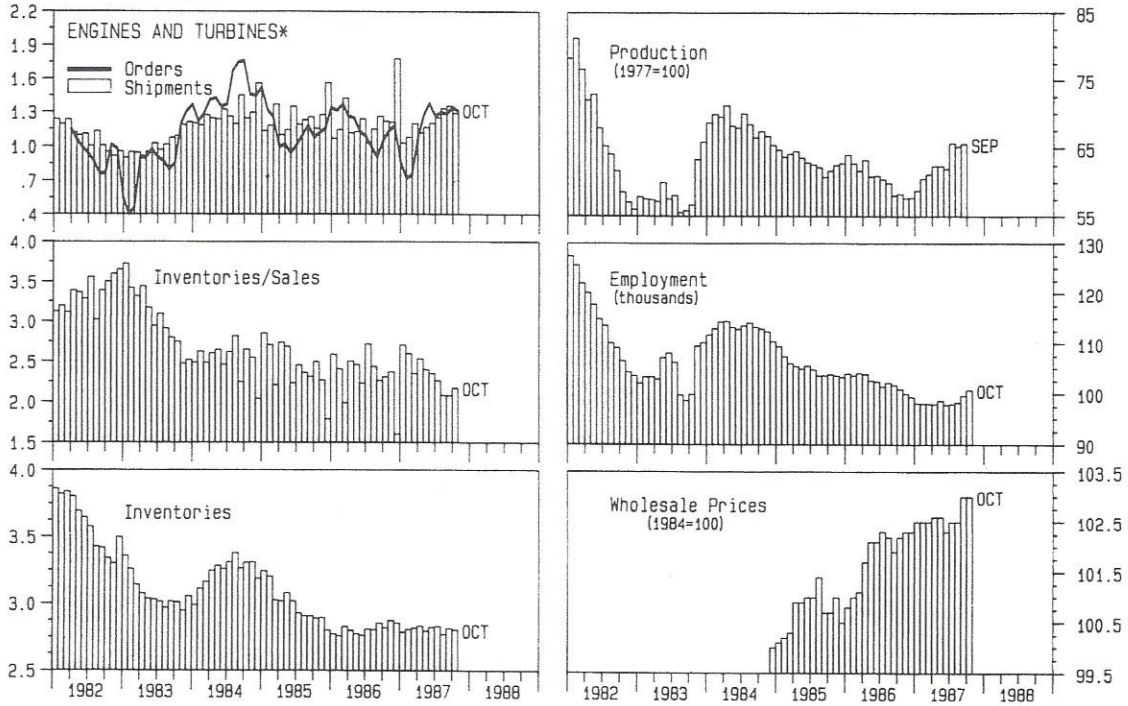


Exhibit 11: Engine Production Is Running Smoothly. Output has increased steadily this year, rising at an annual rate of 18%. Orders are up solidly. Inventories are in good shape. Output should continue to improve.

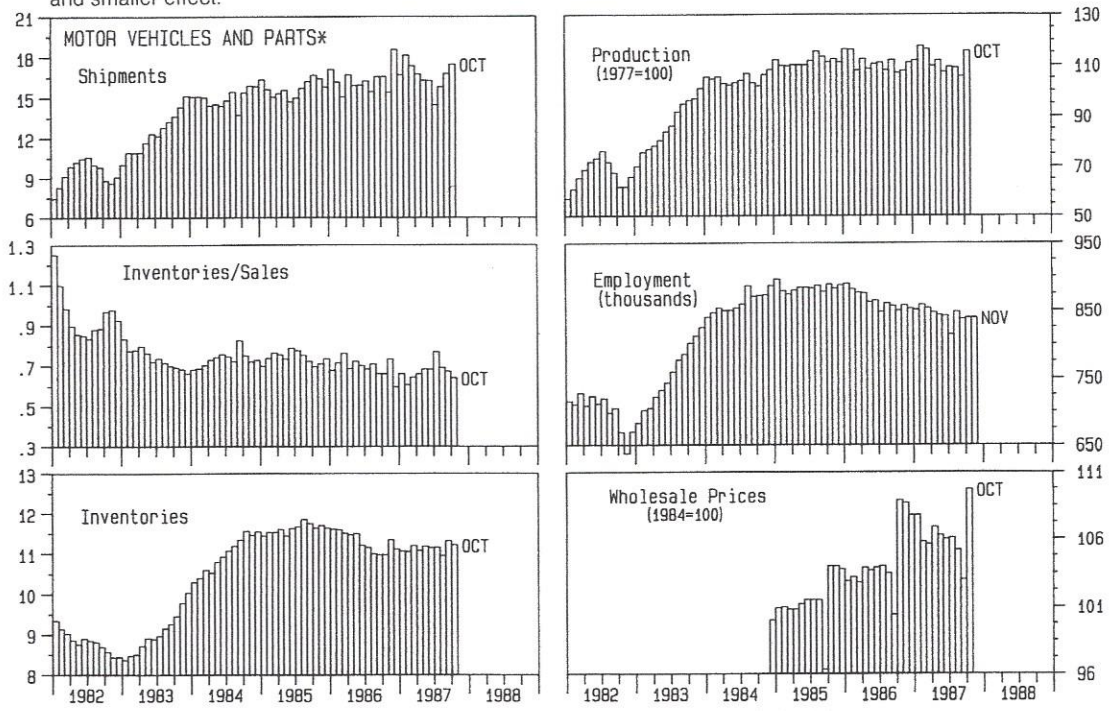


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DURABLES

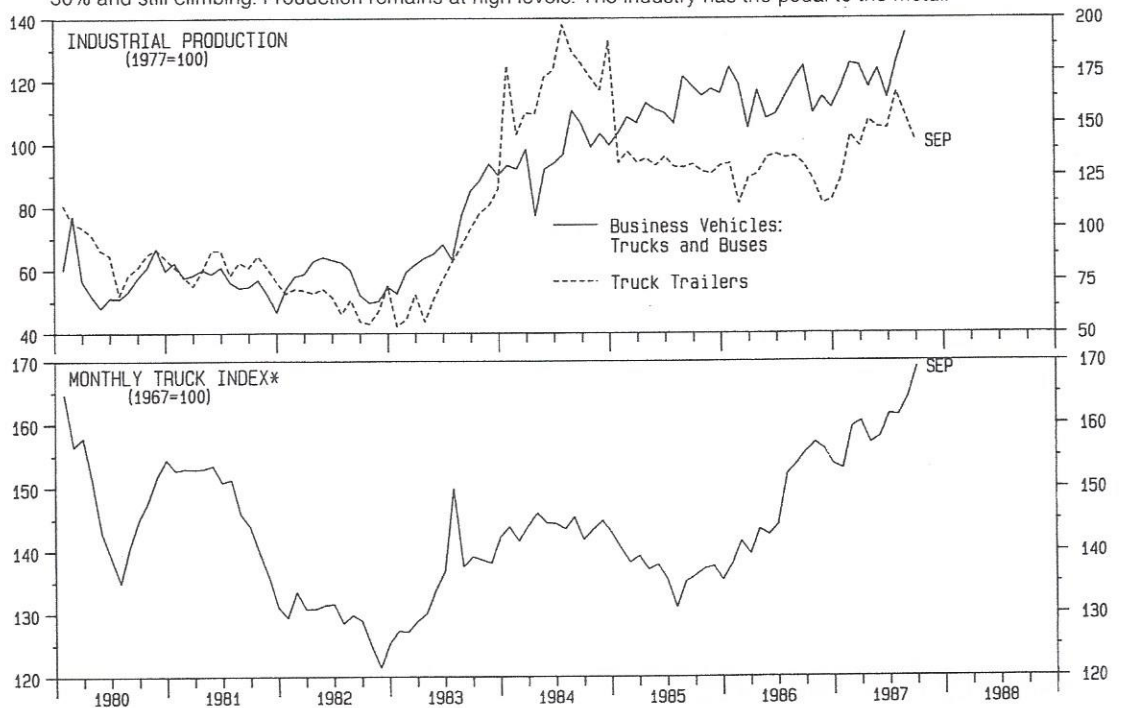
**Transportation
Equipment**

Exhibit 12: Detroit Continues To Zig And Zag. On-again, off-again incentive programs have been the norm in recent years, as car manufacturers were forced to lower prices to reduce bloated inventories. Now most auto makers are announcing price increases. Many options are becoming standard equipment. The sticker price will be 6% to 8% above last year's. And in some instances as high as 14%. The hefty base prices have already slowed car sales enough for manufacturers to reinstate incentive programs. However, consumers have come to expect incentives, so big campaigns are having a smaller and smaller effect.



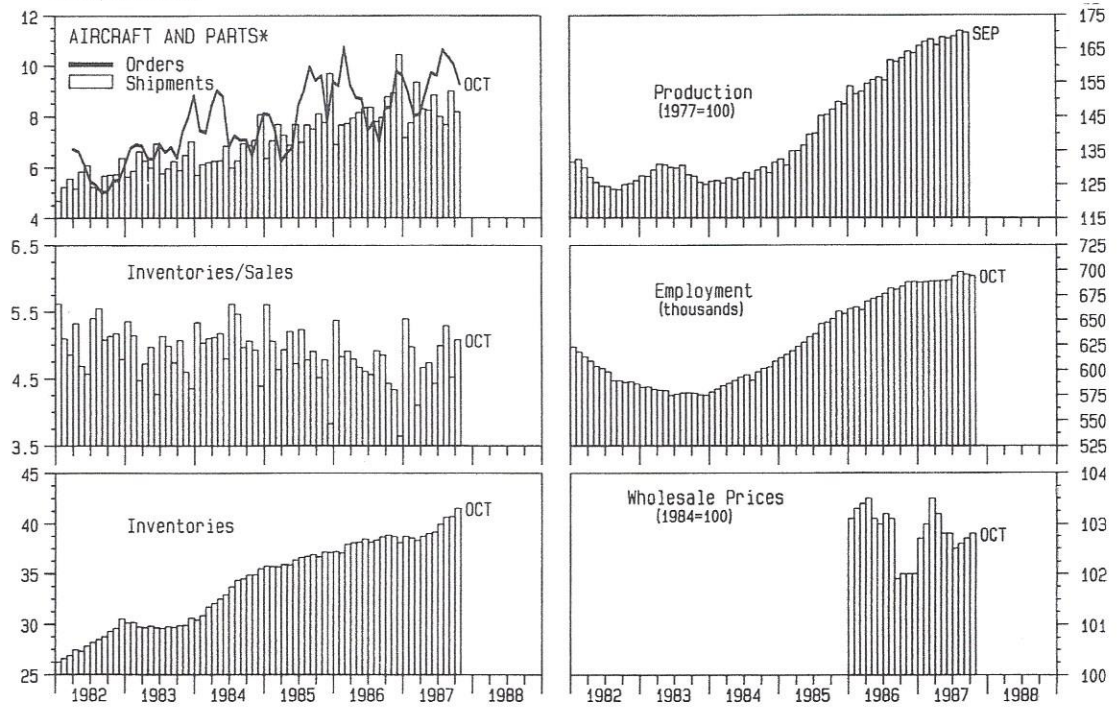
* All data are billions of current dollars, seasonally adjusted, unless otherwise indicated.

Exhibit 13: Highway Boom. The monthly truck index turned the corner in mid-1985. It's up almost 30% and still climbing. Production remains at high levels. The industry has the pedal to the metal.



* Volume index of freight carried by common carriers of general freight.

Exhibit 14: Still Flying High. The aircraft industry is one of the few durable goods industries where employment increased throughout the "age of restructuring". In fact, this is one of the only durable goods industries that boomed while other producers experienced recession-like conditions during 1984, 1985, and 1986.



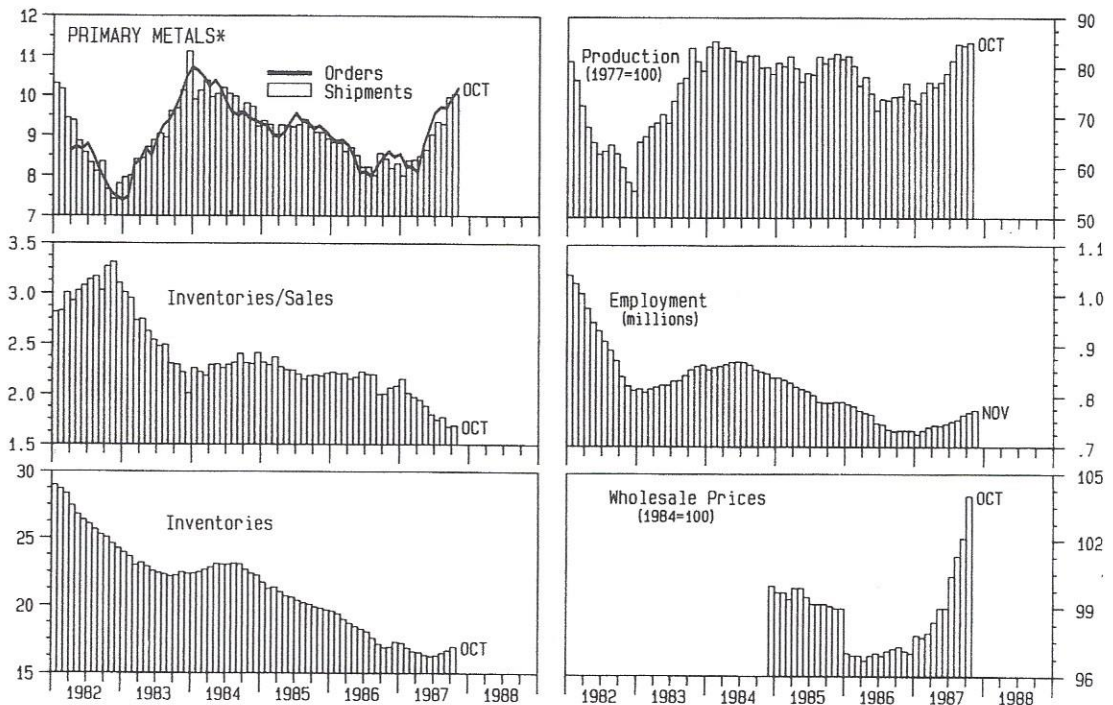
* All data are billions of current dollars, seasonally adjusted, unless otherwise indicated. Orders are smoothed using a three-month moving average.

DURABLES

Metals

Exhibit 15: Primary Metals Producers Should Get A Gold Medal For Restructuring.

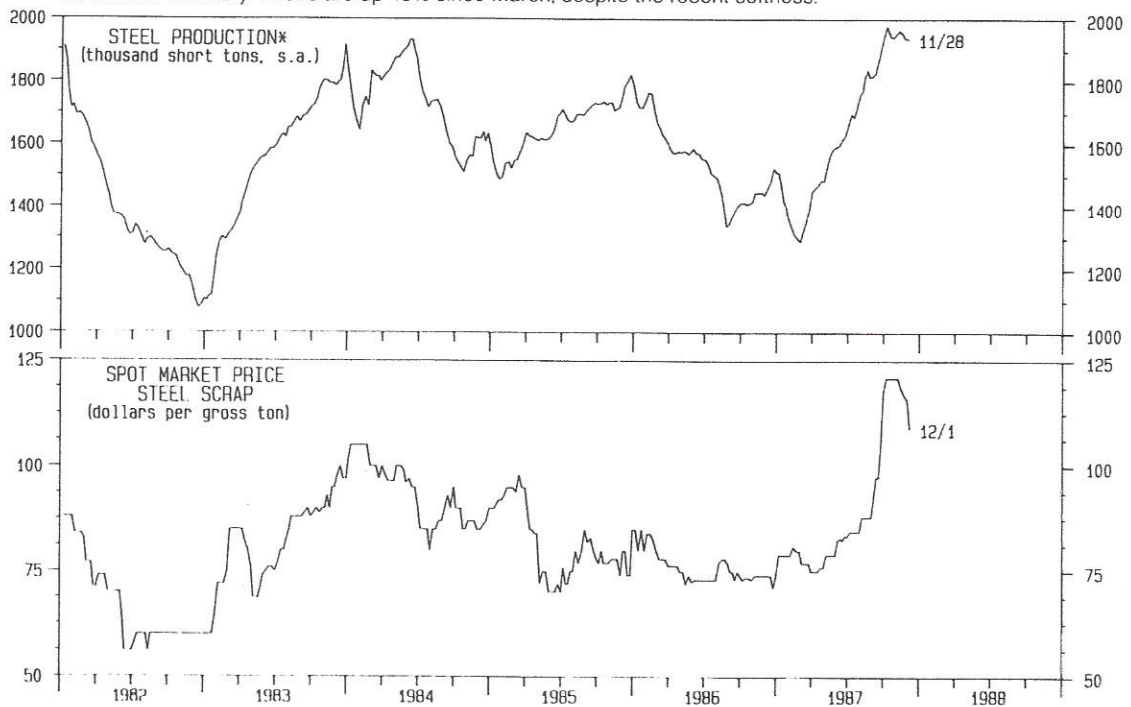
This industry is in fabulous shape. It has clearly benefited from restructuring. Payrolls are 266,000 lower than they were in 1982. Inventories are lean. Orders are on a strong uptrend. Prices are accelerating, rising at an annual rate of almost 9% since December.



* All data are billions of current dollars, seasonally adjusted, unless otherwise indicated. Orders are smoothed using a three-month moving average.

Exhibit 16: Steel Is Back From The Dead.

Since 1982, U.S. producers cut raw steelmaking capacity by almost 30%, and slashed payrolls almost 50%. It's paid off. Steel production is up a whopping 52% since February. Prices are up 45% since March, despite the recent softness.



* Four week moving average.

Exhibit 17: Fabricated Metals Manufacturers Restructured Less Than Primary Producers.

Restructuring in the fabricated metals industry was modest, especially when compared to primary metals. However, the industry looks good. Production is up. Inventories are lean. Prices are increasing, although not as fast as other metals industries.

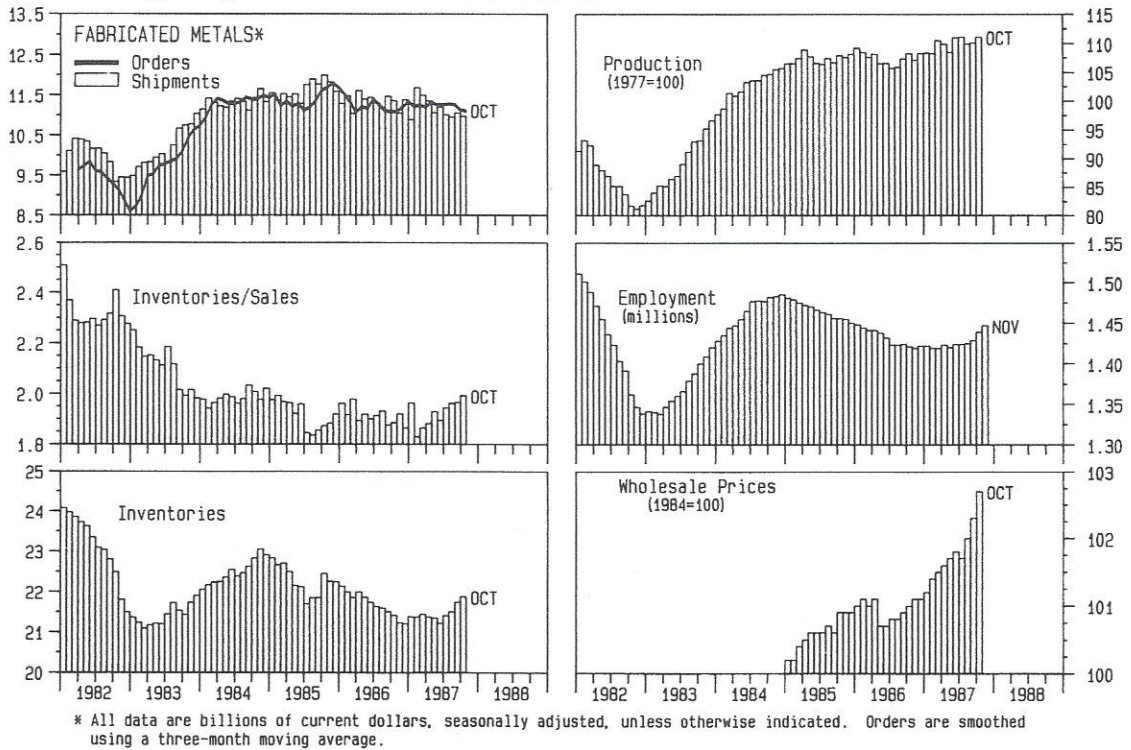
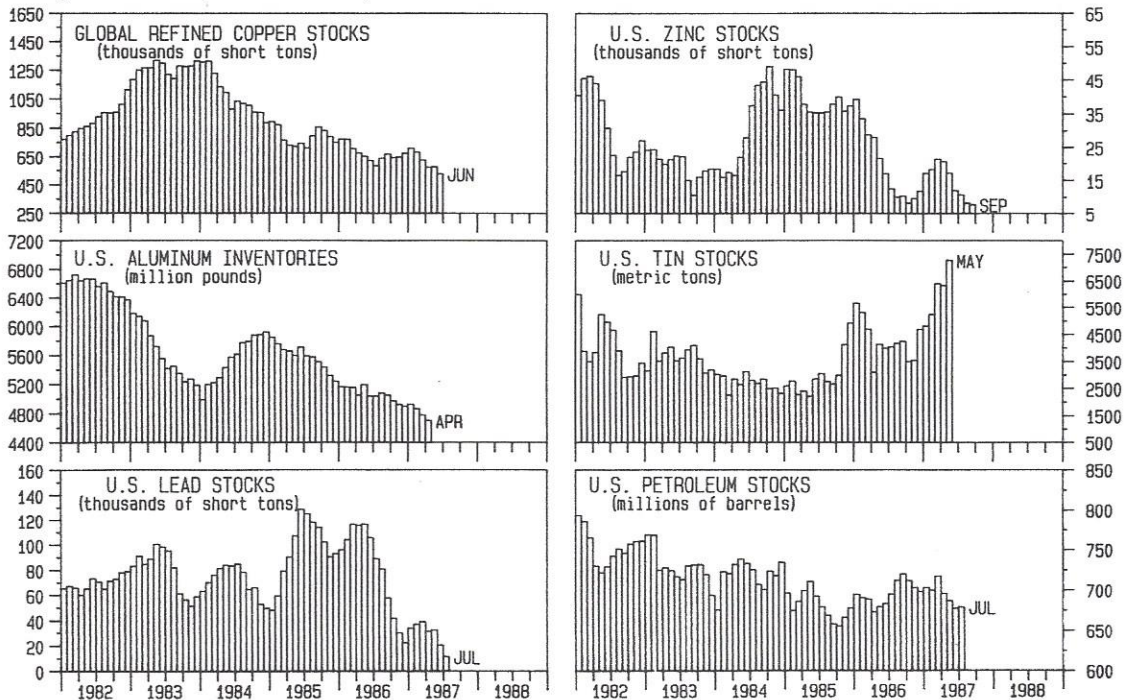


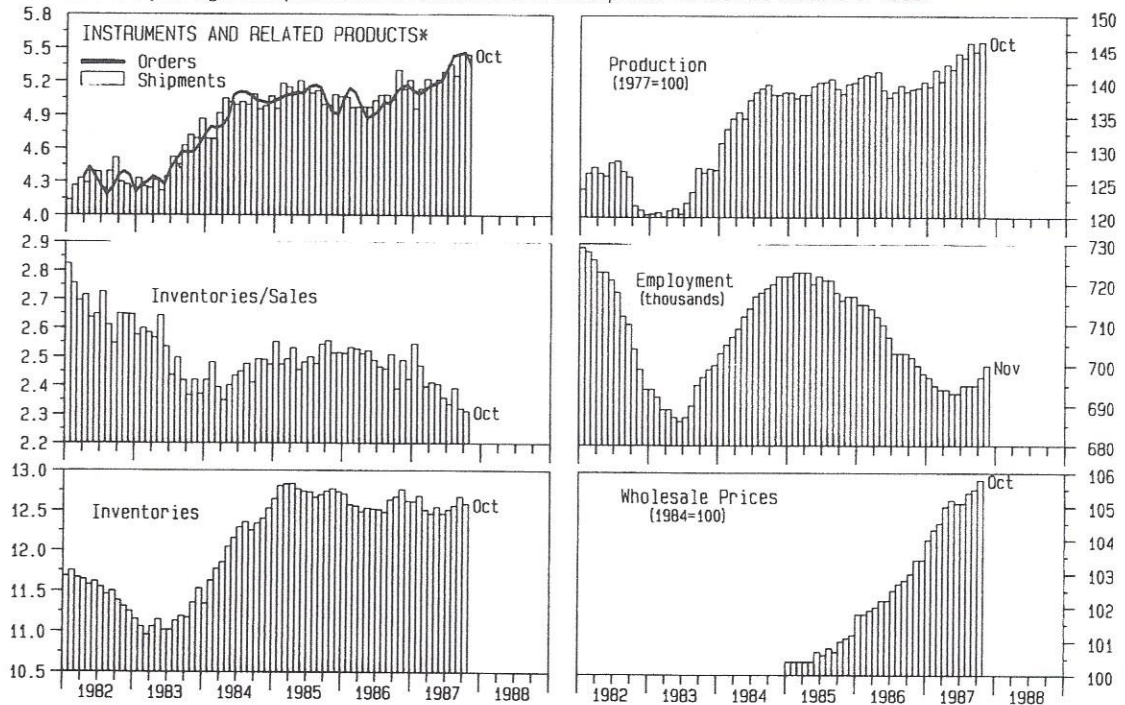
Exhibit 18: Commodity Inventories Were Lean Earlier This Year. And an upturn in global industrial demand caused prices to soar.



DURABLES

**Instruments &
Related Products**

Exhibit 19: Instrument Producers Are Profitable Again. Growth in the photographic equipment and science and engineering instruments industries was at a standstill from 1984 through 1986. Producers responded by cutting payrolls 30,000 over that time span. Recent data show restructuring has paid off. Orders have increased at a 5% annual rate through the third quarter of this year. Production is 5% above a year ago. And producers have been able to raise prices 4.5% since the end of 1985.

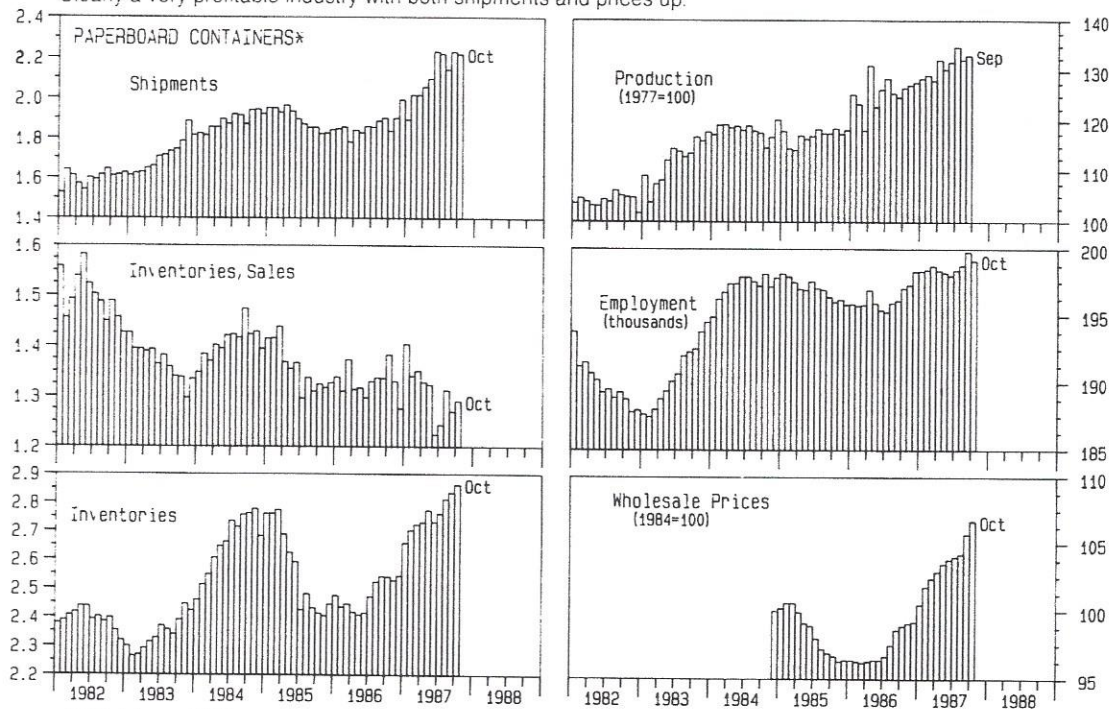


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NON-DURABLES

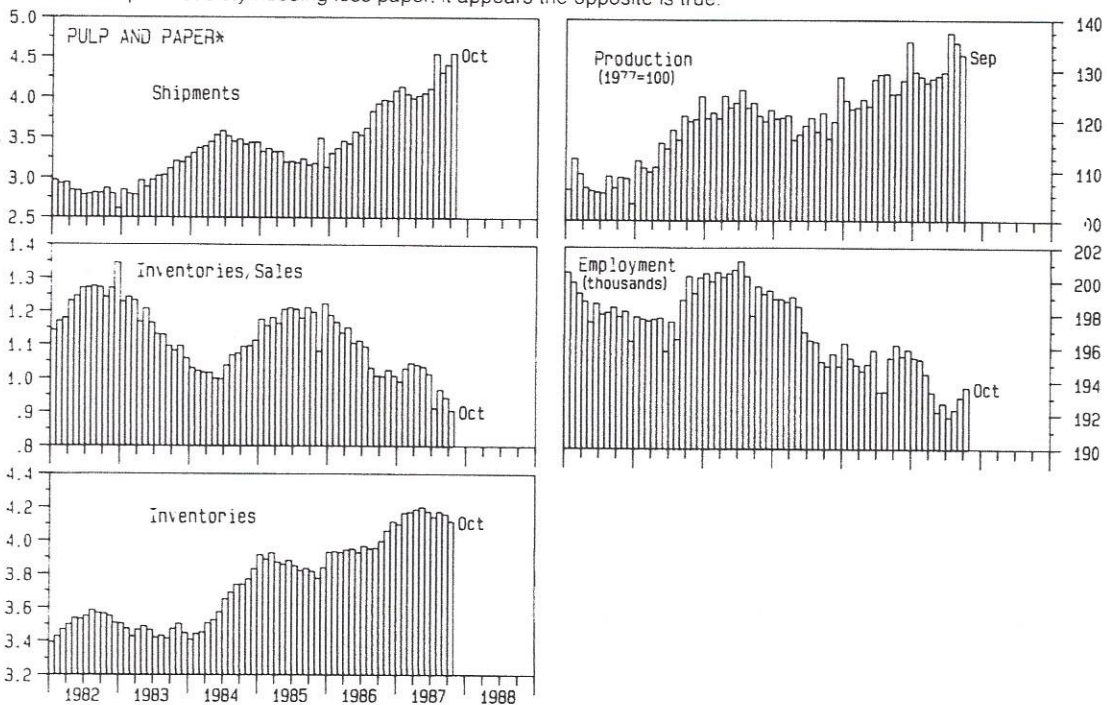
Paper

Exhibit 20: A Great Business In Cardboard Boxes. Shipments are soaring, rising 21% since last year. Inventory levels are extremely high, but the acceleration in shipments is keeping inventory-to-sales ratios extremely low. Production has been rising all along. Prices are almost 8% above last year. Clearly a very profitable industry with both shipments and prices up.



* All data are billions of current dollars, seasonally adjusted, unless otherwise indicated.

Exhibit 21: The Paper Society. Paper production is increasing. Shipments are strong. Inventory levels are rising steadily, but the inventories-to-sales ratio is at an all-time low. Despite all the talk about the computer society needing less paper, it appears the opposite is true.

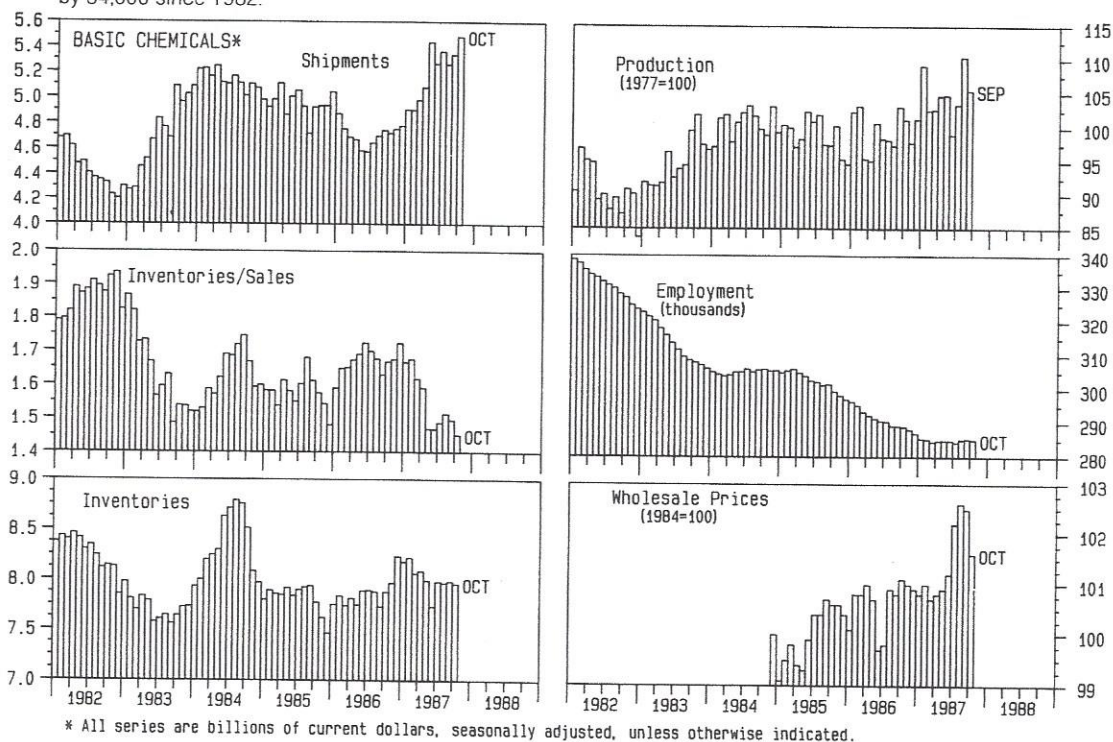


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NON-DURABLES

Chemicals

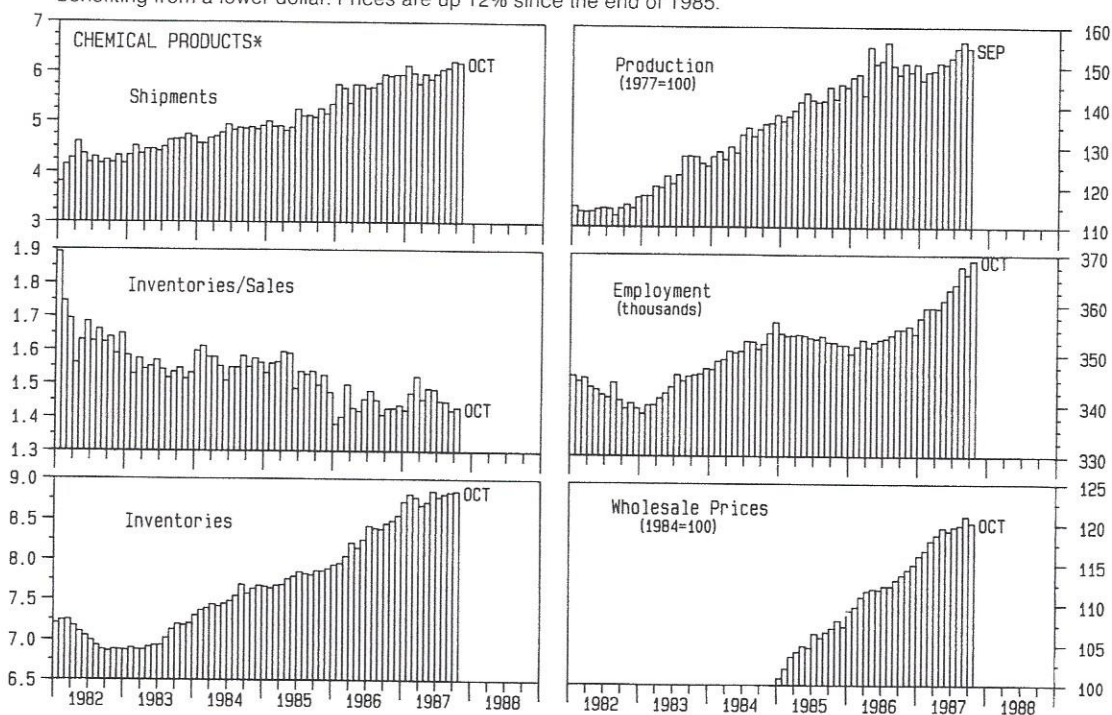
Exhibit 22: Basic Chemical Producers Underwent Major Restructuring. The basic chemical business has been quite strong. Shipments are up 20% since June 1986. Yet the industry has continued to cut costs by reducing payrolls and better managing inventories. Payrolls have been slashed by 54,000 since 1982.



* All series are billions of current dollars, seasonally adjusted, unless otherwise indicated.

Exhibit 23: Some Chemical Products Are Not Economically Sensitive. Drug companies are the predominant industry in this group. This industry has been growing all along.

Shipments, production, employment, and inventories are all above their 1982 levels. The industry is benefiting from a lower dollar. Prices are up 12% since the end of 1985.

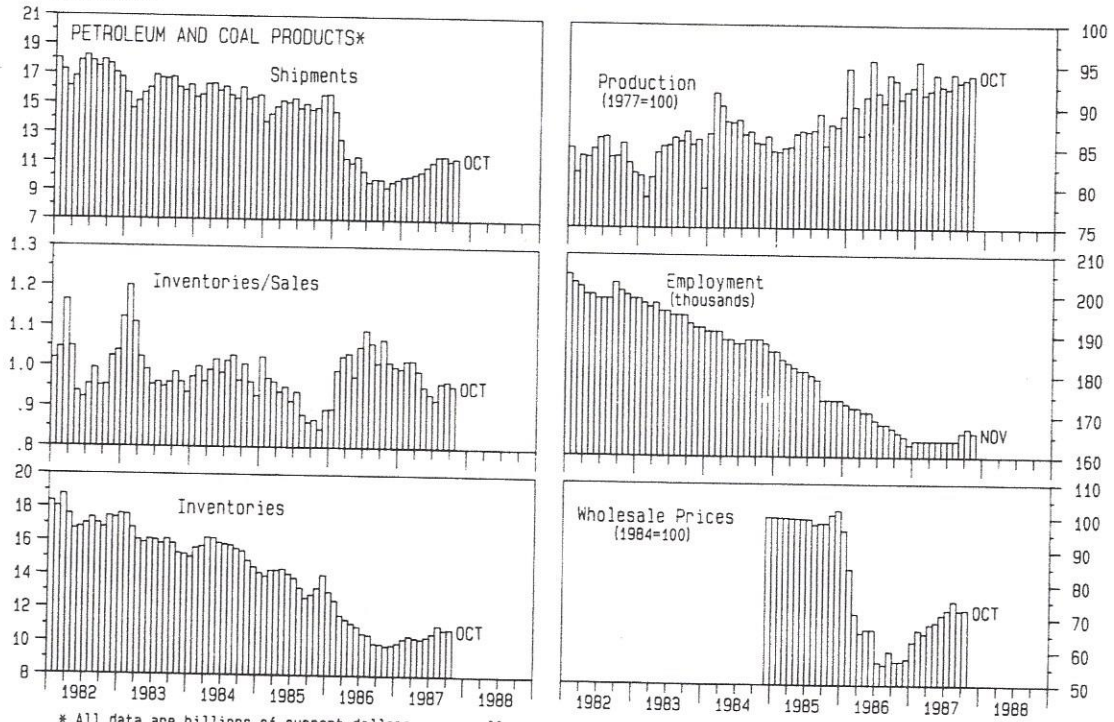


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NON-DURABLES

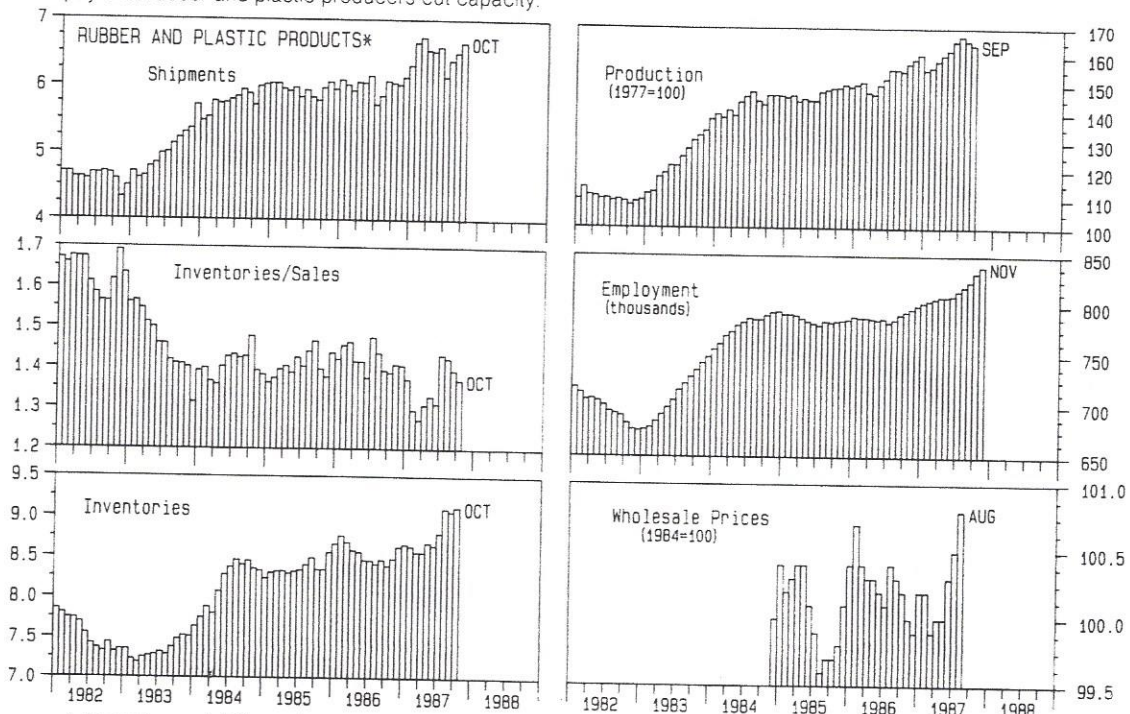
**Petroleum,
Rubber
& Plastics**

Exhibit 24: After Massive Cost Cutting, Petroleum And Coal Industries Are Turning The Corner. Petroleum and coal companies underwent major restructuring. Payrolls are 20% lower than in 1982. Inventories are lean in absolute terms and relative to sales. Shipments are up 22% since last October. Producers have been able to raise prices 25% since the end of last year, not annualized.



* All data are billions of current dollars, seasonally adjusted, unless otherwise indicated.

Exhibit 25: Rubber And Plastic Producers Cut Capacity Rather Than Employment. From mid-1984 through mid-1986 these industries were dead in the water. Shipments, production, employment, and inventories were all flat. While some industries restructured through cutting payrolls, rubber and plastic producers cut capacity.

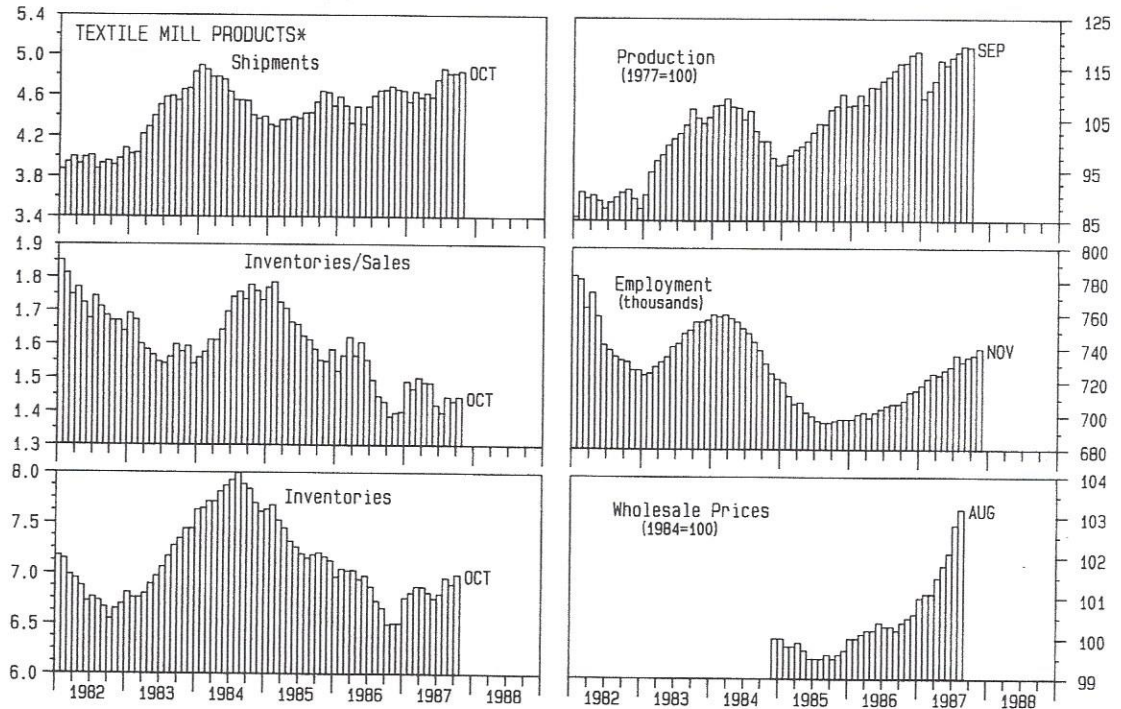


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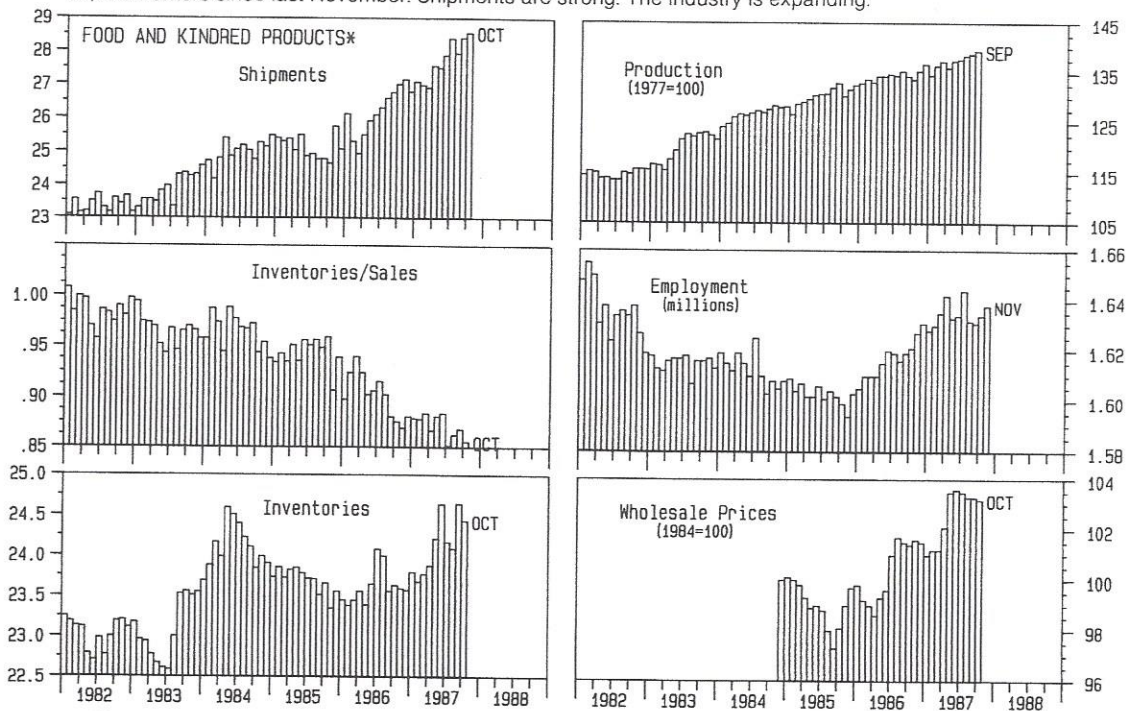
Textiles & Food

Exhibit 26: Restructuring And Lower Dollar Help Textile Industry. Textile producers restructured by cutting payrolls 87,000 from 1982 through mid-1985, and drawing down inventories. They got an additional boost from a falling dollar. Both output and employment began to improve by late 1985. Prices also began to increase, but have really started to accelerate in recent months. Prices are up at an annual rate of 5% since March.



* All data are billions of current dollars, seasonally adjusted, unless otherwise indicated.

Exhibit 27: The Food Industry Is Growing. Production has been expanding at a modest pace since 1982. After cutting payrolls 61,000 from 1982 through the end of 1985, food producers have hired 39,000 workers since last November. Shipments are strong. The industry is expanding.

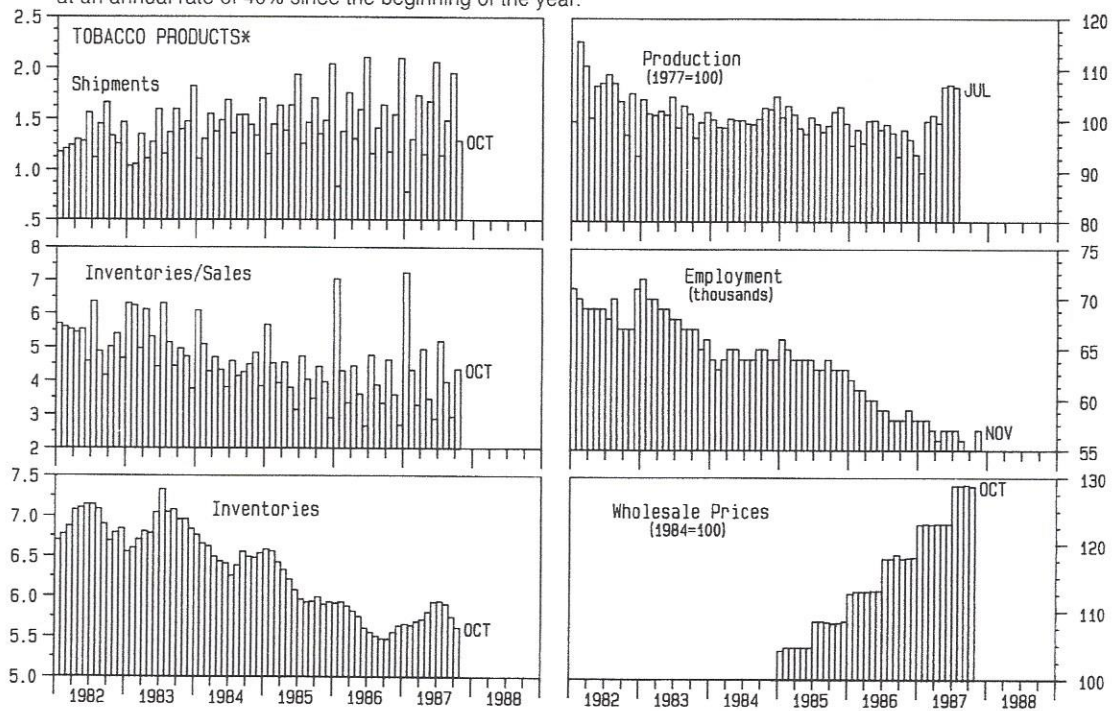


* All series are billions of current dollars, seasonally adjusted, unless otherwise indicated.

NON-DURABLES

Tobacco Products

Exhibit 28: An Expensive Habit. Tobacco producers are profitable. Since the end of 1984, they've been able to raise prices almost 30%. The industry appears to be booming. Output has increased at an annual rate of 40% since the beginning of the year.



* All series are billions of current dollars, seasonally adjusted, unless otherwise indicated.

Topical Studies

- #1 Dr. Edward Yardeni, "*Exports Should Weaken U.S. Recovery,*"
March 22, 1983
- #2 Dr. Edward Yardeni, "*The Ten Pillars of Faith,*" April 6, 1984
- #3 Deborah Johnson, "*Behind the Corporate Borrowing Binge,*"
June 13, 1984
- #4 Dr. Edward Yardeni, "*Why Has the Leading Index of Inflation Failed
So Badly?,*" October 24, 1984
- #5 Dr. Edward Yardeni, "*The Case For Lower Oil Prices,*"
December 12, 1984
- #6 Dr. Edward Yardeni, "*The True Story Behind The Mighty Dollar,*"
January 9, 1985
- #7 Dr. Edward Yardeni, "*Plenty Of Cash Around To Fuel Additional
Stock And Bond Gains,*" January 30, 1985
- #8 Dr. Edward Yardeni, "*No Shortage Of Gluts,*" July 10, 1985
- #9 Dr. Edward Yardeni, "*The Protectionist Road To Depression,*"
September 9, 1985
- #10 Dr. Edward Yardeni, "*The U.S. Becomes The World's Largest
Debtor: So What?,*" July 14, 1987

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