Company A

October 2018

Economic Report

ITR ECONOMICS

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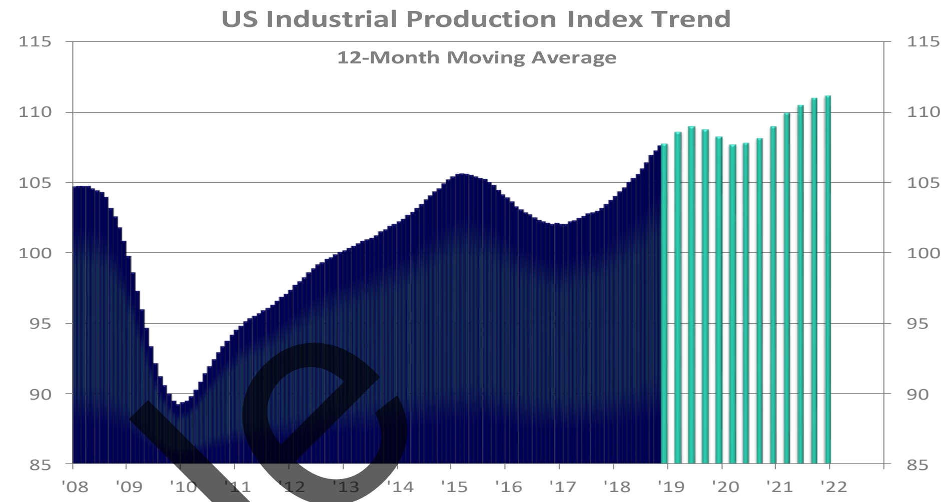
overview

US Industrial Production is cruising, with the last 12 month through August reaching the highest level on record. Production is growing at an accelerating pace, up 3.4% compared to the previous year. The three main components are rising, with mining (up 11.0% year over year, the fastest pace on record), electric and gas utilities (up 3.8%), and manufacturing (up 2.3%) all accelerating in their rates of growth.

We have reevaluated our long-term outlook for Industrial Production, due to recent robust growth and select leading indicators that point to a later business cycle peak. We now expect Phase B to last into early 2019, meaning companies have an extra one to two quarters to prepare for the upcoming declining trend. Leading indicators such as the ITR Leading Indicator™ and US Purchasing Managers Index pose a risk to our updated outlook. They suggest our prior forecast for a late 2018 peak is more likely. However, ITR Checking Points™ indicate such a near-term peak is unlikely.

A later business cycle peak in Industrial Production means the subsequent low will also be pushed out about two quarters. The depth of the business cycle trough is the same as in our previous forecast. Plan for annual average Production to rise into mid-2019 before declining into early 2020. Rise will resume for the remainder of 2020.

We have also updated our outlook for business-to-business activity as measured by US Nondefense Capital Goods New Orders (excluding aircraft). Prolonged Phase B in New Orders is likely due to a temporary boost from tax law changes. The cyclical peak is pushed slightly out, but a cyclical downturn is still expected during 2019.



US Exports are rising at an accelerating pace (up 8.6% from the year-ago level). This is partially due to the previous weakening trend in the US dollar. However, the weak-dollar benefit to exports is fading as the dollar strengthens. This points to the US economy growing at a slowing rate in the near term.

The Bureau of Economic Analysis revised US Personal Savings Rate data to show milder contraction than previously reported. This tempers our fear of a deeper-than-expected upcoming business cycle decline in Retail Sales, as the pre-revision Savings Rate data had suggested the consumer sector could fare worse than projected. The revision is positive news for companies tied to the consumer sector.

Trade tensions present a risk to our macroeconomic outlook. Escalating tensions could limit demand for US goods in foreign markets and breed inflation. The Section 301 tariffs, especially if they escalate to the 25% tariffs slated for year-end, pose a downside risk to our outlook. Trade war or not, it is important to avoid linear budgeting in 2019 as US Industrial Production heads toward and endures the back side of the business cycle (Phase C or D).

Terminology & Methodology

Data Trends:

Monthly Moving Total (MMT) vs Monthly Moving Average (MMA):

Totals are used when it makes sense to add the data together, as with units sold or total dollars spent. Averages are used when the data cannot be compounded, such as with an index, percent, price level, or interest rates.

3MMT/A and 12MMT/A:

A 3-month or 12-month moving total/average is the total/average of the monthly data for the most recent 3 and 12 months, respectively. The 3MMT/A illustrates the seasonal changes inherent to the data series. The 12MMT/A removes seasonal variation in order to derive the underlying cyclical trend. It is also referred to as the annual total or annual average.

Rates-of-Change:

A rate-of-change figure is the ratio comparing a data series during a specified time period to the same period one year ago. **Rates-of-change** are expressed in terms of the **annual percent change in an MMT or MMA, 3MMT/A, and actual monthly data.**

Rates-of-change reveal whether activity levels are rising or falling compared to last year. A rate-of-change trend illustrates and measures cyclical change and trends in the data.

ITR Economics' three commonly used rates-of-change are the **1/12**, **3/12**, and **12/12**, which represent the year-over-year percent change of a single month, 3MMT/A, and 12MMT/A (respectively).

A rate-of-change above 0 indicates the data is higher than one year prior, while a rate-of-change below 0 indicates the data is below one year earlier.

Business Cycle:

The data trends and rates-of-change identify positions in the business cycle. Those positions are:

Accelerating Growth (B): 12/12 is rising and is above zero; the data trend is accelerating in its ascent and is above the year-ago level. This is the second positive phase of the business cycle.

Slowing Growth (C): 12/12 is declining but remains above zero; the data trend ascent is slowing or has stopped its rise, but it is still above the year-ago level. This is the first negative phase of the business cycle.

Recovery (A): 12/12 is rising but is below zero; the data trend is below the year-ago level and is either heading toward a low or is in the early stages of rise. This is the first positive phase of the business cycle.

Recession (D): 12/12 is declining and is below zero; the data trend is below the year-ago level and the rate of decline is increasing. This is the second and final negative phase of the business cycle.

Business Cycle

Page Number	Industry	Phase	Current	2019	2020	2021
4	US Building Materials & Supplies Stores Retail Sales	C	5.5%	3.6%	7.1%	4.5%
5	US Commercial Buildings Construction	C	3.8%	7.5%	-0.2%	6.7%
6	US Veneer, Plywood, and Engineered Wood Product Production Index	B	2.9%			

A RECOVERY

B ACCELERATING GROWTH

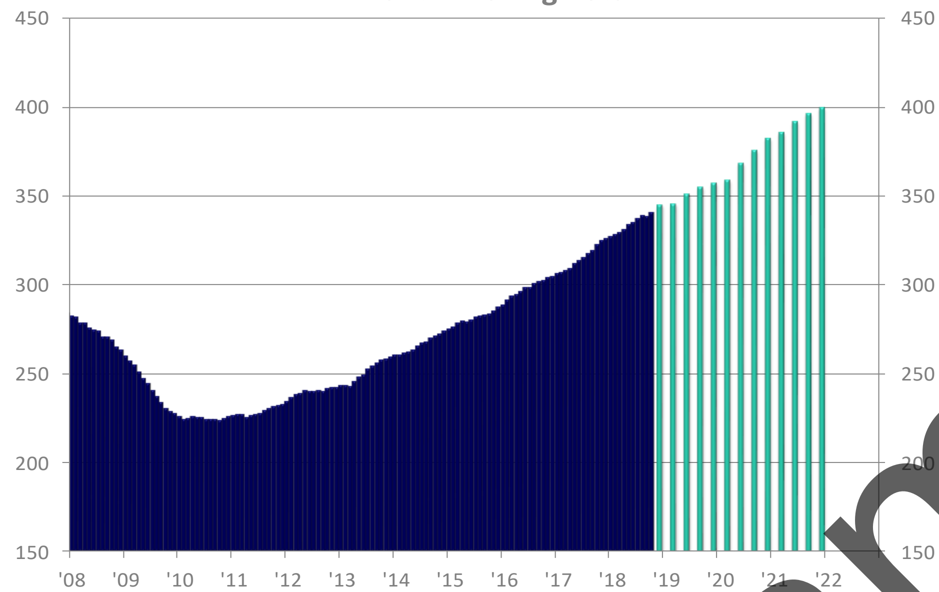
C SLOWING GROWTH

D RECESSION

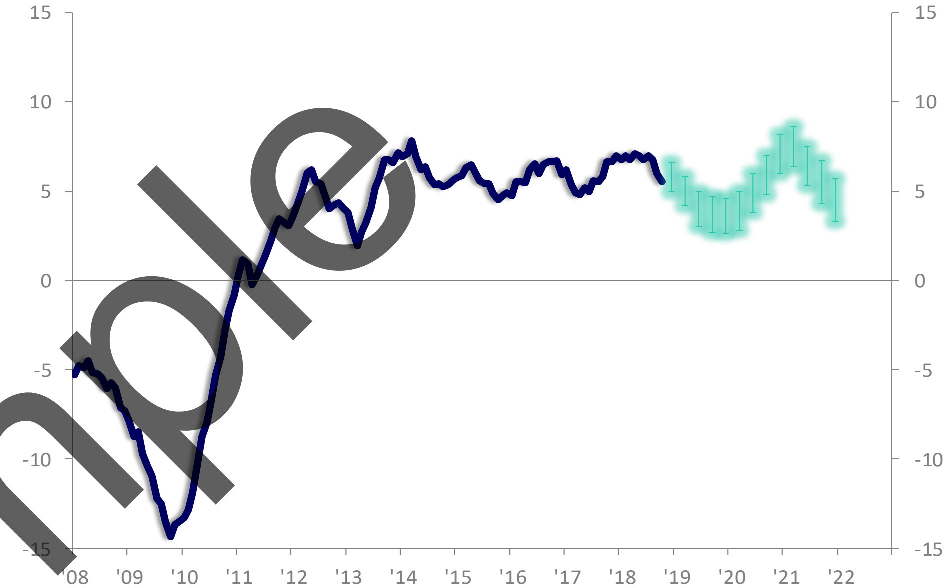
US Building Materials & Supplies Stores Retail Sales

Retail Sales Will Rise Through 2020, but at Slowing Pace in 2019 as Housing Market Cools

12-Month Moving Total



Year-over-Year Growth Rate



Industry Outlook

2019: 3.6%

2020: 7.1%

2021: 4.5%

Outlook & Supporting Evidence

- Results were 0.1% below the forecast range. Leading indicator evidence, such as trends in US Existing Home Sales and Housing Starts, supports the unchanged forecast.
- The Phase C trend in the US Architecture Billings Index supports our expectation that Retail Sales will transition to Phase C, Slowing Growth, imminently and will grow at a slowing pace into at least mid-2019.

Management Objective™

- Do market research to ensure your product offerings match consumer demand. Consumer preferences can shift during economic slowdowns.

Phase & Amplitudes

Phase C

Slowing Growth

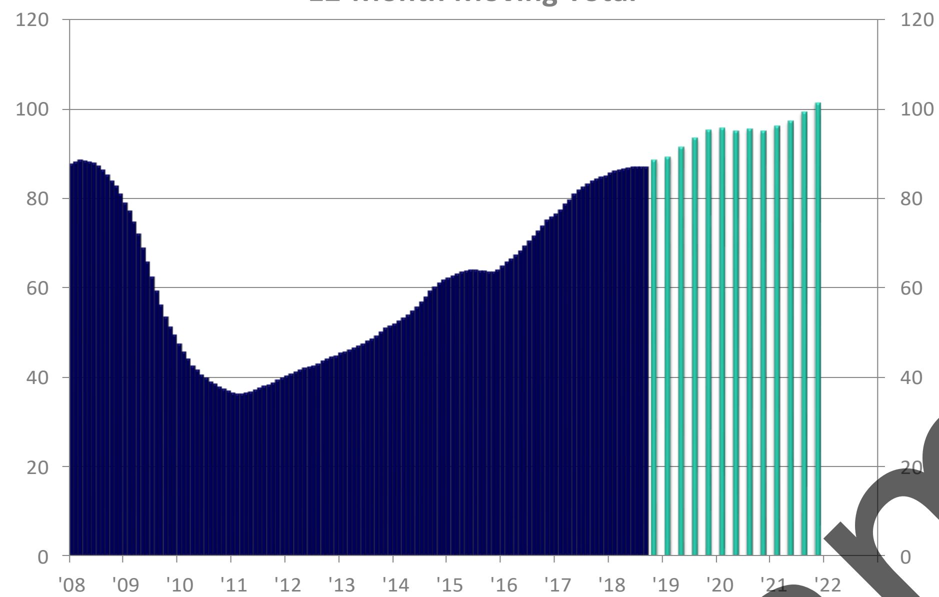
October 2018 Annual Growth Rate (12/12): 5.5%

October 2018 Annual Total (12MMT): $340.2 billion

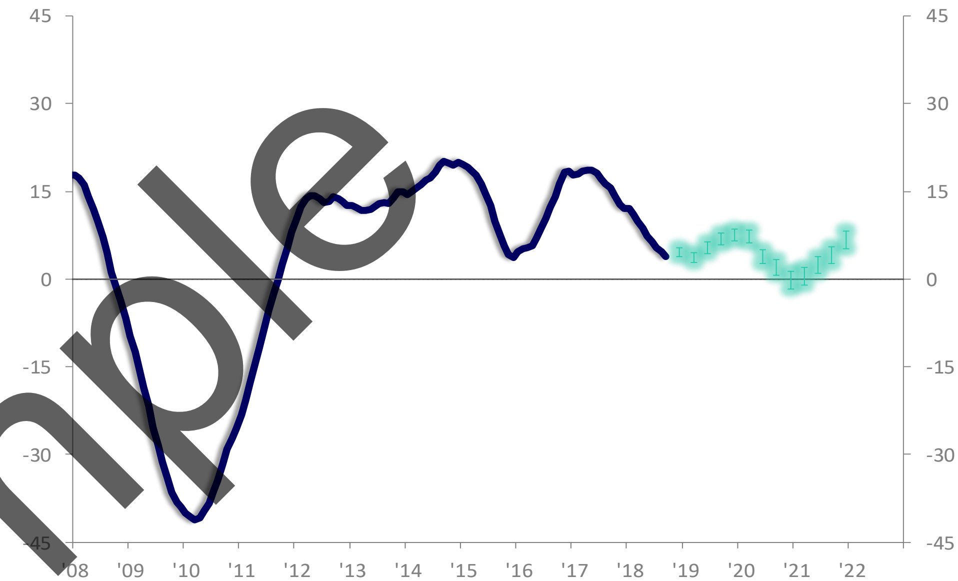
US Commercial Buildings Construction

Downgrade to Outlook Due to Weak Starts; Expect Rise Through 2019 and Plateau in 2020

12-Month Moving Total



Year-over-Year Growth Rate



Industry Outlook

2019: 7.5%

2020: -0.2%

2021: 6.7%

Outlook & Supporting Evidence

- Annual Construction through June was 0.2% below the range of our 15-month-old forecast. US Total Value of Commercial Construction Starts suggested the business cycle decline in Commercial Building Construction would last longer than previously expected.
- We reduced our dollar-value expectations for annual Construction by 6.1%, 2.6%, and 2.8% for year-end 2018, 2019, and 2020, respectively.
- Annual Construction is expected to rise through 2019 and plateau in 2020.

Management Objective™

- Opportunities in Warehouse Construction will likely outpace overall Commercial Construction; focus efforts in this market to maximize growth.

Phase & Amplitudes

Phase C

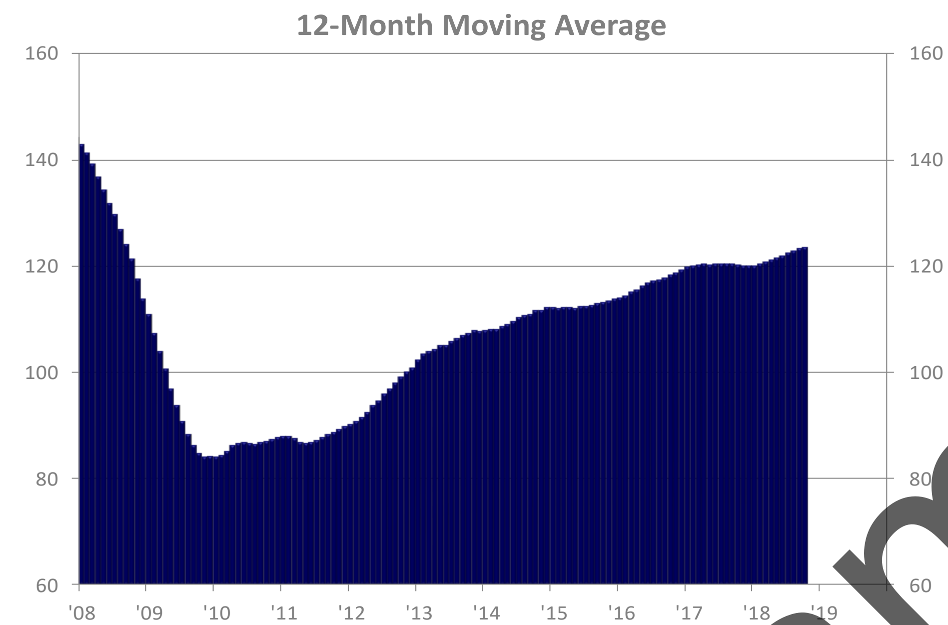
Slowing Growth

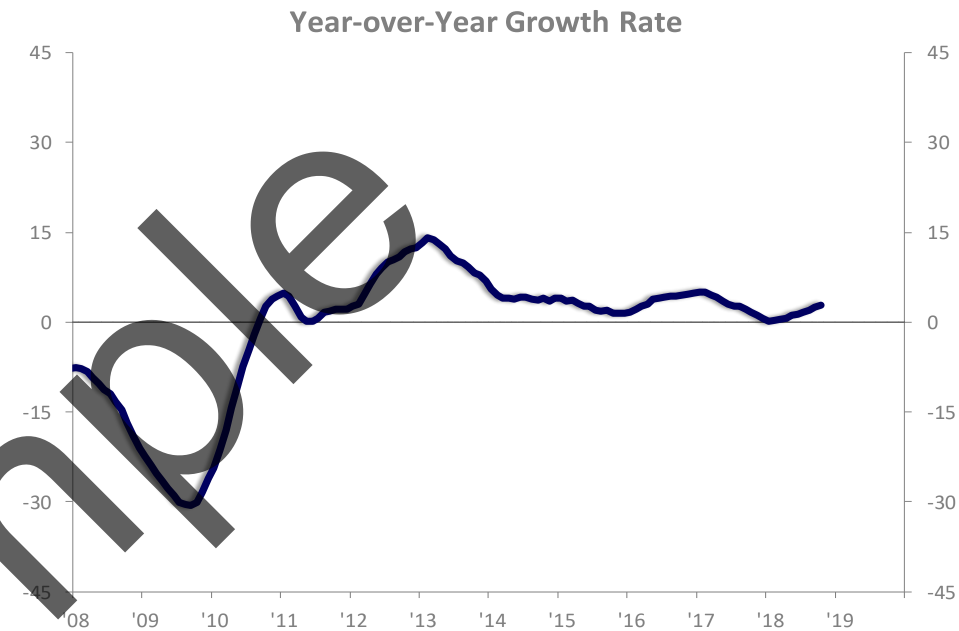
October 2018 Annual Growth Rate (12/12): 3.8%

October 2018 Annual Total (12MMT): $86.9 billion

US Veneer, Plywood, and Engineered Wood Product Production Index

Accelerating Growth Likely to Persist Though the End of the Year





Industry Overview

Outlook & Supporting Evidence

- ITR Checking Points™ point to further accelerating growth in Production through at least late 2018.
- Accelerating growth in the National Remodeling Market Index suggests opportunities tied to the remodeling market into at least early next year.
- Import trends are moving towards softwood plywood due to tariffs on Chinese hardwood plywood imports.

Management Objective™

- Diversify your supply chain across multiple countries and region, in order to mitigate supply chain risks such as imposition of new tariffs and weather.

Phase & Amplitudes

Phase B

Accelerating Growth

November 2018 Annual Growth Rate (12/12): 2.9%

November 2018 Annual Average (12MMA): 123.6

Appendix — Market Definitions

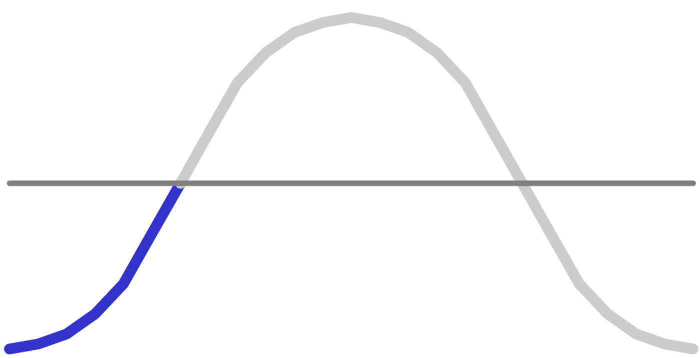
US Building Materials & Supplies Stores Retail Sales — Sales of retail suppliers of the construction trade (NAICS 4441), measured in billions of dollars, not seasonally adjusted (NSA).

US Commercial Buildings Construction — Private construction of commercial buildings, shopping centers, and warehouses, including additions to existing buildings. Measured in billions of dollars, NSA.

US Veneer, Plywood, and Engineered Wood Product Production — This industry includes manufacturing plywood from veneer made in the same establishment or from veneer made in other establishments, and manufacturing plywood faced with non-wood materials, such as plastics or metal. Index, 2012 = 100, NSA.

Management Objectives™

Phase



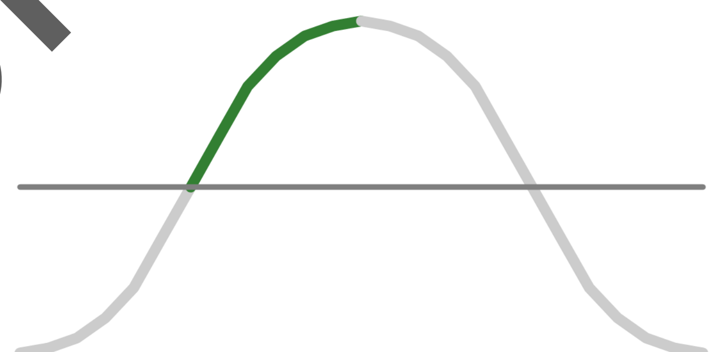
A

1 Model positive leadership (culture turns to behavior)
2 Establish tactical goals that lead to strategic achievement
3 Develop a system for measurement and accountability re: objective 2
4 Align compensation plans with objectives 2 and 3
5 Be keenly aware of the BE (Break Even) point and check it regularly
6 Judiciously expand credit
7 Check distributions systems for readiness to accommodate increased activity
8 Review and uncover competitive advantages
9 Invest in customer market research (know what they value)
10 Improve efficiencies with investment in technology and software
11 Start to phase out marginal opportunities
12 Add sales staff
13 Build inventories (consider lead time and turn rate)
14 Introduce new product lines
15 Determine capital equipment needs and place orders
16 Begin advertising and sales promotions
17 Hire "top" people
18 Implement plans for facilities expansion
19 Implement training programs

Management Objectives™

1 Accelerate training
2 Check the process flow for possible future bottlenecks
3 Continue to build inventory
4 Increase prices
5 Consider outside manufacturing sources if internal pressures are becoming tight
6 Find the answer to “What is next?”
7 Open distribution centers
8 Use improved cash flow to improve corporate governance
9 Use cash to create new competitive advantages
10 Watch your debt-to-equity ratio and ROI
11 Maintain/pursue quality; don’t let complacency set in
12 Stay in stock on A items, and be careful with C items
13 Consider selling the business in a climate of maximum “goodwill”
14 Penetrate new selected accounts
15 Develop plan for lower activity in traditional, mature markets
16 Freeze all expansion plans (unless related to “what is next”)
17 Spin off undesirable operations
18 Consider taking on subcontract work if the backside of the cycle looks recessionary
19 Stay realistic–beware of linear budgets
20 Begin missionary efforts into new markets
21 Communicate competitive advantages to maintain margins

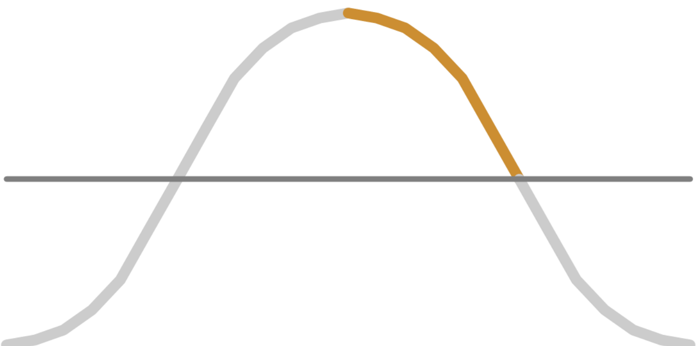
Phase



B

Management Objectives™

Phase



C

1 Begin workforce reductions

2 Set budget reduction goals by department

3 Avoid long-term purchase commitments late in the price cycle

4 Concentrate on cash and balance sheet

5 Reduce advertising and inventories

6 De-emphasize commodity/services in anticipation of diminishing margins

7 Weed out inferior products (lose the losers)

8 Encourage distributors to decrease inventory

9 Identify and overcome any competitive disadvantages

10 Make sure you and the management team are not in denial

11 Cross train key people

12 Watch Accounts Receivable aging

13 Increase the requirements for justifying capital expenditures

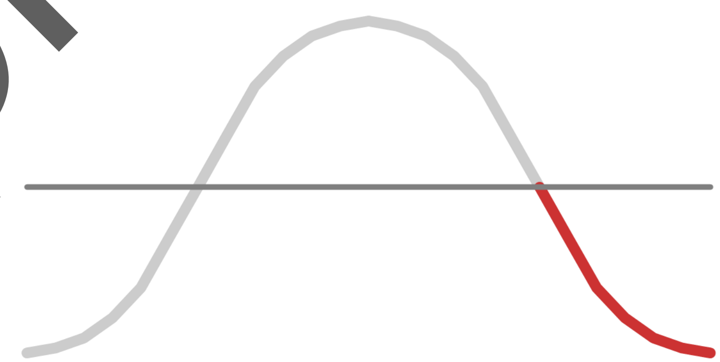
14 Evaluate vendors for strength (don't get caught honoring their warranties with no one to accept returned goods)

15 Manage the backlog through pricing and delivery; try to fill the funnel

Management Objectives™

1 Continue force reduction
2 Reduce advertising – be very selective
3 Continue to avoid long-term purchase commitments
4 Review all lease agreements
5 Increase the requirements for justifying capital equipment
6 Eliminate all overtime
7 Reduce overhead labor
8 Combine departments with like capabilities and reduce management
9 Select targets of opportunity where price will get the business
10 Tighten credit policies – increase scrutiny
11 Look for opportunistic purchases
12 Grab market share as your competitor dies
13 Prepare training programs
14 Negotiate union contracts, if possible
15 Develop advertising and marketing programs
16 Enter or renegotiate long-term leases
17 Look for additional vendors
18 Consider capital expenditures and acquisitions in light of market-by-market potential
19 Make acquisitions – use pessimism to your advantage
20 Lead with optimism and "can do" attitude to mitigate employee anxiety

Phase



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