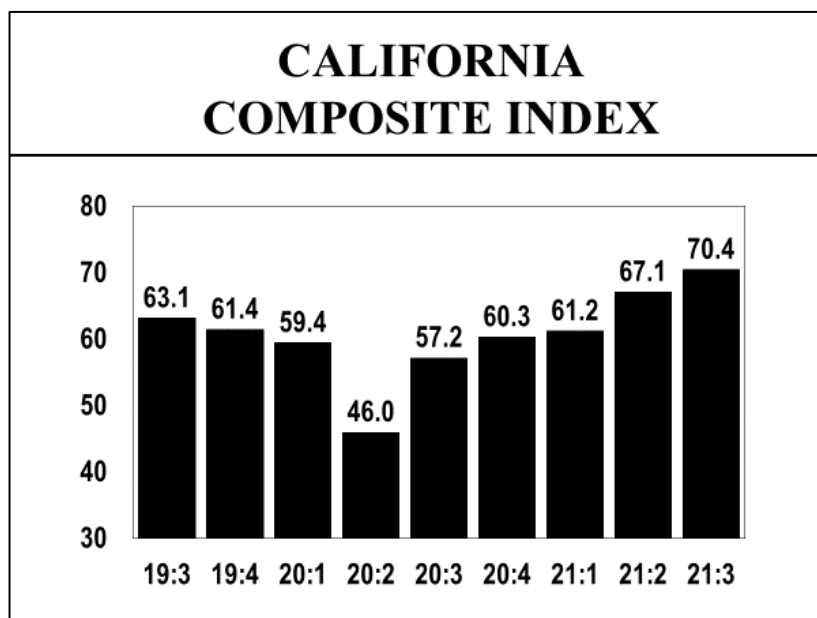




PRESS RELEASE

MANUFACTURING INDEX REACHES RECORD HIGH

ORANGE, CA — Based on a survey of purchasing managers, the California Composite Index, measuring overall manufacturing activity in the state, increased from 67.1 in the second quarter to 70.4 in the third quarter. This indicates that the manufacturing sector is expected to grow at the fastest rate since the survey started. “The California Composite Index is expected to reach a level over 70 for the first time. This indicates that the recovery of the California manufacturing sector is getting stronger and is surpassing that of services” said Dr. Raymond Sfeir, director of the purchasing managers’ survey. Production, new orders, and employment are expected to increase in the third quarter. The commodity price index is expected to reach a level over 90 for the first time, indicating a fast increase in these prices due to high demand. The purchasing managers in most industries are having major difficulties filling job openings and securing raw materials.



California Manufacturing at a Glance

Composite Index	70.4	Increasing at a higher rate
Production	71.2	Increasing at a higher rate
Inventories of purchased materials	61.4	Increasing at a lower rate
Commodity prices	93.4	Rising at a higher rate
Supplier deliveries	75.5	Slowing at a higher rate
New orders	72.9	Increasing at a higher rate
Employment	65.4	Increasing at a higher rate

Performance by Industry Group

The index for the **non-durable goods industries** increased from 69.6 in the second quarter to 71.2 in the third quarter, indicating an expansion in these industries in the third quarter. Inventories of purchased materials, new orders and employment are expected to increase at a higher rate in the third quarter. The commodity price index has reached a new high at 93.5. Supplier deliveries are expected to be slowing at a higher rate with an index of 78.3, a new high.

The **high-tech industries** include the following: Computer & Electronic Products, and Aerospace Products & Parts. The high-tech industries currently employ about 359,000 employees, amounting to 28.6% of total manufacturing employment in the state. The index for the high-tech industries increased from 62.0 in the second quarter to 68.1 in the third quarter, indicating a higher growth rate in the third quarter compared to the second quarter. Production, new orders and employment are expected to grow at a higher rate. Commodity prices are expected to rise at a higher rate with the index standing at 94.9, even higher than that of the non-durable goods industries.

The index for the **durable goods industries other than high-tech** increased from 69.5 in the second quarter to 71.8 in the second quarter, indicating a higher growth rate in these industries. New orders and employment are expected to increase at a higher rate in the third quarter. Commodity prices are expected to rise at a higher rate with an index of 92.4.

Comments by the Purchasing Managers

We are seeing unprecedented increases in raw material costs in the food industry. Corn is the main feed for livestock and the futures of corn are astronomical. Labor remains a huge issue as well, we cannot source enough labor for production needs. (Food)

There is no one to hire! (Beverage & Tobacco Products)

I have been in this chair for over 20 years. Never experienced a period of cost increases like right now. Seems like everything overseas and domestic has a price hike. Business remains very strong. Still faced with capacity issues in our domestic plants because we cannot staff properly. When will people want to work again? We have no choice...we are passing along the price increases. It is not easy but the major retailers we do business with are facing the same from everyone. Gaining traction with price increases. (Textile Mill Products)

Freight is 10xs what it was 2 years ago. (Apparel)

Hyperinflation is here. There is no transitory inflation. M2 + labor up + warehouse demand causes massive increase in costs. Freight is a mess. (Paper)

The paper mills are out of many grades. We are having to find similar papers on many jobs in order to produce the order. The mills are playing catch up, they are very backed up in production. (Printing & Related Support Activities)

Business remains very strong. Major capital expansion projects are taking place at all production sites to support of increased demand. Raw material costs are going up at record rates (chemicals & packaging). Logistics are also impacting our cost significantly. (Chemicals)

We are struggling to find potential employees to even show up for interviews. We have enlisted multiple temp agencies to try and help but the desire to work seems to be low on the list of people's priorities right now. I hear the same struggle from my Vendor's as well. (Plastics & Rubber Products)

Even though lumber prices are starting to dip slightly, it is still getting more difficult to get supplies due to the effect that Covid has had on the raw material shortage & lack of people seeking employment. (Wood Products)

We're experiencing a big shortage of materials, and employees. (Nonmetallic Mineral Products)

Higher shipping cost have hindered our customers buying. Lack of replacement parts has hindered production as well. (Primary Metals)

Many customers were forced to close during COVID. When they finally reopened, they realized they were behind in their orders & inventory. This caused a mass ordering to occur to make up for lost time. We are also seeing an increase in ordering due to less competitors. We have been working overtime for the last two months and anticipate this to continue through at least the 3rd quarter of this year maybe until the end of the year to keep up with continually increasing demand. The workforce is still slim pickings until unemployment ends. (Fabricated Metal Products)

We are purchasing move aggressively than last year. Just In Time is out the window. Better to have inventory and be able to run than lose opportunity. (Machinery)

Supply chains have been interrupted! Items that typically take 3-5 days to get delivered at time of procurement, are now taking 45-75+ days. Very challenging and uncharted territories. (Computer & Electronic Products)

For context, we are a worldwide electrical distributor. Like most, we are experiencing supply issues with most manufacturers we deal with. After 10 years of little or no inflation where manufacturers would guarantee pricing for a minimum of six months and typically a year, we are now getting price increases monthly. The worst with steel and copper. We do expect steel prices to start returning to normal at the end of the 4th quarter. Copper we think will remain at elevated levels into the foreseeable future. (Electrical Equipment, Appliance & Components)

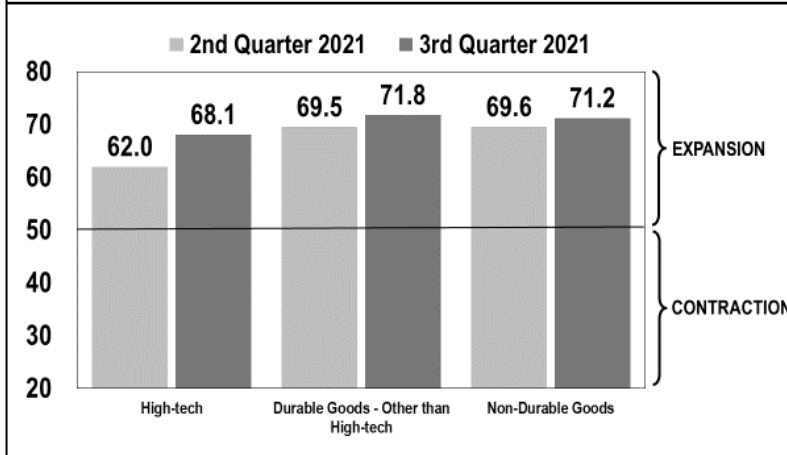
Shipping is very slow - every mode of transportation is delayed. (Transportation Equipment)

The Home Furnishings Industry has been experiencing a BOOM in business. Incoming business is great... Raw Materials however are tough to get and driving cost up! (Furniture & Related Products)

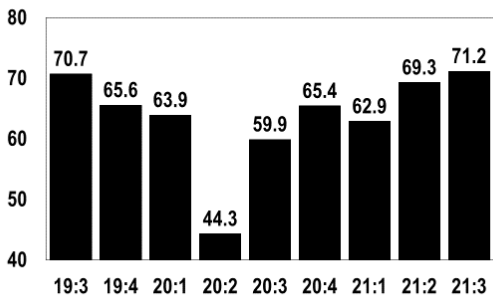
We work for the state and federal government, but they are pushing back projects so we are transitioning toward the private sector. We have a 2-day quoting clause, because prices rise so dramatically. We are utilizing low interest rates to accelerate. Lumber prices are making us think there will be a housing crash. (Miscellaneous)

Components to watch for this quarter are: rubber materials, molding resins. Lead-times are increasing drastically as well as prices. Commercial aerospace is expected to reach its peak this summer and suppliers are responding very slow with order placement/confirming orders. (Aerospace Products & Parts)

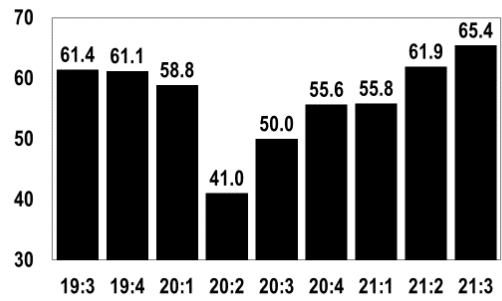
INDICES FOR INDUSTRY GROUPS



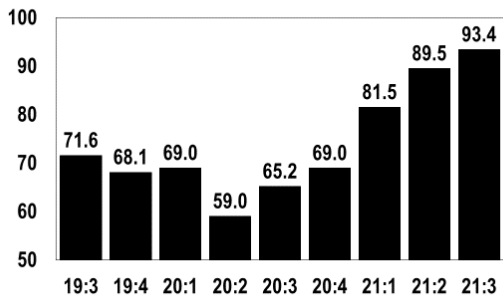
PRODUCTION INDEX



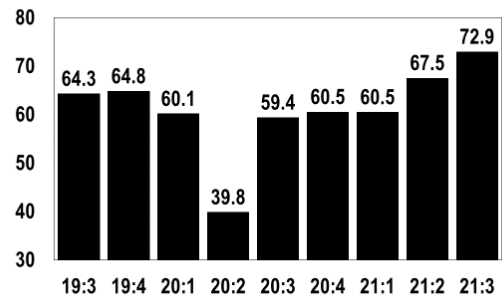
EMPLOYMENT INDEX



COMMODITY PRICE INDEX



NEW ORDERS INDEX



Background and Methodology

The Institute for Supply Management (ISM) conducts a monthly national survey of purchasing managers and publishes the survey results in its *Report on Business*. Such a survey is not available for the state of California. Given the size of our state, and the major role its manufacturing sector plays in the national economy, the A. Gary Anderson Center for Economic Research at Chapman University launched a quarterly survey of California purchasing managers starting in the third quarter of 2002. Similar to the ISM survey, our survey tracks changes in production, employment, new orders, inventories of purchased materials, commodity prices and supplier deliveries. A seasonally adjusted index is computed for each variable except for commodity prices for which no seasonal adjustment is made. Unlike the national survey that tracks the performance of the manufacturing sector in the previous month, the Anderson Center's survey asks the participants to evaluate the expected performance in the coming quarter.

In order to have one single indicator for the performance of the state manufacturing sector, the Anderson Center has developed a Composite Index that is a weighted average of the underlying indices. A value of 50 for the Composite Index shows a general expansion of the manufacturing economy of the state and a value below 50 shows a decline. The industries are classified according to the North American Industry Classification System (NAICS).

**Detailed Results of the Survey of
California Purchasing Managers' Expectations
for the Third Quarter of 2021**

In its attempt to present you with a better delivery of the survey results, the A. Gary Anderson Center for Economic Research has calculated an index for every variable in the survey. The "% Better," is added to half of the "% Same," after which a seasonal factor is used to get a seasonally adjusted index for each variable (except commodity prices). A value over 50 for an index indicates growth and a value below 50 indicates a decline. If for example the index increases from 55 to 59, we say that the growth rate is higher than the previous quarter because 59 is bigger than 55. If the index remains at 55, we say that the growth rate remains the same as the previous quarter. If the index decreases from 55 to 52, we say that we still have growth but that the growth rate is lower than the previous quarter because 52 is smaller than 55. Each industry in the manufacturing sector is represented in the survey based on its employment share of total manufacturing employment in the state.

Production: The seasonally adjusted index for production is expected to increase from 69.3 in the second quarter to 71.2 in the third quarter, indicating that production is expected to increase at a higher rate in the third quarter. This is the fifth consecutive quarter that the production index has been above 50. Production is expected to increase most rapidly in the following industries: Food; Apparel; Paper; Printing & Related Support Activities; Petroleum & Coal Products; Chemicals; Plastics & Rubber Products; Wood Products; Nonmetallic Mineral Products; Primary Metals; Fabricated Metal Products; Machinery; Computer & Electronic Products; Electrical Equipment, Appliance & Components; Aerospace Products & Parts; Furniture & Related Products; and Miscellaneous. No industry reported an expected decrease in production.

Production	% Higher	% Same	% Lower	Net	Seasonally Adjusted Index
3 rd Quarter of 2021	55.0	35.9	9.0	46.0	71.2
2 nd Quarter of 2021	55.4	35.4	9.2	46.2	69.3
1 st Quarter of 2021	41.2	41.8	17.0	24.2	62.9
4 th Quarter of 2020	43.3	36.0	20.7	22.5	65.4

Inventories of Purchased Materials: The seasonally adjusted index for inventories of purchased materials is expected to decrease from 61.7 in the second quarter to 61.4 in the third quarter, indicating that inventories are expected to increase at a slightly lower rate in the third quarter. Inventories of purchased materials are expected to increase most rapidly in the following industries: Food; Apparel; Paper; Printing & Related Support Activities; Chemicals; Plastics & Rubber Products; Wood Products; Nonmetallic Mineral Products; Primary Metals; Fabricated Metal Products; Machinery; Computer & Electronic Products; Electrical Equipment, Appliance & Components; Aerospace Products & Parts; Furniture & Related Products; and Miscellaneous. The Textile Mill Products industry has reported an expected decrease in inventories of purchased materials.

Inventories of Purchased Materials	% Higher	% Same	% Lower	Net	Seasonally Adjusted Index
3 rd Quarter of 2021	44.7	38.1	17.2	27.5	61.4
2 nd Quarter of 2021	43.1	42.2	14.8	28.3	61.7
1 st Quarter of 2021	32.1	48.5	19.3	12.8	57.3
4 th Quarter of 2020	30.4	42.3	27.3	3.1	54.7

Commodity Prices: The seasonally unadjusted index for commodity prices is expected to increase from 89.5 in the second quarter to 93.4 in the third quarter, indicating that commodity prices are expected to rise at a higher rate in the third quarter of this year. This is the first time that the index has reached in the nineties leading to a net value (difference between the percent higher and the percent lower) of 86.9 percent. Commodity prices are expected to increase most rapidly in the following industries: Food; Textile Mill Products; Apparel; Paper; Printing & Related Support Activities; Chemicals; Plastics & Rubber Products; Wood Products; Nonmetallic Mineral Products; Primary Metals; Fabricated Metal Products; Machinery; Computer & Electronic Products; Electrical Equipment, Appliance & Components; Transportation Equipment (other than Aerospace Products & Parts); Aerospace Products & Parts; Furniture & Related Products; and Miscellaneous. No industry reported an expected decrease in commodity prices.

Commodity Prices	% Higher	% Same	% Lower	Net	Index
3 rd Quarter of 2021	89.3	8.2	2.5	86.9	93.4
2 nd Quarter of 2021	80.0	19.0	1.0	79.0	89.5
1 st Quarter of 2021	67.1	28.9	4.0	63.1	81.5
4 th Quarter of 2020	43.2	51.5	5.3	37.9	69.0

Supplier Deliveries: For this variable, an index value over 50 indicates slower deliveries, and an index value under 50 indicates faster deliveries. The seasonally adjusted index for supplier deliveries is expected to increase from 71.2 in the second quarter to 75.5 in the third quarter, indicating that supplier deliveries are expected to be slower at a higher rate in the third quarter. The difference between the percent higher and the percent lower reached a new high at 50.1. Supplier deliveries are expected to be slowest in the following industries: Food; Textile Mill Products; Paper; Printing & Related Support Activities; Chemicals; Plastics & Rubber Products; Wood Products; Nonmetallic Mineral Products; Primary Metals; Fabricated Metal Products; Machinery; Computer & Electronic Products; Electrical Equipment, Appliance & Components; Aerospace Products & Parts; Furniture & Related Products; and Miscellaneous. No industry reported an expectation of faster supplier deliveries.

Supplier Deliveries	% Slower	% Same	% Faster	Net	Seasonally Adjusted Index
3 rd Quarter of 2021	55.6	38.9	5.5	50.1	75.5
2 nd Quarter of 2021	50.2	43.1	6.8	43.4	71.2
1 st Quarter of 2021	47.0	44.4	8.5	38.5	70.1
4 th Quarter of 2020	37.9	52.0	10.1	27.9	63.3

New Orders: The seasonally adjusted index for new orders is expected to increase from 67.5 in the second quarter to 72.9 in the third quarter, indicating that new orders are expected to increase at a higher rate in the third quarter. The difference between the percent higher and the percent lower reached a new high at 48.2. New orders are expected to increase most rapidly in the following industries: Food; Beverage & Tobacco; Textile Mill Products; Paper; Printing & Related Support Activities; Petroleum & Coal Products; Chemicals; Plastics & Rubber Products; Wood Products; Nonmetallic Mineral Products; Primary Metals; Fabricated Metal Products; Machinery; Computer & Electronic Products; Electrical Equipment, Appliance & Components; Transportation Equipment (other than Aerospace Products & Parts); Aerospace Products & Parts; Furniture & Related Products; and Miscellaneous. No industry reported an expected decrease in new orders.

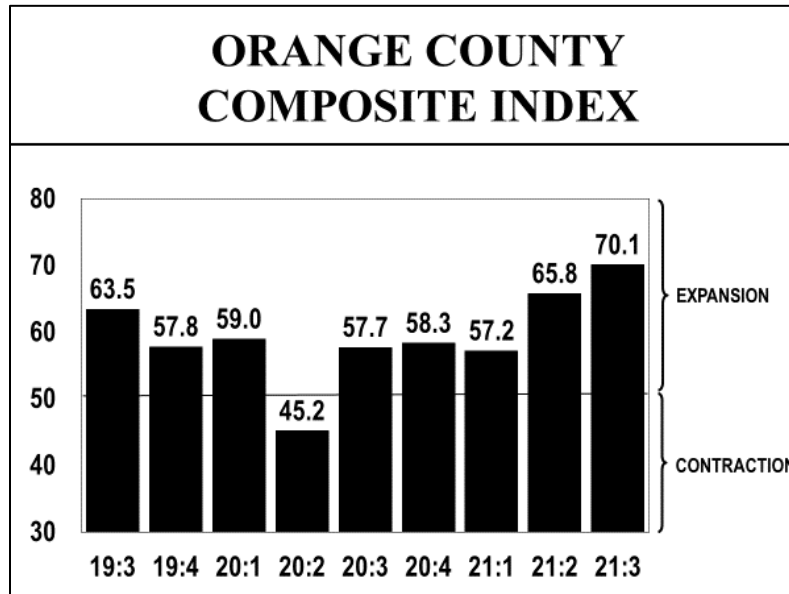
New Orders	% Higher	% Same	% Lower	Net	Seasonally Adjusted Index
3 rd Quarter of 2021	58.7	30.9	10.4	48.2	72.9
2 nd Quarter of 2021	50.3	41.9	7.8	42.5	67.5
1 st Quarter of 2021	37.5	45.2	17.3	20.1	60.5
4 th Quarter of 2020	38.1	37.5	24.4	13.8	60.5

Employment: The seasonally adjusted index for employment is expected to increase from 61.9 in the second quarter to 65.4 in the third quarter, indicating that employment in manufacturing is expected to increase at a higher rate in the third quarter. Employment is expected to increase most rapidly in the following industries: Food; Textile Mill Products; Paper; Printing & Related Support Activities; Chemicals; Plastics & Rubber Products; Wood Products; Nonmetallic Mineral Products; Primary Metals; Fabricated Metal Products; Machinery; Computer & Electronic Products; Electrical Equipment, Appliance & Components; Transportation Equipment (other than Aerospace Products & Parts); Aerospace Products & Parts; Furniture & Related Products; and Miscellaneous. No industry reported an expected decrease in employment.

Employment	% Higher	% Same	% Lower	Net	Seasonally Adjusted Index
3 rd Quarter of 2021	43.2	47.5	9.3	33.9	65.4
2 nd Quarter of 2021	31.7	62.6	5.7	25.9	61.9
1 st Quarter of 2021	22.9	65.1	12.0	11.0	55.8
4 th Quarter of 2020	23.4	60.5	16.1	7.3	55.6

Orange County's Manufacturing Survey

The Orange County manufacturing sector's Composite Index increased from 65.8 in the second quarter to 70.1 in the third quarter, indicating that the county's manufacturing economy is expected to expand at a higher rate in the third quarter.



The seasonally adjusted index for production increased from 65.8 in the second quarter to 72.2 in the third quarter, indicating that production is expected to increase at a higher rate in the third quarter. The seasonally adjusted index for supplier deliveries increased to a new high at 75.0, indicating that supplier deliveries are expected to slow at a higher rate in the third quarter. The commodity price index also increased to a new high at 89.9, indicating that commodity prices are expected to rise at a higher rate in the third quarter.

The index for the **non-durable goods industries** increased from 64.6 in the second quarter to 71.1 in the third quarter, indicating that these industries are expected to expand at a higher rate in the third quarter. The index for production is expected to increase from 63.4 to 73.8, indicating that production is expected to increase at a higher rate. The index for employment increased from 57.9 to 64.3 indicating that employment is also expected to increase at a higher rate. The index for the **high-tech industries** increased from 68.4 to 74.9, indicating that these industries are expected to expand at a higher rate. The index for production increased from 70.2 to 79.0 indicating that production is expected to increase at a higher rate. The index for supplier deliveries increased from 59.8 to 74.4 indicating that supplier deliveries are expected to slow further. The index for the **durable goods industries other than high-tech** increased from 65.5 to 68.3 indicating that the durable goods industries other than high-tech are expected to expand at a higher rate. The index for production increased from 65.0 to 70.2 indicating that production is expected to increase at a higher rate in the third quarter.

ABOUT THE ANDERSON CENTER FOR ECONOMIC RESEARCH

The A. Gary Anderson Center for Economic Research (ACER) was established in 1979 to provide data, facilities and support in order to encourage the faculty and students at Chapman University to engage in economic and business research of high quality, and to disseminate the results of this research to the community.

ANNUAL SCHEDULE OF CONFERENCES AND PRESS RELEASES

JANUARY

- › Economic Forecast Conferences for the Inland Empire
- › California Purchasing Managers Survey
- › Orange County Consumer Sentiment Survey
- › California Consumer Sentiment Survey

APRIL

- › California Purchasing Managers Survey
- › Orange County Consumer Sentiment Survey
- › California Consumer Sentiment Survey

JUNE

- › Economic Forecast Update Conference for the U.S, California and Orange County

JULY

- › California Purchasing Managers Survey
- › Orange County Consumer Sentiment Survey
- › California Consumer Sentiment Survey

OCTOBER

- › California Purchasing Managers Survey
- › Orange County Consumer Sentiment Survey
- › California Consumer Sentiment Survey

DECEMBER

- › Economic Forecast Conference for the U.S., California and Orange County