IAR'S INLAND EMPIRE REPORT ON BUSINESS

Prepared by: The Institute of Applied Research

Housed in CSUSB's Jack H. Brown College of Business and Public Administration

Report for April 2020

Sponsor: San Bernardino County Economic Development Agency Riverside County Economic Development Agency

Record Low Figures for Several PMI Indices

CONTEXT FOR THIS REPORT: March and April have seen a record 9% decline in retail sales in the US, and an estimate that the pandemic has claimed one in six jobs nationwide. Late this month, it was announced that the US GDP had decreased 4.8% during the period from January to March – a startling number considering that the mandatory stay-at-home order was issued by the governor on March 19, so the sharp decline was due to only about a week and a half when all-but-essential businesses were shuttered to help "flatten the curve" and keep people healthy and safe.

When we wrote last month's report, California had registered 8,548 positive cases and 181 deaths (https://www.worldometers.info/coronavirus/country/us/). That figure has now spiked to 50,316 cases and 2,045 deaths. Riverside County has 4,031 confirmed cases and 149 deaths, and San Bernardino County has 2,058 cases and 93 deaths – a substantial increase from the combined 554 cases with 19 deaths for the two-county area at this time last month.

It is in this context that we write this report based on the data from our monthly survey of manufacturing firms in the Inland Empire.

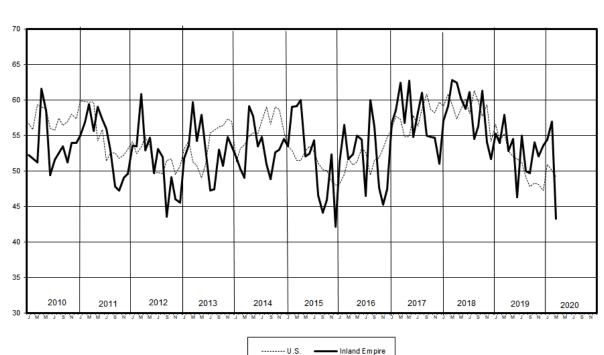
"According to Dr. Barbara Sirotnik (Director, Institute of Applied Research) and Lori Aldana (Project Coordinator, Institute of Applied Research), "This month's Inland Empire Purchasing Managers' Index (PMI) declined to 41.8 from last month's 43.3. There are only 8 months since the inception of the report in 1993 that the PMI has been lower – most of those were during the great recession in 2008/2009." "Considering the pandemic ravaging the world, it is not surprising that the PMI would be as low as it is. Non-essential businesses have been shuttered and residents in most states have been ordered to stay home. Of course, some people have the financial means to keep purchasing the products they want (assuming that those products can be produced and delivered). And it is possible that pent-up demand from these individuals will help the economy rebound when the businesses reopen. But another large group of individuals are now on the unemployment rolls and are barely holding on, and those people are unlikely to make any purchases other than the essentials."

"The Production and New Orders indices (two of the five key indices in the PMI) were at record lows this month. Production is down to 28.6 (a drop from 33.3 last month) and New Orders decreased to 28.6 from last month's 31.5. Any number below 50 indicates a decrease in activity, and clearly these numbers indicate that manufacturing firms have significantly decreased their activity. It is not surprising that the Employment index is also at nearly a record low. It registered 28.6, only slightly higher than the 27.4 registered in November of 2008 during the recession. Inventory of raw materials increased slightly from 44.4 to 48.2 this month but still remained below the baseline 50%. And 82% of respondents indicated that inventory of the company's product for sale (i.e. finished goods) are either the same or lower than last month. The Supplier Deliveries have slowed significantly, changing from 68.5 to 75.0 this month."

"Purchasing Managers' confidence in the state of the economy echoes the dismal PMI figure and indices. Not a single Purchasing Manager predicted a strengthening of the local economy in the coming quarter. Instead, 89% (down from 96% last month) of the Purchasing Managers predicted a weaker local economy in the upcoming three months, with the other 11% anticipating that the local economy will remain unchanged from last month.

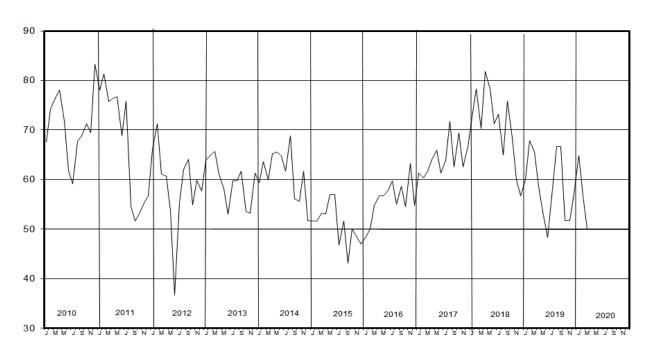
Following is a summary of highlights from this month's report:

April 2020 Business Survey at a Glance										
	Series	Index	Direction from	Rate of Change	Trend					
	Last Month	This Month	50	from Last Index	Months					
Local PMI	43.3	41.8	Contracting	Faster	2					
Commodity Prices	50.0	50.0	Unchanged	From unchanged	10					
Production	33.3	28.6	Contracting	Faster	2					
New Orders	31.5	28.6	Contracting	Faster	2					
Inventory	44.4	48.2	Decreasing	Slower	4					
Employment	38.9	28.6	Contracting	Faster	3					
Supplier Deliveries	68.5	75.0	Slowing	Faster	7					
Purchasing Managers' Confidence in the State of the Local Economy										
% Stronger	0%	0%								
% Same	4%	11%								
% Weaker	96%	89%								



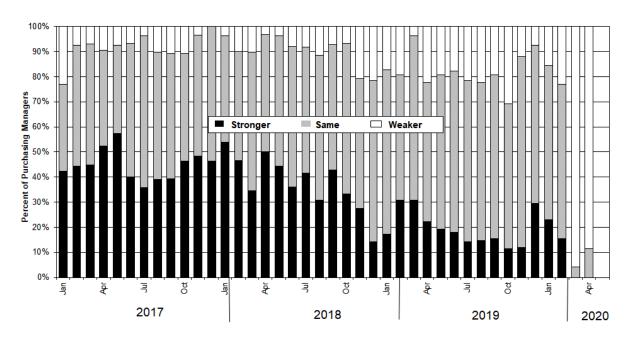
Purchasing Managers' Index

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Commodity Prices

State of the Local Economy



	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
Weaker	22	19	18	22	22	19	31	12	7	15	23	96	89
Same	56	62	64	64	63	65	58	76	63	62	62	4	11
Stronger	22	19	18	14	15	16	11	12	30	23	15	0	0

STATE OF THE ECONOMY: DATA FROM 4/2019 THROUGH 4/2020

What Respondents are saying:

This month, only a few respondents had positive comments regarding the business outlook for their company or industry (and for the most part, those respondents either are in the business of producing products deemed "essential" during this global crisis or have been able to "repurpose" their facilities to produce those). Comments included:

- "Our manufacturing plant is currently working with all employees on staff. Nothing has changed with the COVID 19 virus pandemic."
- "Largest orders in the history of the company. We went from 150 employees to 400."
- "Business has been steady maybe even up slightly."
- "Everything is up in the air, but for us as an "essential" business serving the aerospace and trucking industry, our work has been secured."
- "Obviously, COVID-19 has created several challenges both within our company and in doing business with our customers. Thankfully, we supply to many medical related manufacturing companies. This increase in business from that sector has helped fill in the missing business from automotive and aerospace."

Mixed and/or cautionary comments included:

- "This virus is complicating and disrupting all operations."
- "COVID 19 has screwed everything up."
- "COVID-19. Riverside County still on mandatory stay-at-home. Our employees are at home, with pay. Our sales have decreased. We are an 'essential business', manufacturing water treatment equipment. We provide parts and equipment to homes for drinking water, commercial and industrial businesses for other processes, including the medical field."
- "Orders delay because of COVID-19 resulted in a 30% reduction in sales."

- "Things have been about 20-30% slower because of the COVID 19."
- "Trailer Products has laid off all of the crew until the stay at home order is lifted."
- "Very very slow."
- "We are running at 20% capacity currently."
- "We have remained open in March and April. New orders are way down due to the current pandemic. May is going to be much slower than April. We did get a loan for PPP and this may help with payroll for a couple months. Everything depends on new orders. We only make heaters when customers order. We do not build for inventory."
- "We are not taking export orders because of the concentration on PPE for the Covid-19 crisis."
- "Business from Asia, specifically China, has continued to crawl back from near zero just a month ago."
- "Cannot import or export currently."
- "Most business have shut down or slowed down during COVID-19."
- "No orders at all at this time."
- "While we are purchasing USA materials, some of the products are made in foreign countries and those volumes of imports are up."
- "Decrease in orders to build equipment, so importing is down."
- "Lower demand."
- "Paper orders have decreased due to reduction in company print sales."

Special Questions: This month we continued to add a few special questions regarding the challenges of the Inland Empire business community during this crisis. Following is a summary of responses to those questions:

1) We are tracking month-to-month changes in the working conditions and challenges of the Inland Empire business community during the COVID-19 crisis. What changes have been made in your organization's procedures and/or working conditions?

On 4/28/20, the Governor released his roadmap for reopening the economy. Currently California is in stage 1, a situation where people are staying home as much as possible and the priority for personal protective equipment is to get it to front-line workers. He

indicated that based on a decrease in hospitalization rates, ICU rates, PPE availability, testing, and contact tracing, it might be possible to move to stage 2 in weeks rather than months. Reopening manufacturing facilities could be part of stage 2 as long as physical and environmental adaptations are made in order to keep people safe.

Most of the comments in response to this question indicate that manufacturing firms have already planned for (or have implemented) those adaptations. The adaptations include increased distancing between employees by splitting shifts; employees wearing face coverings and washing hands frequently; companies incentivizing employees to stay home when sick; and companies allowing their employees to work from home when possible.

Comments:

- "All production has stayed the same. Nothing has changed for our company since the pandemic started. We were able to keep working. We have contracts that still have to be met so we had no choice but to keep the manufacturing going. The employees wear masks if they are working close together and wash their hands frequently."
- "Sticking to all government guidelines and having employees who can work from home."
- "Taking care to check the temperature of every employee, washing workstations. Employees wear face covering."
- "Because we are a very small operation (6 employees), we have been able to get working with minimal changes. The main one has been for me, as manager, to keep closer tabs on everyone, making sure that they and their families are good."
- "Employees home while receiving paycheck. Only one person in the manufacturing shop each day. Office is now working remotely."
- "Everyone has a mask and is maintaining safe distances."
- "Everyone has to have a mask on and social distance whenever it's possible. Washing and sanitizing hand often."
- "In order to create more distance in our warehouse between employees, we have split our shifts. We now work two shifts instead of one. Each shift contains half of our warehouse work force."
- "Masks"
- "Masks are now required for employees & vendors, hourly and daily cleaning throughout the offices, and social distance rules have been applied. Certain

employees are working remotely from home, and employee hours & shifts have been reduced."

- "More stringent enforcement for social distancing, use of personal protective gear, more frequent cleaning of break area and restrooms."
- "None -- we are essential."
- "Obviously everyone required to have a mask, but if working areas are over 10' away, not required to wear at workstation. Limited outside visitors."
- "Office employees that are able are working from home, employees still on site are wearing masks and attempting to keep distance from one another."
- "Office employees working from home. Plant employees following COVID-19 practices for social distancing, disinfecting and face coverings."
- "Orders delay because of COVID resulted in a 30% reduction in sales."
- "Our diversity in manufacturing engineered fabric products for a wide range of industries has insulated us from this market insecurity to a large degree. Plus we are working on a product development that is directly addressing the COVID-19 pandemic, and we expect a great response to this new product."
- "People are not ordering as often, and they are taking longer to pay their bills."
- "Same work force just distributed to 3 shifts to minimize gathering of employees. We are busier than ever and fortunate for that."
- "Use masks and gloves
- "We are part of Transportation industry manufacturer. We have to be open. Everyone uses masks. Work away from each other."
- "We are running on a skeleton crew of 4 employees. Front door is locked to walk ins, curb side pickup only, and all employees are wearing facemasks."
- "We have moved equipment and workstations to a minimum of 6 ft apart."
- "We have reduced our staff by furlough by 70 % and sales are at about 30% of the previous months."
- 2) Has your company "repurposed" its equipment and/or employees during the pandemic to produce goods/services it doesn't usually provide? For example, some companies are now using their facilities to produce masks or ventilators.

The vast majority of the respondents (86%) indicated "no". Only 14% stated that they have repurposed their equipment and/or employees to produce goods/services to aide

in the pandemic.

New products/services included facemasks and face shields, and one manufacturer has begun to produce a Patient Isolation Transportation Unit (PITU), a negative pressure isolation enclosure for patients who are suffering from a highly contagious disease. Infected patients are placed inside to prevent the contagion from getting into the environment or infecting another person. PITU makes working with highly contagious diseases a safer process by providing a secure barrier between the patient and the medical staff and other patients.

3) Over the last few weeks the government made various types of loans and grants available for struggling businesses, but unfortunately the money ran out quickly so many businesses were not able to get financial assistance. About how long (in WEEKS) can your organization survive based on your current cash flow and reserves without government support?

Over a third of respondents indicated that they simply don't know how long their organization can survive without financial assistance. A quarter said they would only be able to last 2 months or less. Approximately 29% said that they were not concerned about needing financial assistance, and indicated that they could last "indefinitely."

4) Are you considering shutting down your business in the next 2.5 months?

For the most part, businesses are NOT considering shutting down. Over three-quarters (79%) said they don't think they will shut down, and another 4% said it was possible that there would be a *temporary* shutdown. Some (14%) said "who knows?"

5) What percent of your workers/employees have you already laid off?

Last month when we asked this question, 82% of respondents indicated that they had not experienced any layoffs as yet. This month that figure dropped to 54%, with an additional 18% saying that they had laid off less than 10% of the workforce. A disturbing 11% said they had already laid off 50% or more of their workers/employees.

6) What are your plans for re-hiring once the state economy is re-opened?

Comments indicated that rehiring would be based on orders coming in and resulting production, and that firms would wait until the situation is stable before bringing back the employees they had lost (if they are still available).

Examples of comments included:

- "Based on production."
- "Once the shutdown is over we may increase work staff by 10%."
- "We will try to get past employees back."
- "If employees are available we will re-hire, else we will get new people."

- "If we are stable we will be hiring back the employees we lost."
- "We have been keeping in contact with them and we are hopeful they will return to our company once the orders begin to flow back in."
- "We will hire as soon as we have demand to support."
- "When stay at home order is lifted; employees will be hired as orders come in."
- "Will rehire based on level of revenue."

7) What percent of your workers/employees are you *considering* laying off? Most respondents (71% down from last month's 80%) indicated that they are not considering layoffs at this time. Only one person indicated that the firm is considering laying off 50% or more of the workforce.

8) Do you anticipate continuing to pay your workers who have been laid off?

For the most part, those who have laid off workers (or are considering doing so) indicated that their organization would most probably not continue to pay those workers (8 of 14 respondents). Three respondents said that they plan to pay, and another 3 have no idea at this point.

In summary, uncertainty is the name of the game. We have no concrete idea when California will get to stage 2 in the reopening process, and stage 3 (where there can be more interaction among employees) is even farther off in time. Some economists are predicting a "V" shaped recovery in which the economy will bounce back quickly once businesses are reopened. Others anticipate more of a "U" shape in which economic conditions will remain at a low point for a period of time until the pandemic has eased and consumer confidence rebounds. IAR tends to be conservative in its forecasts, and we believe that the latter situation will occur. But this month's comments from representatives of the manufacturing sector seem to indicate that this sector has already made changes to work safely in this extraordinary time, and will be ready to get back to work with social distancing in place and personal protective equipment being used.

IAR will continue to provide the most up-to-date data on business conditions that we can during this uncertain time.

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