

COVID-19 Print Business Indicators Research

A Path Forward

May 12, 2020





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Introduction

The economic crisis caused by COVID-19 is unprecedented in nature and effect. To help printing companies navigate through the crisis to the recovery on the other side, NAPCO and SGIA have launched COVID-19 Print Business Indicators Research.

The research gets the facts by surveying a cross-section of printing companies, including commercial printers, graphic and sign producers, apparel decorators, functional printers, and package printers/converters.

The results of the first survey indicate a deep contraction across the printing industry. Sales fell 53.7%, on average, between mid-March and mid-April for all companies surveyed, and there are no signs of an upturn, yet. Still, printing companies are maintaining an attitude of determination and taking action to protect and position their companies to survive the crisis.

This report presents the results of our first survey. It is organized in four sections:

- **Section 1: Participant Profile.** Number of companies surveyed, size, primary printing segment, and geographic location.
- Section 2: Key Metrics. Three metrics are presented for all companies surveyed and by primary printing segment:
 - Percent change in sales over the last 30 days to measure the depth of the contraction. We chose
 the last 30 days (the third week in March through the third week in April) rather than the first
 calendar quarter to capture the full effects of the crisis: Economically, 2020 got off to a strong
 start. It wasn't until mid-March that the bottom dropped out.
 - o Index of current business indicators to measure the breadth of the contraction and determine when it has hit bottom. The index monitors sales, production, employment, prices, and pre-tax profitability. A reading above 50.0 means more printing companies report business is picking up than report it is slowing down, while a reading below 50.0 means the opposite.
 - Index of leading business indicators to identify the first signs of recovery and how recovery is likely to progress. The index monitors work-on-hand, estimate activity, production payroll hours, and confidence. A reading above 50.0 suggests activity will be picking up during the months ahead, while a reading below 50.0 suggests the opposite.

Representative comments on current and expected business conditions (we got nearly 350) are also included to put the metrics in context.

- Section 3: Taking Action. What printing companies are doing to protect themselves from the COVID-19 crisis.
- Section 4: The Economy. The outlook for the American economy and what it will mean for the printing industry.

Initially, we will conduct the survey every two weeks, because conditions are changing that quickly. When conditions settle, we'll move to a monthly or quarterly schedule. Whatever the frequency, the surveys and reports they yield will provide timely assessments of printing industry's performance, prospects, critical trends, and defining issues.



Please share your thoughts about NAPCO/SGIA COVID-19 Printing Business Indicators Research by contacting our research team at: research@napco.com.



Executive Summary

More than 500 printing companies from across the United States and Canada participated in the inaugural NAPCO/SGIA COVID-19 Print Business Indicators Survey. Participants include commercial printers, graphic and sign producers, apparel decorators, functional printers, and package printers/converters. As in the industry at large, most are small: 40.3% sell \$1 million or less per year and 63.7% sell \$3 million or less per year. However, companies of all sizes are represented: Annual sales exceed \$3 million for 36.3%, \$10 million for 17.9%, and \$50 million for 5.0%.

Key Findings

- The contraction has been deep across the printing industry. Sales fell 53.7%, on average, between mid-March and mid-April for all companies surveyed. Declines averaged 57.0% for commercial printers, 51.9% for graphic and sign producers, 68.3% for apparel decorators, and 37.3% for functional printers. Work for the pharmaceutical, healthcare, and packaged-food industries, which have grown throughout the crisis, limited the average decline for the package printers/converters surveyed to 15.3%.
- There are no signs of an upturn or even a bottom yet. The index of current business indicators (sales, production, employment, prices, and pre-tax profitability) closed the survey period at 18.6. A reading below 50.0 means more printers report activity is falling than report activity is rising. The index of leading business indicators (work-on-hand, quote activity, production payroll hours, and confidence) closed at 20.4. A reading below 50.0 means more printers report these forward-looking measures of activity are falling than report they are rising. Both indexes are in the teens and twenties for four of the five segments studied. They are higher in package printing/converting for the reasons mentioned above but still below 50.0.
- Actions and attitude are the bright spots. Many of the companies surveyed are moving aggressively to protect themselves from the COVID-19 crisis. Actions include pre-payment price discount programs, pivoting to growth industries, essential industries, and printing related to COVID-19, (health guidelines, updates, etc.); producing personal protection equipment; using social media to monitor client needs, how those need are changing, and how they are likely to change post-crisis; expanding e-commerce and Web capabilities, and of course, protecting the health of their employees. The prevailing attitude is determination, not resignation, as comments such as these show: "This market requires us to be more creative, resourceful, and value-added to maintain and grow accounts," and "We are working on new selling ideas...Never give up!"

The Metrics at a Glance

	Average Percent Change in Sales Last 30 Days	Index of Current Business Indicators	Index of Leading Business Indicators
All surveyed	-53.7%	18.6	20.4
Commercial printing	-57.0%	15.7	17.8
Graphic and sign production	-51.9%	20.3	22.3
Apparel decoration	-68.3%	14.6	16.7
Functional printing	-37.3%	27.1	26.8
Package printing/converting	-15.3%	45.0	44.0



Section I: Participant Profile

Number surveyed: 506

Company Size: 2019 Sales (all sources)

2019 Sales (m=millions)	Percent
\$500,00 or less	25.4%
\$500,000+ to \$1M	14.9%
\$1M+ to \$3M	23.4%
\$3M+ to \$5M	8.9%
\$5M+ to \$10M	9.5%
\$10M+ to \$25M	7.3%
\$25M+ to \$50M	5.6%
\$50M+ to \$100M	2.0%
More than \$100M	3.0%

Primary Printing Segment

Segment	Percent
Commercial printing	61.8%
Graphic and sign production	15.7%
Apparel decoration	10.7%
Functional printing	6.2%
Package printing/converting	5.6%

Location

Location*	Percent
United States	95.8%
West	20.8%
Pacific	11.3%
Mountain	9.5%
Midwest	28.6%
Plains	8.3%
North Central	20.3%
South	24.6%
South Central	7.3%
Southeastern	17.3%
East	21.8%
South Mid-Atlantic	4.0%
North Mid-Atlantic	12.8%
New England	5.0%
Canada	4.2%

^{*} Pacific: Alaska, California, Hawaii, Oregon, Washington. Mountain: Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming. Plains: Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota. North Central: Illinois, Indiana, Michigan, Ohio, Wisconsin. South Central: Arkansas, Louisiana, Oklahoma, Texas. Southeast: Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee. South Mid-Atlantic: Delaware, District of Columbia, Maryland, Virginia, West Virginia. North Mid-Atlantic: New Jersey, New York, Pennsylvania. New England: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont

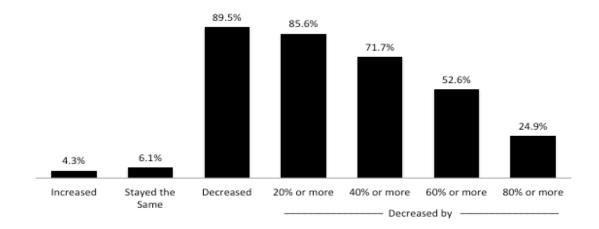


Section 2 — Key Metrics

All Companies Surveyed

Average Change in Sales Last 30 Days: -53.7%

Sales are down for 89.5% of companies surveyed, with 71.7% reporting a decline of at least 40% and 24.9% a decline of at least 80.0%.



Q. What has happened to your total sales (all sources) over the last 30 days? n=506

Index of Current Indicators: 18.6

More than four-fifths report sales, production, and pre-tax profitability are trending downward. So far, reductions in hours have mitigated declines in employment — 40.7% report employment is steady — but the leading indicators below suggest additional staff reductions are coming. Nearly three-quarters report prices are holding steady.

	Current Trend		
Indicator	Increasing	Staying the Same	Decreasing
Sales	5.6%	5.8%	88.6%
Production/Amount of Work	5.8%	7.2%	87.0%
Employment	1.6%	40.7%	57.7%
Prices	4.4%	74.7%	21.0%
Pre-Tax Profitability	4.0%	15.2%	80.8%

Q. How is business trending? Please indicate whether each of the above is increasing, not changing, or decreasing? n=501



Index of Leading Business Indicators: 20.4

Large majorities report work-on-hand, quote activity, and production payroll hours are falling. Additionally, just 16.2% expect business to improve during the month ahead, while 62.0% expect business to stay the same (28.5%) or decline further (33.5%). More than one-fifth report business is so inconsistent they don't know what to expect.

	Current Trend		
Indicator	Increasing	Staying the Same	Decreasing
Work-On-Hand	5.6%	9.2%	85.2%
Quote Activity	4.4%	7.6%	88.0%
Production Payroll Hours	4.4%	19.2%	76.4%

Q. How is business trending? Please indicate whether each of the above is increasing, not changing, or decreasing? n=501

	Over the next month, we expect business to:			
Indicator	Improve Staying the Same Decline Not Sure			
Confidence	16.2%	28.5%	33.5%	21.8%

Q. In relation to current conditions, do you expect business conditions for your company to improve, stay the same, or decline over the next month? n=501

Comments on Current and Expected Business Conditions

The segment data that follow include representative comments on current and expected business conditions. Some conditions are segment-specific, but others are universal. Look for the following common themes:

- The numbers are likely to get worse over the next few months. It seems like a lifetime ago, but 2020 did start strong, creating significant order backlogs. Now those backlogs have largely been worked off: "We came into the crisis with a huge backlog and have seen no impact in March and April. We expect slowdown starting in May or maybe June."
- Concern about long-term survival of clients. Things will not quickly return to normal when the
 economy reopens and social distancing eases. Many small businesses are not going to make it. And
 those that do will need time to restore normal operations. "Once the stay at home orders came, our
 sales dropped to almost nothing. I am concerned about a comeback, as other businesses we support
 may not survive."
- Clients have been designated as "nonessential." One participant in our research speaks for many: "The governor declared printing to be essential and then closed all my clients' businesses."
- Markets make the difference. "Retail is dead. Healthcare fine," "We have a lot of sign business related to virus. Other business has dropped of more than 50%," and "The food sector of our business is up quite a lot, while the non-food sector (industrial) is dying." In every segment, reported results depend on how many of the companies surveyed are in markets that have grown throughout the pandemic and how many have been able to move into them.
- Clients are hesitant to commit. "We have actually done more estimates in April 2020 than in April 2019, but the conversion of those estimates is almost nonexistent," and "Our customers are open but most projects are currently on hold."



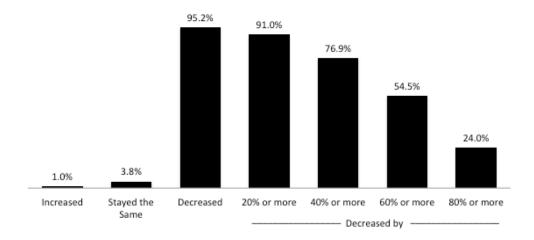
- Many diverse challenges. The economic fallout from COIVD-19 extends in many directions:
 - "All is declining. Salespeople cannot travel nationwide and sell face-to-face. We are trying to sell by FaceTime instead."
 - "Many wide-format printers cannot get materials from their suppliers. Suppliers have run down their inventories as orders dropped. We stocked up with many thousands of dollars of inventory in early April. So regardless of orders, many printers do not have the materials to do the work."
 - "Employees make more money on unemployment then working, so 50% took a leave. I can't take on work without employee help! Hence, I've turned away work."



Commercial Printers

Average Change in Sales Last 30 Days: - 57.0%

Sales decreased for 95.2% of commercial printers surveyed, by 20.0% or more for 91.0%, by 60.0% or more for 54.5%, and by 80.0% or more for 24.0%.



Q. What has happened to your total sales (all sources) over the last 30 days? n=312

Index of Current Indicators: 15.7

Sales are trending down for 93.6%, production for 92.9%, and pre-tax profitability for 85.9%. Nearly 42.0% have held employment steady. The question is, How much longer can they?

Prices are unchanged for 72.3%. But comments such as this suggest prices may not hold much longer: "My competitors are SLASHING prices. It's hard to hold the line ... but my costs have increased as a result of lower volume. There's no way I can charge LESS."

	Current Trend		
Indicator	Increasing	Staying the Same	Decreasing
Sales	1.6%	4.8%	93.6%
Production/Amount of Work	1.9%	5.1%	92.9%
Employment	0.6%	41.8%	57.6%
Prices	3.9%	72.3%	23.8%
Pre-Tax Profitability	2.3%	11.9%	85.9%

Q. How is business trending? Please indicate whether each of the above is increasing, not changing, or decreasing? n=311



Index of Leading Business Indicators: 17.8

Work-on-hand and quote activity are falling for nine of ten commercial printers surveyed and production payroll hours are falling eight of ten. Companies expecting business to decline further over the next month outnumber those expecting business to improve by better than two-to-one: 35.4% to 15.8%. More than one-fifth report conditions are so erratic they don't know what to expect.

	Current Trend		
Indicator	Increasing	Staying the Same	Decreasing
Work-On-Hand	2.9%	5.8%	91.3%
Quote Activity	1.3%	4.8%	93.9%
Production Payroll Hours	1.9%	18.3%	79.7%

Q. How is business trending? Please indicate whether each of the above is increasing, not changing, or decreasing? n=311

	Over the next month, we expect business to:			
Indicator	Improve Staying the Same Decline Not Sure			
Confidence	15.8%	27.0%	35.4%	21.9%

Q. In relation to current conditions, do you expect business conditions for your company to improve, stay the same, or decline over the next month?

n=311

Comments on Current and Expected Business Conditions

- "We were having a great year until Covid-19, then sales dropped drastically."
- "Unmitigated disaster. Everything going to the floor. Summer looks 30%-50% off from normal. Predicting
 the year will be down 22% from last year. We print for all industries, and all of them have been hit:
 manufacturing, tourism, education, oil, non-profits, retail."
- "We are in a worldwide depression. Many retailers will declare bankruptcy, hurting unsecured creditors.
 The trade show business will be a fraction of the past until many months to come. PPP monies will destroy pricing and margins in the short term."
- "We are still actively quoting quite a bit of work, but it seems that it is future projections for our
 customers rather than live orders. We have been quoting quite a few large jobs that are relevant to the
 current pandemic, i.e., signage, direct mail, and informational collateral."
- "We have a dribble of work coming in from clients that are 'essential' business."
- "We have been able to pivot and are currently manufacturing PPE face shields. We will see what happens when this work is done."
- "Eighty percent of our customers are closed due to mandatory shelter-in-place. Many others are working from home and so are only generating mail once a week or less, where previously they were generating print and mail daily."
- "Business just stopped. We are doing COVID-19 work and work for convenience stores and medical industry. Some work for banks."
- "We provide essential services to three major clients, which include government, pharmaceutical labels and food-product labels."
- "Full operation: We serve medical companies."



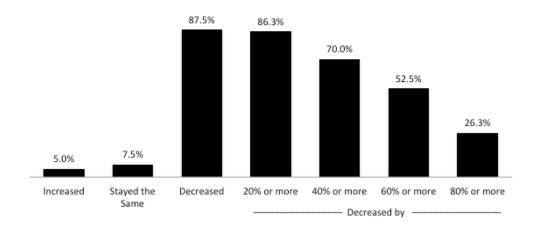
- "Pharmaceutical and healthcare documentation is growing. Financial markets work steady."
- "I have seen an increase in our packaging division, but it does not make up for our commercial losses."
- "Sixty percent of our business is schools, weddings, invitations, and churches, which has steadily declined or ceased altogether."
- "We print mostly for hospitality and trade show companies. Both are non-existent at the moment."
- "Our primary source of income is medical conventions, all of which have been canceled through August. We could easily face a summer of no revenue at all."



Graphic and Sign Producers

Average Change in Sales Last 30 Days: - 52.3%

Nearly 88.0% of graphic and sign producers surveyed report sales declined, 86.3% by at least 20.0%, 52.5% by at least 60.0%, and 26.3% by at least 80.0%.



Q. What has happened to your total sales (all sources) over the last 30 days? n=80

Index of Current Indicators: 20.3

Sales and production are trending downward for 86.1% and 84.8%, respectively, and pre-tax profitability is falling for 79.7%. Approximately half report employment is holding steady and half report it is heading down. Prices are unchanged for 70.9%. Some are testing price concessions: "Everything is down. I am offering discounts to try to encourage clients to start jobs."

	Current Trend		
Indicator	Increasing	Staying the Same	Decreasing
Sales	7.6%	6.3%	86.1%
Production/Amount of Work	7.6%	7.6%	84.8%
Employment	0.0%	50.6%	49.4%
Prices	5.1%	70.9%	24.1%
Pre-Tax Profitability	6.3%	13.9%	79.7%

Q. How is business trending? Please indicate whether each of the above is increasing, not changing, or decreasing? n=79



Index of Leading Business Indicators: 22.3

Work-on-hand is falling for 86.1%, quote activity for 83.5%, and production payroll hours for 74.7%. Just 15.2% expect business to improve over the next month, while 58.2% expect business to stay at current depressed levels (25.3%) or decline further (32.9%). Nearly 27.0% report business is too unpredictable to forecast even 30 days out.

	Current Trend			
Indicator	Increasing	Staying the Same	Decreasing	
Work-On-Hand	7.6%	6.3%	86.1%	
Quote Activity	7.6%	8.9%	83.5%	
Production Payroll Hours	2.5%	22.8%	74.7%	

Q. How is business trending? Please indicate whether each of the above is increasing, not changing, or decreasing? n=79

	Over the next month, we expect business to:				
Indicator	Improve Staying the Same Decline Not Sure				
Confidence	15.2%	25.3%	32.9%	26.6%	

Q. In relation to current conditions, do you expect business conditions for your company to improve, stay the same, or decline over the next month?

n=79

Comments on Current and Expected Business Conditions.

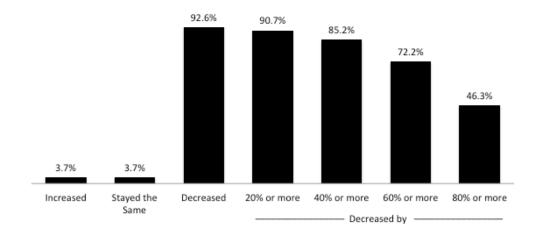
- "Quite a few of our clients are deemed nonessential and have completely shut their doors until further notice."
- "The current crisis has had a huge impact on our business. We have added some COVID-related work, but not enough to replace what was lost."
- "I am creating products I don't usually sell to bring in some money."
- "Not only have we decreased, but we were on a huge upward trend before this."
- "Work has been steady but we are noticing fewer calls and emails. When the shutdown started we had enough work to last four weeks. Concerned about next month."
- "We are quoting a lot of work. But we are unable to install much of the graphics we are producing, so the invoicing is delayed."
- "Retail decreased to zero. Interior decor has stayed the same."
- "With local schools and businesses closing, our sales have dropped tremendously."
- "We are in the event and retail-space business, so most of that spigot shut off."
- "We have lost about 25% of our event and trade show graphics but have replaced that work with COVID-19 related signage."
- "We have expanded COVID-19 response kits, special zone distancing shields, and PPE equipment that allowed us to continue our operations as well as increase sales and profitability."



Apparel Decorators

Average Change in Sales Last 30 Days: - 68.8%

Nearly 13.0% of apparel decorators surveyed have temporarily suspended operations. For the group as a whole, 92.6% report sales have declined, with nearly three-quarters (72.2%) reporting a decline of at least 60.0%.



Q. What has happened to your total sales (all sources) over the last 30 days? n=54

Index of Current Indicators: 14.6

Based on the past 30 days and the comments below, it's not surprising that majorities exceeding 79.0% report sales, production, pre-tax profitability, and even employment — not just production payroll hours — are trending down.

	Current Trend				
Indicator	Increasing	Staying the Same	Decreasing		
Sales	1.9%	7.4%	90.7%		
Production/Amount of Work	1.9%	5.6%	92.6%		
Employment	0.0%	20.4%	79.6%		
Prices	5.6%	77.8%	16.7%		
Pre-Tax Profitability	1.9%	13.0%	85.2%		

Q. How is business trending? Please indicate whether each of the above is increasing, not changing, or decreasing? n=54



Index of Leading Business Indicators: 16.7

None of the apparel decorators surveyed report an increase in work-on-hand, and less than 2.0% report an increase in quote activity or production payroll hours. Additionally, 67.3% either expect business to stay as it is (34.5%) or to decline further (32.7%) during the month ahead.

	Current Trend			
Indicator	Increasing	Staying the Same	Decreasing	
Work-On-Hand	0.0%	18.5%	81.5%	
Quote Activity	1.9%	11.1%	87.0%	
Production Payroll Hours	1.9%	9.3%	88.9%	

Q. How is business trending? Please indicate whether each of the above is increasing, not changing, or decreasing? n=54

	Over the next month, we expect business to:				
Indicator	Improve Staying the Same Decline Not Sure				
Confidence	13.0%	33.3%	33.3%	20.4%	

Q. In relation to current conditions, do you expect business conditions for your company to improve, stay the same, or decline over the next month? n=54

Current and Expected Business Conditions

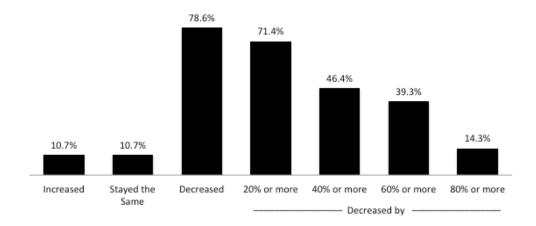
- "This market requires us to be more creative, resourceful, and value add to maintain and grow accounts."
- "We rely on email, online and telephone contact for most of our business now."
- "Prior to March 13 our business was trending upward: We had a record first quarter. After March 13, it completely dropped off."
- "No orders. Not even any phone calls."
- "Our print service is declining, but our manufacturing of cut-and-sew is increasing."
- "Apparel business has ground to a halt. We are still doing signs. Phone doesn't ring. Copy shop goes in surges."
- "Currently no one is looking for services in our field except for face masks, which will not be available until end of May."
- "No events occurring, so no business. No schools or sports, so no business. We cannot even fulfill orders in-house due to manufacturing shutdowns."
- "Three-quarters of my business comes through school and youth sports. This time of the year carries
 me though until fall school and sports start. This year that won't be the case."
- "We're in Florida and service a lot of resorts and restaurants and the souvenir business with t-shirts. Covid-19 has had a huge negative impact on our company."



Functional Printers

Average Change in Sales Last 30 Days: - 37.3%

Sales declined for 78.6% of functional printers surveyed, by at least 20.0% for 71.4% and at least 40.0% for 46.4%.



Q. What has happened to your total sales (all sources) over the last 30 days? n=28

Index of Current Indicators: 27.1

Sales and production are trending downward for 78.6% and 64.3%, respectively. Employment is also trending down for a majority, as reductions in production payroll hours alone haven't been enough to offset sharp declines in sales. Prices are unchanged for 89.3%.

	Current Trend			
Indicator	Increasing	Staying the Same	Decreasing	
Sales	10.7%	10.7%	78.6%	
Production/Amount of Work	14.3%	21.4%	64.3%	
Employment	0.0%	35.7%	64.3%	
Prices	3.6%	89.3%	7.1%	
Pre-Tax Profitability	10.7%	35.7%	53.6%	

Q. How is business trending? Please indicate whether each of the above is increasing, not changing, or decreasing? n=28



Index of Leading Business Indicators: 26.8

Large majorities report work-on-hand (67.9%) and quote activity (78.6%) are declining, while more than 57.0% report production payroll hours are declining. The most positive indicator: Just 28.6% expect business to decline further over the next month.

	Current Trend			
Indicator	Increasing	Staying the Same	Decreasing	
Work-On-Hand	14.3%	17.9%	67.9%	
Quote Activity	10.7%	10.7%	78.6%	
Production Payroll Hours	10.7%	32.1%	57.1%	

Q. How is business trending? Please indicate whether each of the above is increasing, not changing, or decreasing? n=28

	Over the next month, we expect business to:				
Indicator	Improve Staying the Same Decline Not Sure				
Confidence	28.6%	32.1%	28.6%	10.7%	

Q. In relation to current conditions, do you expect business conditions for your company to improve, stay the same, or decline over the next month?

n=28

Comments on Current and Expected Business Conditions

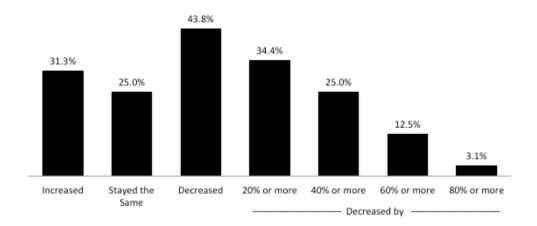
- "We've taken on more medical work than normal, which is making up for the nonessential work dropping off."
- "Luckily, we have not seen a big change yet, but we believe it is coming based on major customers furloughs of employees."
- "Our OEM business flat. But vehicle graphics, which has been 25% of our revenue, is almost dead."
- "Production has stayed the same, or possibly increased due to us manufacturing PPE. But since we are trying to get them to where they're needed as inexpensively as possible, our profit margin has decreased."
- "We are still working. Some staff have opted not to work even though there is work available. Overall, a bit of a slowdown not terrible yet."



Package Printers/Converters

Average Change in Sales Last 30 Days: - 15.3%

Results are less depressed than in other segments because a number of package printers/converters surveyed serve industries such as pharmaceuticals, healthcare, and packaged-food, which have grown throughout the COVID-19 crisis. Specifically, 56.2% report sales have increased (31.3%) or held steady (25.0%) over the last 30 days, significantly greater than the 43.8% who report sales have decreased. Sharp declines, however, are not uncommon: Sales are down at least 20% for more than one-third and at least 40.0% for one-quarter.



Q. What has happened to your total sales (all sources) over the last 30 days? n=32

Index of Current Indicators: 45.0

Significant percentages report sales (48.3%) and production (41.4%) are trending down, in part because panic buying of packaged foods is subsiding. Except for prices, which are holding steady for 89.7%, more report production, employment, and pre-tax profitability are trending down than report the opposite.

	Current Trend				
Indicator	Increasing Staying the Same Decreas				
Sales	44.8%	6.9%	48.3%		
Production/Amount of Work	41.4%	17.2%	41.4%		
Employment	20.7%	44.8%	34.5%		
Prices	6.9%	89.7%	3.4%		
Pre-Tax Profitability	13.8%	37.9%	48.3%		

Q. How is business trending? Please indicate whether each of the above is increasing, not changing, or decreasing? n=32



Index of Leading Business Indicators: 44.0

Higher percentage report decreases in work-on-hand, quote activity, and production payroll hours than report increases. Expectations for the next month are all over the lot: 17.2% expect business to improve, 41.4% expect no change, 20.7% expect further decline, and 20.7% don't know what to expect.

	Current Trend			
Indicator	Increasing	Staying the Same	Decreasing	
Work-On-Hand	31.0%	27.6%	41.4%	
Quote Activity	27.6%	24.1%	48.3%	
Production Payroll Hours	34.5%	24.1%	41.4%	

Q. How is business trending? Please indicate whether each of the above is increasing, not changing, or decreasing? n=32

	Over the next month, we expect business to:				
Indicator	Improve Staying the Same Decline Not Sure				
Confidence	17.2%	41.4%	20.7%	20.7%	

Q. In relation to current conditions, do you expect business conditions for your company to improve, stay the same, or decline over the next month?

n=32

Comments on Current and Expected Business Conditions

- "Overall sales are up. The food sector of our business is up quite a lot, while the non-food sector (industrial) is dying. We made a big investment in equipment and people, so our profits are down."
- "We have seen strong increases in certain sectors of our client base: food and nutraceuticals have been very strong."
- "Our primary product is rice packaging, and rice sales have been higher than normal."
- "Labels are growing."
- "It is a race to keep store shelves stocked with food, beverage, and household items."
- "Strong sales in January and February. From mid-March there was a big peak in purchases, following the panic buying in grocery stores (our major market), followed by a softening of incoming orders."
- "All event-based projects have been canceled or postponed. The only business we are receiving is for to-go beer and hand sanitizer bottles."



Section 3 — Taking Action

"We are working on new selling ideas... Never give up!"

NAPCO/SGIA COVID-19 Print Business Indicators Research participant

The numbers are exactly what we'd expect given large swaths of the American economy have been shut down. The bright spot is the decisive actions many we surveyed are taking to protect their companies from the coronavirus crisis and prepare for the recovery to follow.

The actions are summarized below. They are not broken out by segment because they are universal: Every printing company should be taking them.

- Protect employee health. Priority #1. A sampling of the steps being taken to achieve it:
 - "Screening all employees at start of shift (including temperature). Face masks required. Social
 distancing monitored. Hand sanitizer readily available. Additional sanitizing of common areas/tools.
 Personal speakers with microphones provided for use with masks to aid communication. Daily
 video from owner with information, tips, and reminders. Doors which can be propped open are and
 those that can't have a 'foot handle.'"
 - "We have a full-time cleaner who takes peoples temperatures every four hours and sanitizes all high touch services."
 - "Disinfecting work areas three times per day. Locked front counter: No customer access without calling first, and we go to their vehicle with materials, if possible. Cleaning and disinfecting after each person who is at our counter. Closing one-half hour early to disinfect at the end of day. All wearing gloves and face masks."
 - "Separate shifts of employee no overlap. Sanitizing products available. Teams scheduled to sanitize work and common areas three times daily. Employees cleaning their work areas throughout the day. Facial masks provided. Gloves provided. Air filtration machines in work areas. Employees in facility separated by minimum 6' distance. Information provided on COVID-19 and CDC guidelines. If employee does not feel comfortable coming in to wok, will try to adapt role so can work from home."
 - "About 60% of the company is working from home. Those working in our facility are practicing CDC best practices: social distancing, wearing masks, washing hands, etc. Additionally, we have spaced out break room areas, assigned multiple people to full-time cleaning and disinfecting duties, relocated administrative personnel to create additional spacing, implemented plastic shields in manufacturing for equipment that requires folks to work near each other, and added 30-minute gaps between production shifts."



- "Social distancing. Hand washing/disinfecting on a regular basis. Common-touch surfaces (door handles, bannisters, etc.) are disinfected a minimum of seven times per day. Remote work instituted whenever possible. No visitors. Procedure in place in case an employee is diagnosed with COVID (action plan, contact tracing, procedure for general disinfection, etc.)."
- Control costs and protect cash flow. Judiciously reducing salaries and hours. Discontinuing
 contributions to 401K programs. Minimizing nonessential costs. Delaying purchases and the payment of
 invoices, when possible. Pursuing all sources of aid, both public, such as the Paycheck Protection
 Program and SBA Economic Injury Disaster Loans, and private, such as Google and Facebook grants.
- Focus on growth. As noted in Section 2, some industries are growing rapidly as the pandemic boosts demand for their products. Many we surveyed are going after them. While the industries are easy to identify, knowing which, if any, are opportunities requires thoughtfully answering questions such as, Can we service those markets efficiently? Do they fit our resources and capabilities? How quickly can we gear up to serve them?
- **Employee support.** We heard about everything from "checking in with everyone to make sure their needs are being met" to "paying staff to 'volunteer' in the community" to "interest-free loans to staff who are affected by the virus."
- Prevent a temporary separation from becoming permanent. If we must lay off top employees, the
 objective immediately becomes making sure the separation does not become permanent.
 Recommendations from our survey group include discussing the generous unemployment benefits
 authorized by the CARES Act; local sources of aid, private as well as public; and everything the
 company is doing to remain viable and maximize the likelihood that their jobs will be waiting for them
 when the crisis is over. Here's how one package printer/converter explains it:

"We placed as many employees as possible on reimbursement program to keep them on payroll. We have released other employees so they can take part in the unemployment program of getting \$600 a week over what they can get from regular paycheck with understanding that they will return to full time employment with the company ASAP."

- Stay in touch with clients, particularly through social media. It wasn't mentioned often, but this important action dovetails with the recommendations of "How Retailers Can Reach Consumers Who Aren't Spending," Christine Moorman and Torren McCarthy, hbr.org. We need current, detailed, actionable intelligence on how COVID-19 is affecting clients and how they are responding. Social media can help us get it. Join their LinkedIn networks, Facebook networks, and the forums they participate in not to sell but to listen, observe, and learn. As Moorman and McCarthy put it: "Social distancing has resulted in a huge spike in social media traffic. If that is where your customers are, that is where you want to be."
- Enhance Web and ecommerce capabilities. We heard about beefing up online sales, marketing, product demonstration, educational/advisory capabilities, etc. because even when social distancing has eased, clients may still want to do more business over the Web.

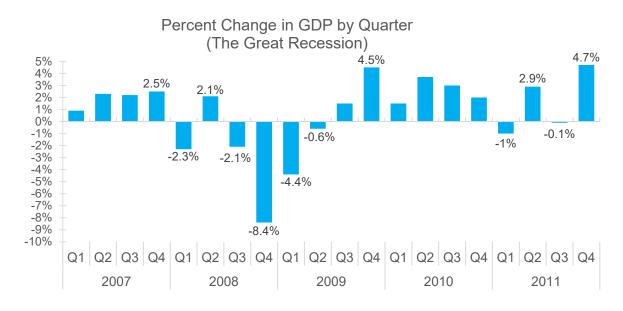
The consensus among the large, diverse group of participants in the inaugural NAPCO/SGIA Print Business Indicators Research Survey: No printing company must take this lying down, wait for another round of government stimulus, or hope the economy reopens soon. That's positive news the numbers don't capture.



Section 4 — The Economy

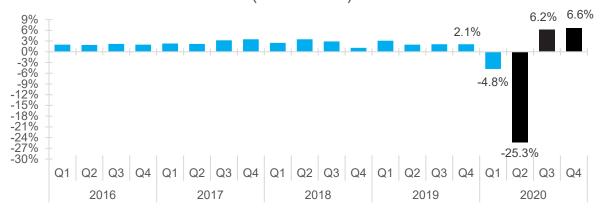
Throughout history, the U.S. economy has been forced to traverse many tough times but the current conditions are truly unprecedented. Although the 1918 Influenza Pandemic was accompanied by economic contraction, the virus was only one part of the problem. The manufacturing sector was ceasing wartime production and took time to shift back to normal operations, and a large number of troops were returning home which kept unemployment up for a period of time. While the current downfall obviously is not facing all of the same problems, there hasn't been a shutdown of current proportions since this pandemic more than a century ago. Handling the fallout associated with Covid-19 is undoubtedly a difficult situation to navigate, but if done with cohesion, virus research, modern recession mitigation techniques, and appropriate social distancing guidelines can drastically reduce the severity of the trough in the current recession.

It has been about six years since the U.S. economy has contracted in any manner and more than 10 years since the last recession, but it appears that that streak is finally coming to an end. According to the most recent GDP release, the U.S. economy declined at a 4.8% annual rate last guarter, which follows growth of 2.1% in the fourth quarter of 2019. The reasons for contraction are quite obvious as there were global supply chain disruptions across all industries, which resulted in widespread layoffs. Stay-at-home orders and state-mandated business closures also heavily reduced consumer spending. Although some states are beginning to lift some stay-at-home orders and reopen parts of the economy, it will most likely be a slow and tiered process that will keep second quarter GDP significantly negative. According to The Wall Street Journal Economic Forecasting Survey, economists and analysts believe that second quarter GDP will reflect the worst of Covid-19 effects, with GDP declining at a 25.3% annual rate, nearly 3 times greater than the trough of the Great Recession. On a positive note, these same projections indicate that there will be an uptick in the third and fourth guarters of 6.2% and 6.6% respectively, which would be the highest seen since 2003. In an attempt to compare and contrast the two 21st century economic downturns, the figures below show the percent change in GDP by quarter for the two periods. It is important to note that percent change is at annual rate using actual data for Q1 2007 - Q1 2020. The Wall Street Journal Economic Forecasting Survey consensus is used to produce Q2-Q4 2020 numbers.





Percent Change in GDP by Quarter (2016-2020)



While this anticipated drop in the 2nd quarter may seem steep, there is potential for a quick recovery. Although many Americans are familiar with the length of the Great Recession, it is important to note that not all recessions are the same. When many large financial institutions failed in 2008, firms were forced to close their doors for good and many jobs were lost. Now, many businesses were forced to close and furlough workers, but a majority of these jobs will be available again once virus concerns are eased. In an attempt to make sure this is possible, the U.S. is providing unprecedented stimulus across several avenues. The Paycheck Protection Program is one form of this aid and is the main driver in an attempt to keep small businesses afloat. Although the program has gotten off to a rocky start, those in charge are becoming familiar with some of the nuances of the program as they are attempting to patch up some of the previous mistakes that were made in terms of who should be receiving funding and how quickly they should get them. The program is already on its second round of funding and, depending on how long it takes for a widespread reopening, it will likely require an additional injection of funding.

Another attempt to ease financial strain on the economy is to aid consumer spending and sentiment, which were anchors of the record-breaking expansion prior to Covid-19. To do this, unemployment benefit restrictions have been eased and payment amounts have been increased to the point where the average furloughed worker is receiving more than \$900 per week. Unemployment benefits of this magnitude have never been seen before. Federal and state funding on unemployment exceeded \$15 billion during the last week of April. In comparison, after the Great Recession, spending was near \$4 billion per week. The amount of aid benchmarked for this group will decline as more states begin to develop and implement their plans to reopen.

Many will continue to lean on the Fed and Congress as it is expected that trillions more will need to be injected into the economy to dampen the effects of the pandemic. Although the Federal Reserve's balance sheet sits at just under an unprecedented \$6.5 trillion, some analysts believe that this number could approach \$10 trillion before this crisis is all said and done. In any circumstance, a heavy injection of funds through fiscal or monetary policy must be done carefully as inflationary side effects could present themselves.

In present day economics there is a split between two schools of thought when it comes to the current situation. Those who preach a more traditional approach believe that such a heavy injection could cause high inflation once the economy begins to regain its footing. The reasoning behind this comes from the



expectation that there is more money available to purchase the same amount of goods as before, which in turn creates an opportunity for prices to rise. In turn, this decreases the buying power of the U.S. dollar. When inflation exceeds the Fed's target 2.0% annual rate, it is typically tempered by a series of moves to reduce liquidity that typically end with increasing interest rates. In the end, a spike in interest rates could prove to be dangerous when it comes to payments needed to reduce the national debt. Many believe that the debt bubble popping will be a trigger of the next major economic downfall.

On the other side of the fence, proponents of Modern Monetary Theory (MMT) believe that a country can continue to inject money during the bad times without worry about inflation as long as there is unused economic capacity or unemployed labor. The cornerstone of the theory states that as long as a country controls its own currency, then it can basically print its own money to pay interest. It also believes that raising taxes is another answer to reducing inflation and taking money out of private hands. One criticism of this is that it wouldn't be a great idea to raise taxes when the public is already dealing with high prices from inflation. Of course, there are other criticisms of MMT, but proponents suggest that there isn't much to worry about regardless. They point to the period after the Great Recession as evidence that large stimulus can be injected without inflationary fears. Inflation has not been much of a concern since the Great Recession as it has always been relatively close to the Fed's target.

Policy decisions of a new or existing administration will guide us after recovery with hopes of replicating the length of the previous expansion. Only time will tell whether or not the national debt or inflationary concerns will wreak havoc in the future.

Other developing stories to keep an eye on:

- Canadian officials believe that 79% of their deaths are linked to long-term care facilities and seniorliving homes.
- After easing restrictions Germany has seen an increase in the number of infections.
- Some states, most notably Texas and Ohio, have laid out plans and expected dates for a tiered reopening. If successful, it is anticipated that other states will quickly follow suit.
- The Federal Reserve announced that it will expand eligibility for its Main Street Lending Program to include companies with up to 15,000 employees or \$5 billion in revenue.



WHO WE ARE



In a milestone in the printing industry, on May 1, 2020, SGIA and PIA officially combined to create PRINTING United Alliance, the largest, most comprehensive member-based printing and graphic arts association in the United States. Members now have unparalleled access to preeminent education, training, workshops, events, research, government and legislative representation, safety and environmental sustainability guidance, as well as resources from the leading media company in the industry – NAPCO Media.

PRINTING United Alliance produces the PRINTING United Expo and Conference, the three most important days in printing. This year, PRINTING United takes place in Atlanta on October 21-23, 2020. This expansive display of printing technologies and supplies, education, programming, and services are showcased to the industry at large, and represents all market segments together under one roof. For more information, visit PRINTINGUnited.com.

