

Industry Outlook and Firm Performance (Nationally, Regionally, and by Revenue Categories)

PRINTING INDUSTRY PERFORMANCE & INSIGHTS

Providing regional printing association members
a printing industry outlook view and actionable knowledge.

January
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Industry Outlook and Firm Performance **(Nationally, Regionally, and by Revenue Categories)**

This report shares the January PIPI study findings related to industry outlook and performance. We explore industry outlook and performance from multiple perspectives: national, regional, and multiple revenue categories.

So, what are the benefits of taking a broad view of our industry's outlook and performance? Consider the following:

- If you are considering purchasing software, equipment, or other assets, these outlook and performance views may reinforce the decision to move forward with those investments, or they may prompt you to reconsider those paths.
- If your outlook or your firm's performance is not as strong as others, then you might step back and ponder why your perspective is different.
- If you are preparing to grow your firm, merge with another firm, or acquire a local business from another region, these outlooks may contribute to your reasoning.
- In addition, the performance numbers we share may provide helpful benchmarks.

Also in the January PIPI study, we identified different production/product groups in the printing industry. From those groups, we provide some helpful knowledge. We share those findings in another report.

Key Takeaways

- Consistent with previous PIPI studies, printing business leaders have a positive outlook for their businesses.
- Printing firm leaders' relatively positive outlook is encouraging in the context of the current workforce shortages and supply chain issues.
- Our findings suggest leaders of large printing companies have a more positive outlook than leaders of small printing companies.
- We found the most optimistic outlooks in the West, Northcentral, and Southeast regions, and we observed a less optimistic outlook in the Northeast region. Yet, printing leaders' outlooks were positive in all regions.
- Our performance data is relatively positive, indicating that printing companies are growing, reaping profits, and generating returns.
- It appears larger firms are growing more and generating higher profit percentages than smaller companies. However, small firms are generating higher ROA percentages.
- Printing firm performance appears most robust in the Southeast while the Northeast appears the weakest performer of the regions. The
- Southeast's higher performance may connect with that region's more optimistic outlook, and the Northeast's lower performance may connect with that region's less optimistic outlook.

- However, printing company performance is positive nationally, in every region, and in every revenue category.

Outlook

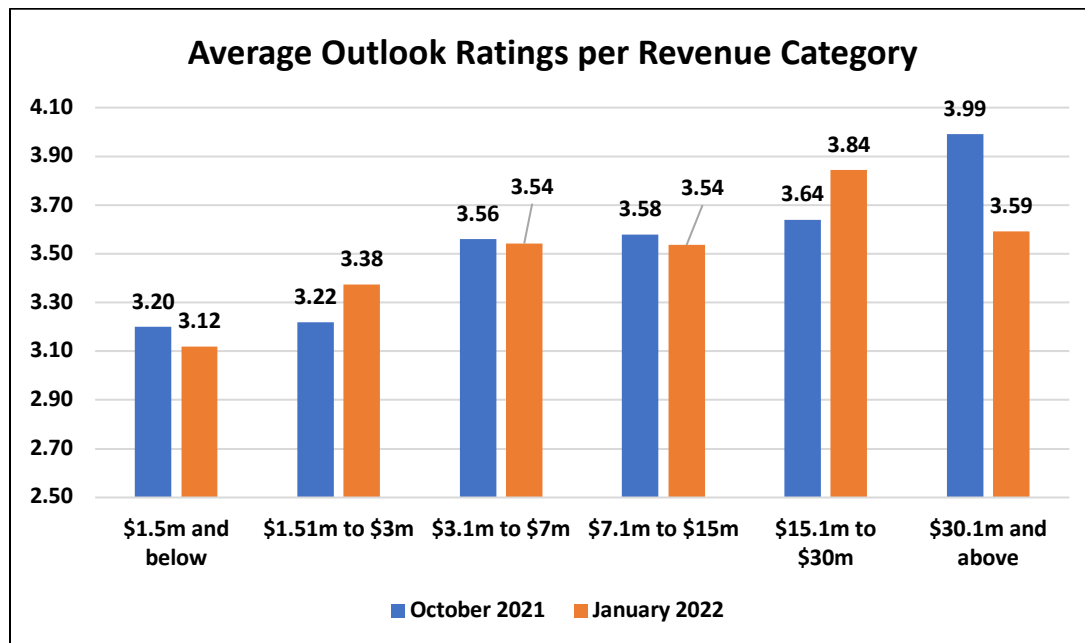
In January, 128 printing firm leaders answered our outlook questions based on a five-point scale (1 = Very pessimistic; 2 = Pessimistic; 3 = Neutral; 4 = Optimistic; 5 = Very optimistic). The average response was 3.5, right between neutral and optimistic. It's interesting that in the context of inflation, supply chain issues, workforce shortages, and Covid's lingering, printing leaders' have a somewhat optimistic outlook. January's national outlook average is very close to what we found in October, 3.48.

One hundred twenty-six respondents provided their firms' approximate annual revenue. We divided the responses into six revenue categories. Here are the numbers of responses for each revenue category:

Revenue Category	Responses
\$1.5 million and below	23
\$1.51 million to \$3.0 million	16
\$3.0 million to \$7.0 million	30
\$7.1 million to \$15.0 million	21
\$15.1 million to \$30.0 million	24
\$30.1 million and above	11

Illustration one provides the average outlook ratings per revenue category from our October and January studies. As shown in illustration one, our data indicate that printing business leaders' outlook optimism improves as revenue is higher, except for our largest category (\$30.1m and above). Having only 11 responses in the *\$30.1m and above* revenue category may have caused that dip. However, the 3.59 average rating for *\$30.1m and above* is higher than the average outlook ratings of the three smallest revenue categories. As we saw in October, leaders of large printing firms have a slightly more favorable business outlook than those of smaller printing firms. Reinforcing this view, the average outlook for the three smallest revenue categories is 3.35, yet the average outlook for the three largest revenue categories is 3.66. However, all the categories were above neutral (3.0), at least leaning slightly toward optimism.

Illustration One



(1 = Very pessimistic; 2 = Pessimistic; 3 = Neutral; 4 = Optimistic; 5 = Very optimistic).

The findings from October and January are consistent with our spring 2021 study; we found a more positive outlook among leaders of larger printing firms there, too (that study included five regional associations). We shared these results with some folks tightly connected to the industry. They shared the following thoughts as to why leaders of larger printing firms have a more positive outlook:

- 1) It's possible that large companies are more diverse, which reduces risk.
- 2) Large firms tend to have larger management teams with members who handle HR, finance, accounting, and sales management, which may allow leaders of larger firms to focus more on critical issues.
- 3) With deeper pockets and more leverage with vendors, large firms may handle current supply chain issues better.

We will see if this trend continues.

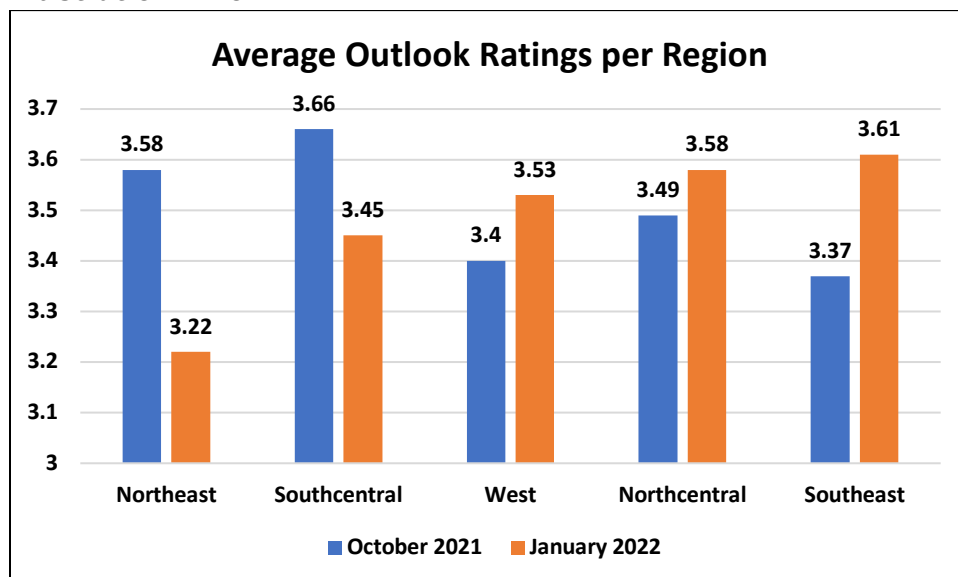
One hundred seventeen respondents reported their home state locations. We divided the responses into five geographic regions. We identify the states included in each region at the end of this report. Here are the number of responses per region:

Region	Responses
Southcentral	15
Northcentral	18
Northeast	23
West	25
Southeast	36

Related to our findings, which suggest that leaders of large firms have a more positive outlook, it appears that each region includes a wide variety of firms in size. Therefore, we don't think firm size affected the regional average outlook ratings.

Illustration two shows the average outlook rating for each region as drawn from our October and January studies. It appears that as of January, printing firm leaders from the Southeast and Northcentral regions had the most positive outlook, and the West and Southcentral are not far behind. It appears printing company leaders in the Northeast have the lowest outlook with an average significantly lower than the other regions. However, keep in mind the averages in all five regions are over three, between neutral and optimistic and relatively positive. Relative to October, Southeastern printing firm leaders' outlook improved significantly, and those in the Northeast declined slightly. In our October PIPI study of supply chain issues, it appeared that firms in the Northeast are having more shipping problems, which may have prompted the decline of business outlook among Northeastern firm leaders. However, one industry-connected contact suggested the tightening of Covid restrictions in the West and Northeast may have prompted outlook declines in those regions. The Southeast's relaxation of regulations may have enhanced that region's outlook a bit.

Illustration Two



(1 = Very pessimistic; 2 = Pessimistic; 3 = Neutral; 4 = Optimistic; 5 = Very optimistic)

To summarize, it appears that printing business leaders have a positive outlook for their firms. Indeed, among leaders who completed the outlook questions, only 13 leaders had an outlook average of less than three, and there were no entries under two.

Performance

In assessing performance, we requested the following numbers:

- Percentage change between fourth-quarter 2021 total revenue (October, November, December) and third-quarter 2021 total revenue (July, August, September)
- Percentage change between 2021 and 2020 total annual revenue
- Approximate EBITDA (earnings before interest, taxes, depreciation, and amortization) as a percentage of revenue
- 2021 approximate net profit as a percentage of revenue
- 2021 percentage Return on Assets (ROA)

In future studies, we may ask for different numbers...we'll see what works. After cleaning the data (for example, some entries had higher net profit percentage than EBITDA percentage, and some had positive profit percentages and negative ROA percentages), we had usable numbers from 110 firm leaders. We very much appreciate leaders sharing these numbers! Here are the overall averages from the complete set of entries with the number of responses for each question:

- One hundred and eight firms reported their 2021 3rd quarter to 4th quarter percentage revenue change, and the average was a 6.72% increase.
- Ninety-eight firms reported their 2020 to 2021 annual percentage revenue change, and the average was a 12.35% increase.
- Eighty-seven firms reported their EBITDA as a percentage of revenue for 2021, and the average was 10.54%.
- Ninety-four firms reported their 2021 net profit as a percentage of revenue, and the average was 6.83%.
- Seventy-eight firms reported their 2021 Return on Assets (ROA) percentage, and the average was 14.69%.

During these challenging times, our numbers suggest printing firms are growing and are profitable!

Taking a deeper look, we considered the five performance questions based on the six revenue categories applied above. Here are the average number of responses for the five performance questions per revenue category.

Revenue Category	Responses
\$1.5 million and below	13
\$1.51 million to \$3.0 million	10.2
\$3.0 million to \$7.0 million	24.4
\$7.1 million to \$15.0 million	16.4
\$15.1 million to \$30.0 million	19.4
\$30.1 million and above	8

When digesting the information below, one should consider the small number of responses from *\$30.1 million and above* firms.

Illustration three shows the 2021 third quarter to fourth-quarter percentage revenue change. Although we deleted one outlier from the largest revenue category, these numbers suggest a more substantial revenue growth in large printing firms than small firms 2021. Reinforcing this point, the average quarterly growth for the three smallest revenue categories was 5.08%, compared to 9.84% for the three largest revenue categories.

Illustration Three

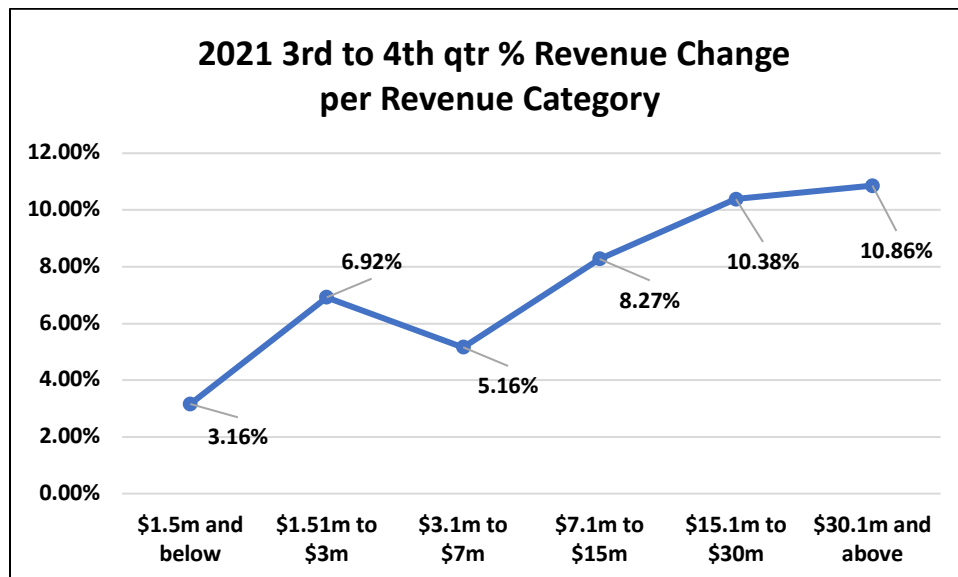


Illustration four provides the revenue category's annual percentage change from 2020 to 2021. Annual revenue growth appears to increase as the revenue category size increases, except for *\$30.1 million and above*, the largest revenue category. Why do we see annual revenue growth fall in the last category? As we only had eight responses in that category for this question, the small sample size may have affected the findings. Also, for a company with \$60 million-dollar annual revenue to grow by 12%, they need

to add \$7.2 million in sales. That's a big piece of pie. As we saw above, the average annual revenue growth for the three smallest revenue categories was 8.32% and 12.36% for the three largest categories. Regardless of the dip in the largest revenue category, that's parallel with the quarter growth percentages just above, supporting the premise that large printing firms are experiencing more growth. One may surmise from these numbers a decent demand for conventional printing. We'll see if future studies support that thought.

Illustration Four

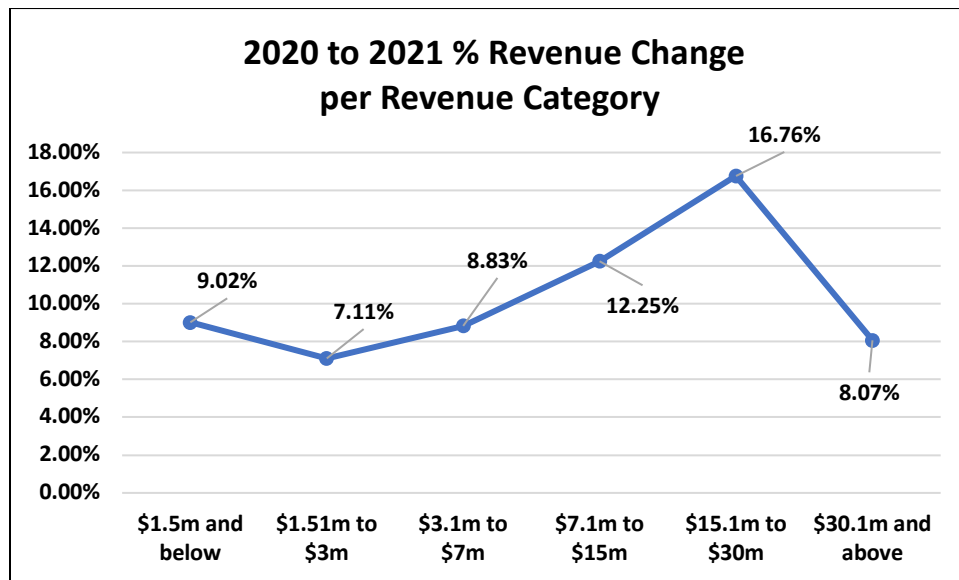


Illustration five provides EBITDA as a percentage of revenue per revenue category, and illustration six provides net profit as a percentage of revenue per revenue category. Even with the dip in the \$15.1 million to \$30 million category, it appears large printing firms are more profitable. Comparing the three small categories to the three large ones supports that premise. When considered together, the three small categories have an average EBITDA percentage of 8.90%, and the three larger categories have an average of 13.19%. Similarly, the three small have an average net profit percentage of 5.65%, and the larger categories have an average of 8.36%. From a big picture, these EBITDA and net profit percentages indicate that printing companies are making money.

By the way, given that a firm's debt level drives interest costs, depreciation is driven by an asset's lifespan as applied by owners, and tax rates vary among states – EBITDA is a good performance benchmarking tool. In future studies assessing performance, we will probably request EBITDA percentages again. If you are not including EBITDA calculations in your income statements, you might add that metric so you can easily compare your firm's performance to our findings.

Illustration Five

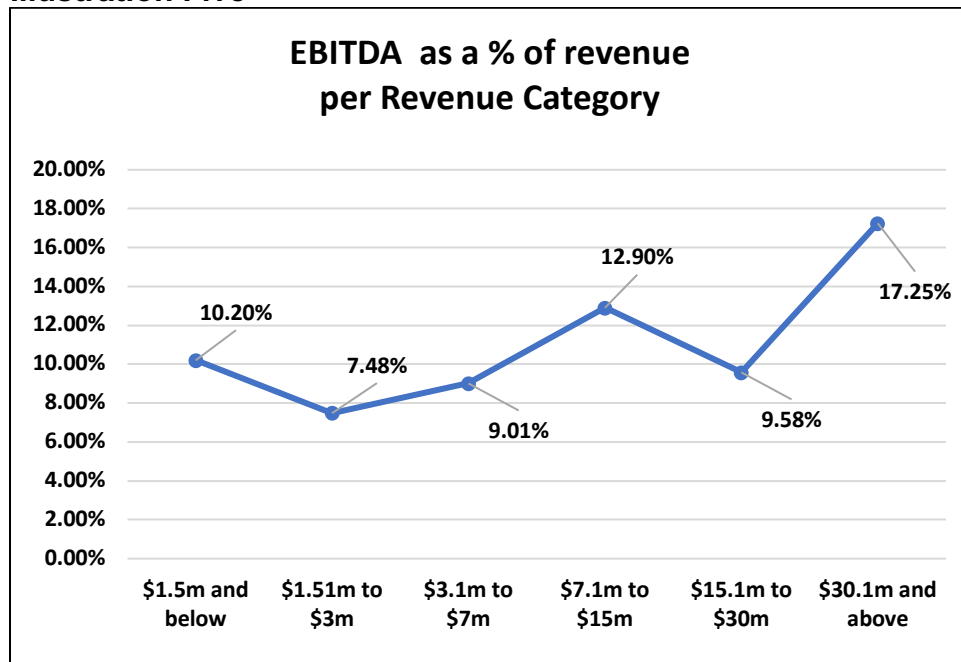


Illustration Six

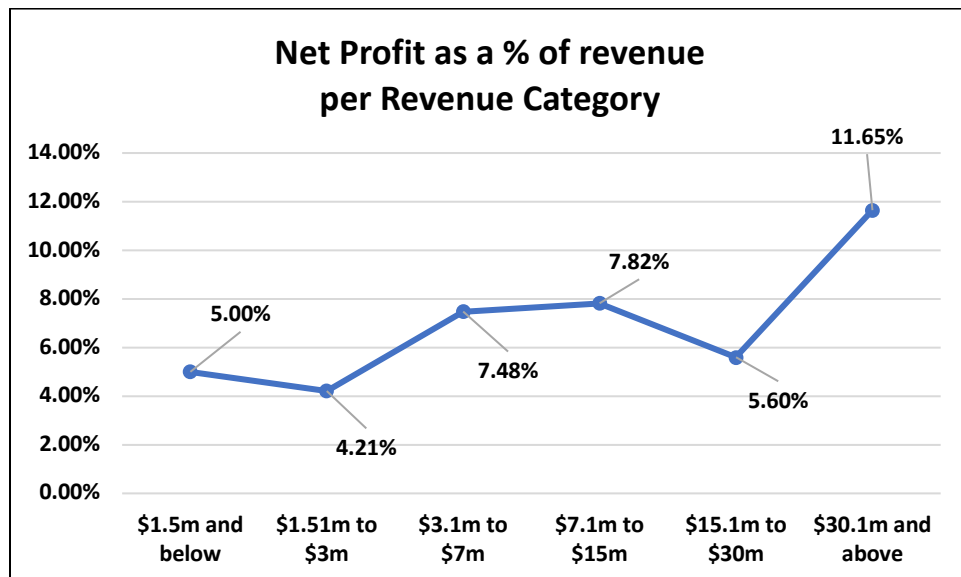
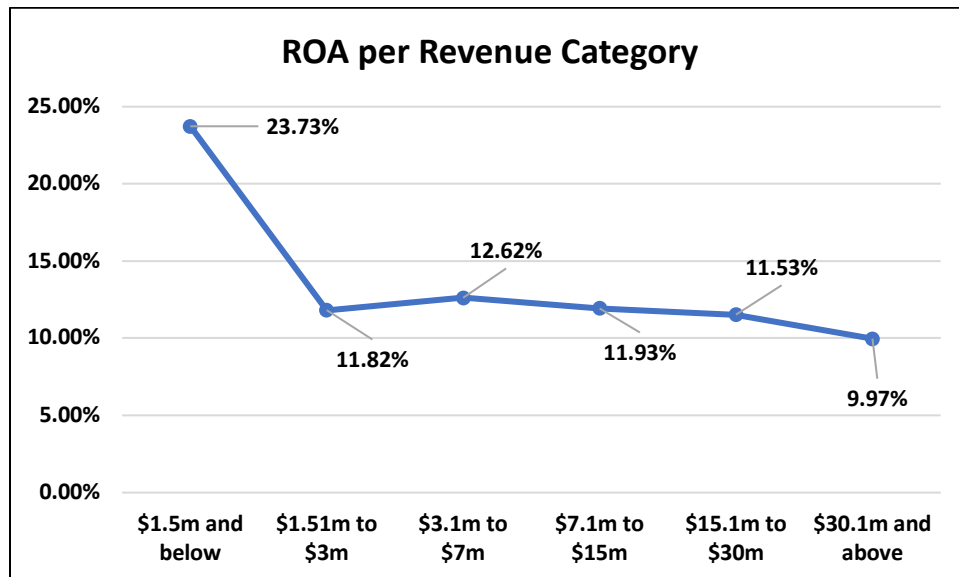


Illustration seven provides our ROA findings per revenue category, which we found very interesting. Although in illustrations five and six, EBITDA and net profit percentages appear higher in large firms, the highest ROA in our findings is associated with the smallest revenue category, *\$1.5 million and below*. After pondering these numbers, we assumed that the smallest printing companies are more digital and invest less in equipment than larger companies that purchase presses, folders, and bindery

equipment. If that's true, smaller firms may have higher ROAs because they require less assets to produce a profit.

Among the five large revenue categories, another aspect of the ROA numbers that caught our attention was the 9.97% to 12.62% ROA range. Given well-diversified mutual funds should provide around 10% returns, one would expect ROAs higher than these 9.97% to 12.62% returns. When considering purchasing assets, printing company leaders might project future ROAs (how will the new asset affect profits and ROA) and consider those numbers.

Illustration Seven



We also assessed the five performance questions per region. Here are the average number of responses for the five performance questions per region:

Region	Responses
Southcentral	11.4
Northcentral	12.8
Northeast	16
West	21
Southeast	22.8

Illustrations eight through twelve show averages for our five performance questions per region. We ranked regions for each question to understand how printing firm performance varies between the five regions (1 = lowest performance, and 5 = highest performance). Here are the average rankings:

Region	Ranking
Northeast	1.6
Northcentral	2
Southcentral	3.2
West	3.4
Southeast	4.8

From this arbitrary approach, one might surmise that the strongest performing printing firms are in the Southeast, those in the West and Southcentral are in the middle, and firms in the Northeast and Northcentral are a bit below the other regions. Are higher performance reports affecting the Southeast region's relatively strong outlook? Maybe. However, one must keep in mind that we see positive printing firm performance in all regions!

Illustration Eight

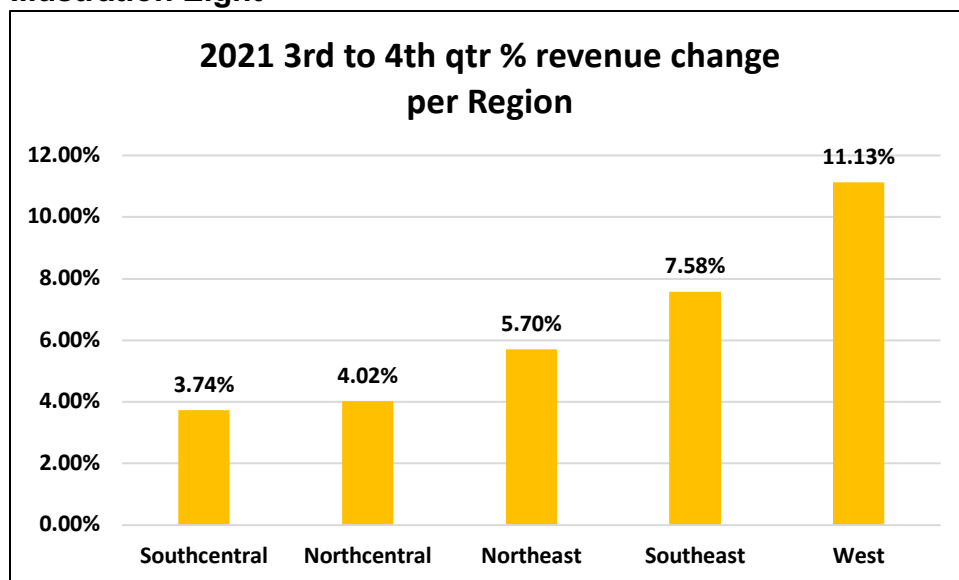


Illustration Nine

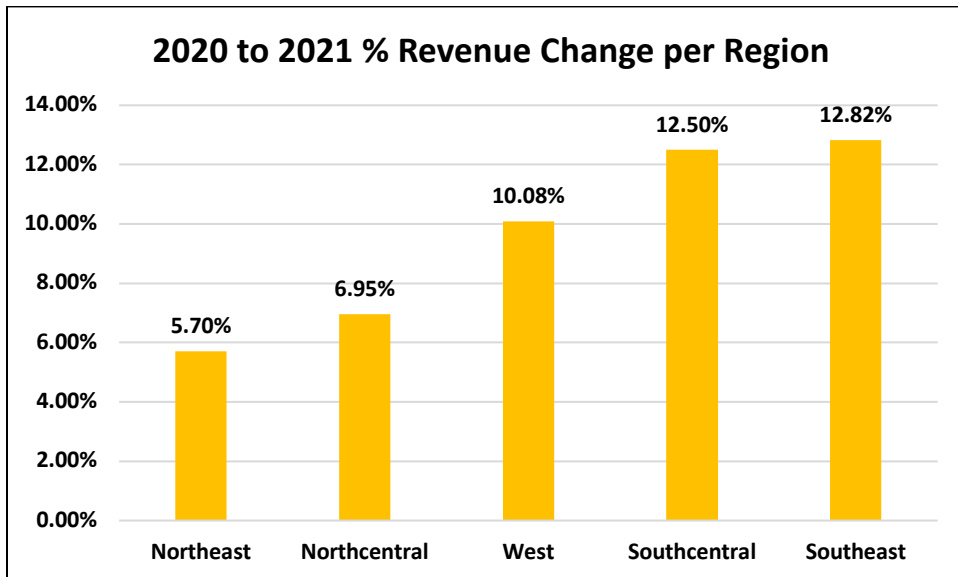


Illustration Ten

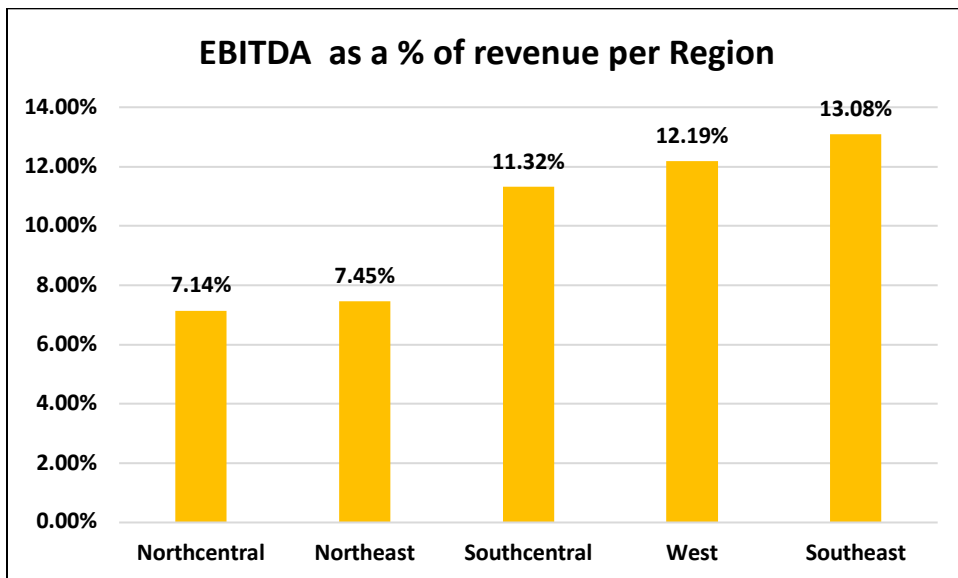


Illustration Eleven

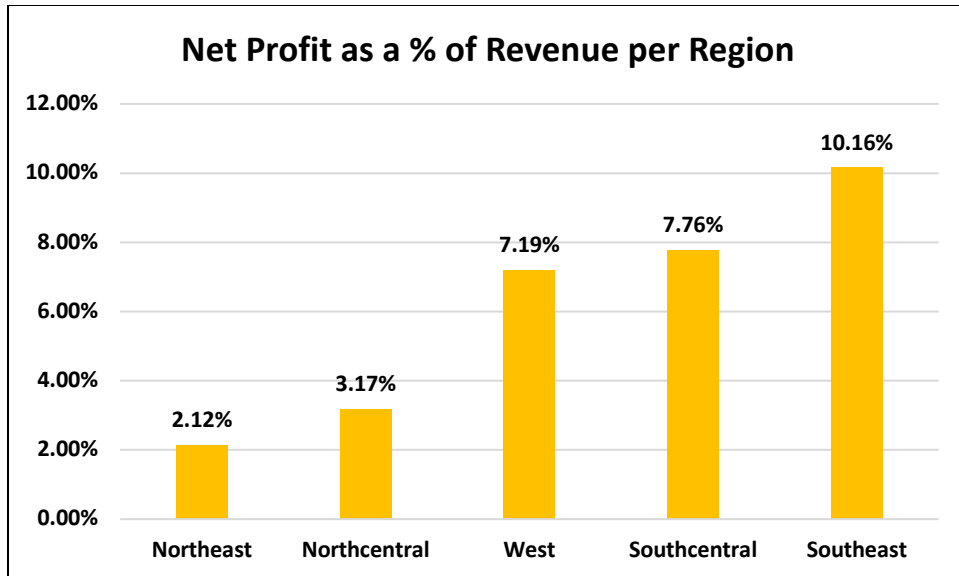
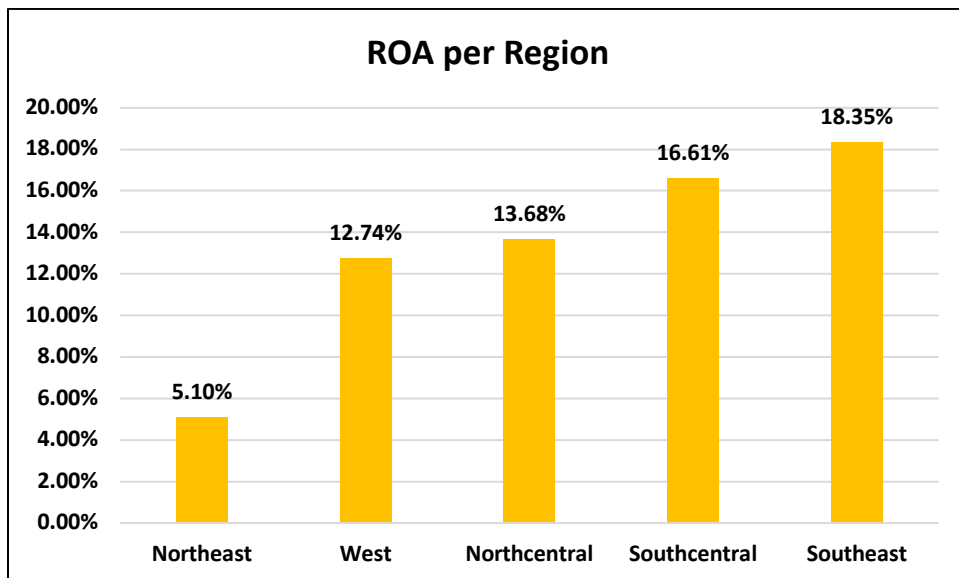


Illustration Twelve



Generally, regardless of revenue category or region, we see decent performance among responding printing firms, supporting the positive outlooks described above.

As we conduct more studies, we hope to explore industry trends, both for outlook and performance. Here's the big message from our January results: printing company leaders are mostly optimistic, and printing firms are performing nicely.

We hope you find this material helpful in decision-making and provides valuable benchmarks. If you have questions or comments, please email Dr. Ralph Williams at ralph.williams@mtsu.edu

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States Included in Each Region

Northcentral

Illinois
Indiana
Michigan
Minnesota
Nebraska
Ohio
South Dakota
Wisconsin

Northeast

Connecticut
Maryland
Massachusetts
New Hampshire
New Jersey
New York
Pennsylvania

Southcentral

Arkansas
Kansas
Louisiana
Missouri
Oklahoma
Texas

Southeast

Alabama
Florida
Georgia
Kentucky
Mississippi
North Carolina
South Carolina
Tennessee

Virginia
West Virginia

West

Arizona
California
Oregon
Utah
Washington

Participating Regional Printing Associations

FGA – Florida Graphic Alliance

GAA – Graphic Arts Association

GLGA – Great Lakes Graphics Association

GMA – Graphic Media Alliance

PGAMA – Printing and Graphics Association Mid-Atlantic

PIA – Printing Industries Alliance

PIAMA – Printing and Imaging Association MidAmerica

PIAS – Printing Industry Association of the South

PIASC – Printing Industry Association of Southern California

PIASD – Printing Industry Association of San Diego

PICA – Printing Industry of the Carolinas

PIMW – Printing Industry MidWest

PINE – Printing Industries of New England

PMA – Print Media Assoc.

VMA – Visual Media Alliance