2020

THE STATE OF THE BOOK INDUSTRY

Executive Summary

The *State of the Book Industry 2020* provides an overview and examination of current trends and issues impacting American book manufacturers. The report begins with a macroeconomic scan and funnels down through various book manufacturing topics, ending with an examination of key management issues book manufacturers will likely face in this environment.

The U.S. began the year looking as if it would simply maintain the status quo of slow-but-steady growth, but that sentiment quickly changed as a combination of external forces has made the future more uncertain. Coronavirus fears have prompted global quarantines, which are adversely affecting global supply chains and consumer sentiment. Saudi Arabia and Russia have announced that they will continue to increase their oil production levels, which has driven down the price per barrel to levels that have not been recently seen. Both of these issues are already enough to pull down growth, but throw in the uncertainty of an election year, and it appears that the perfect storm has brewed to end the record breaking expansion.

The U.S. manufacturing sector hit a rough patch at the end of the year but then rebounded in January and February. However, the optimistic industry sentiment was soon thwarted as fallout from virus fears disrupted supply chains across all industries.

After the first couple of months of 2020, it appeared that the U.S. would be able to persevere through tough times and manage at least sluggish growth, but that is no longer the case. With estimated first quarter GDP near 1% and negative rates expected to follow in quarter two, it is safe to say that this country is on the verge of a recession. We must now watch how the country responds in order to estimate how long it will last. The best case scenario is that we will once again see growth during the third quarter, but this is unlikely as we would need to see the virus subdue quickly and a swift return to the norm for many different sectors. In order to see growth in the fourth quarter, which is our most likely scenario, we would still need to have an expeditious response, but this gives the U.S. and other countries around the globe more time to repair supply chains and move back to normal life. There is also a slight chance that the recession could carry over to 2021 and last much longer. This scenario would arise if the infection rates continue to rise and the global economy remains severely disrupted.

Even though book manufacturing is driven by some other forces that are not necessarily present in the general print industry, it is important to understand that there are still many similarities. Throughout the expansion, print markets recovered from the pain felt during the recession. Following a few stronger years, growth has been minimal. According to the most recent Census

Bureau data, print accounted for more than $166.2 billion worth of shipments, had 41,786 establishments, and employed more than 804,400 people. These numbers reflect print's position as a mature industry because the numbers remain similar to previous iterations of this data. The most recent metric from PIA's *Performance Ratios* program shows that profits as a percent of sales is around 2.9% for the average commercial printer.

Quite a few printers offer book printing to customers, but when it comes to firms specializing in this segment, the number is much lower. Most who provide this service say that they provide it as well as a mix of other products. When surveyed jointly by PIA and Middle Tennessee State University (MTSU), 40% of printers indicated that their products and services include book manufacturing.

In terms of employment, jobs in the publishing industry have not only recovered but are expected to surpass levels previously seen once the economy gets back on track. At the beginning of 2020, the BLS reported that job opportunities were near 2010 levels with 768,000. Although this number reflects the publishing sector as a whole and not just the printing end of things, the signs are positive for the industry.

Another issue that printers have had to deal with recently comes from increased paper prices. Paper producers have signaled a rise in prices in the range of 4–7% last May, which means that book manufacturers' bottom lines could be affected adversely as the average firm spends about 25% of sales on this material. Increases in the price of raw pulp, paper mill closures, consolidations, lack of mill capacity, and the repurposing of mill equipment are all stated reasons for the increased prices.

In terms of readership trends, there are quite a few positives to go along with the negatives. People are signaling that they are reading print books at a higher clip than last year's iteration of this report. This is especially true among younger people (between 18 and 29), which yields positive thoughts as the young cohort is always good to have on your side when thinking about growth. Another positive comes from the fact that e-book popularity seems to have reached its peak. The popularity of self-publishing and independent bookstores will also help drive growth in the future. Book manufacturers will have to keep an eye on the rise in popularity of both audiobooks and podcasts and how this affects their standing in the market. Both of these mediums are being consumed at an increasing rate, and their popularity is only expected to rise.

Overall, book manufacturers' financial operations are improving. Book manufacturers participating in the *Ratios* survey averaged before-tax profit on sales of 3.4%. This rate was significantly higher than the all-printer average of 2.9%. The major cost items for book printers were people and paper. The number one expenditure in relation to sales was total payroll cost, which was around 41%. Paper cost comprised an additional 25%, and other materials accounted for an additional 15%.

The employee profile for a book manufacturer demonstrates the preponderance of production employees, with almost eight out of ten employees in this category. The remaining employees were almost equally divided between administrative/executive and sales employees. Book manufacturers also exhibit high levels of investment in plant and equipment, with an average of over $103,000 per employee. At the same time, profit per employee averaged about $6,175.

Throughout 2020, book manufacturers must stay vigilant, look for opportunities to increase revenues and reduce costs, and always have a game plan to adjust to a dynamic economic environment that could present a tough situation for many firms. During the recovery period, when labor demand once again increases, firms must also be willing and able to attract a competent workforce. While facing a tight labor market, this could be challenging, so companies must be willing to get creative and put their best foot forward when it comes to recruiting. Lastly, firms need to take advantage of industry trends and provide services that are increasing in demand if capable of doing so.

The State of the Book Industry 2020

Welcome to *The State of the Book Industry 2020*. This report provides an overview and examination of current trends and issues impacting American book manufacturers. The report starts with a macroeconomic scan and then funnels down through various book manufacturing topics, ending with an examination of key management issues book manufacturers will likely face in this environment. Specific topics include:

- The macroenvironment—current economic forces affecting the book industry
- The print economy and book manufacturing
- Key trends in book readership, consumption, and demand
- Book manufacturers' income and operating metrics
- Key management issues for book manufacturers in 2020

Economic Forces Impacting Book Manufacturers in 2020

The United States economy headed into the new decade on a familiar note. The expansion continued to chug along at a lackluster growth rate. 2019 started out strong, with the economy growing around 3.1% in the first quarter, but the following three quarters were much more muted as growth hovered around 2%. This number was held back mostly by uncertainties regarding trade. Although trade uncertainties have eased, the Covid-19 outbreak has created an unprecedented scenario for our nation and economy. While the advanced estimate for first quarter GDP still indicates that there was positive growth (around 1%), it is safe to say that the economy is going to dip into a recession.

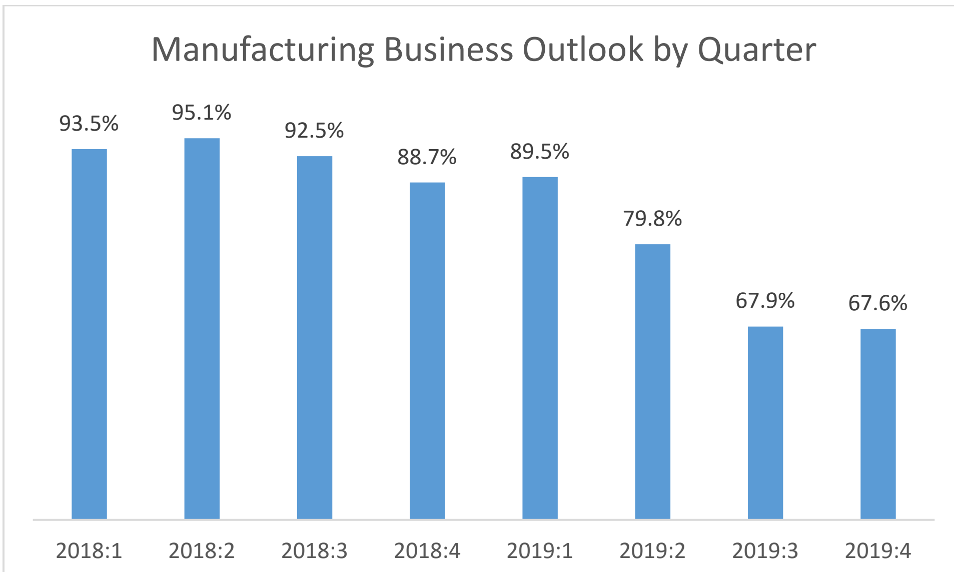
Manufacturing Outlook

The manufacturing sector started out hot in 2019, but things began moving in the opposite direction from the midpoint of the year. The Institute for Supply Management (ISM) puts out monthly reports that track the health of the manufacturing sector.

- In December, the Purchasing Managers' Index (PMI) reached its lowest point since 2009 at 47.8. January, however, ended a 5-month contraction as the number rose to 50.9. The April report indicated that the number dropped back below 50, and it should continue to remain this way until recovery begins.
- Manufacturing employment and inventories continue their streaks of contraction at 8 and 10 months respectively.

- These fluctuations are all occurring as the economy continues its record-breaking expansion with a streak of 131 straight months, but it appears that the buck stops there as growth is no longer expected.
- Due to supply chain issues, we can anticipate heavy contraction across the board for at least the next several months.

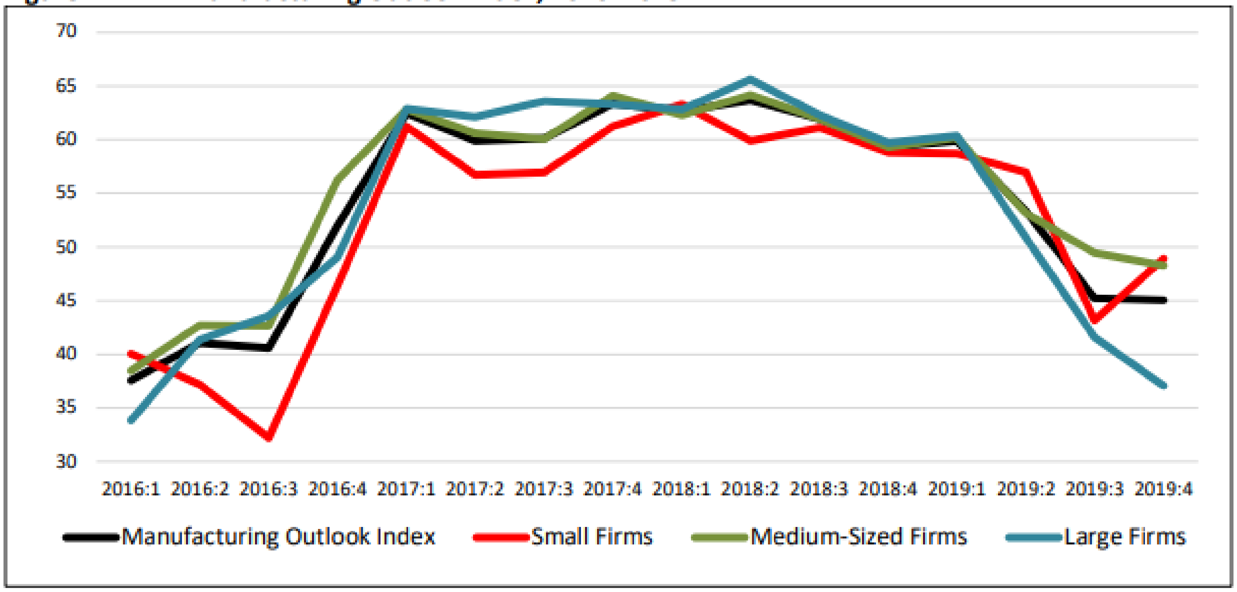
The National Association of Manufacturers (NAM) conducts a quarterly outlook survey, which yielded the following results for the fourth quarter of 2019:



NAM

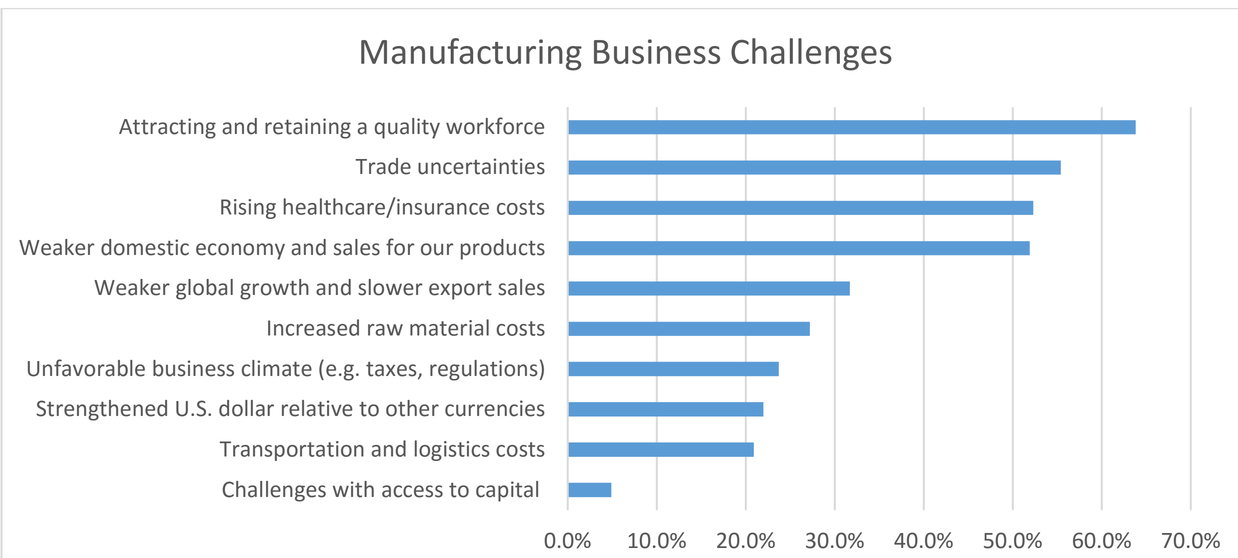
When asked to categorize their business outlook, nearly two-thirds of firms said that they have a somewhat or very positive outlook. Although this number shows that there is plenty of optimism, it is easy to see that there was a huge dip from what was observed throughout 2018 and at the beginning of 2019. Sentiment has been driven down, mainly by large firms (500 or more employees). Part of the reason for this is simply because these larger firms are more likely to do business globally, which means that they were more wary about trade uncertainties and slowing global growth. The chart below shows the outlook for firms of different sizes:

Figure 2: NAM Manufacturing Outlook Index, 2016–2019



NAM

When asked what their primary business challenges were, firms responded in the following way:



NAM

As mentioned before, the low unemployment number was making it hard for firms to bring in qualified and experienced workers. Employees that do currently have positions can also be lured away by other employers who are desperate to fill their roles and who are offering increased pay

and/or benefits. If expansion resumes, this will surely still be an issue, but at the moment, firms may be static or regressive in their employment tactics.
As far as trade uncertainties are concerned, it is hard to say if the halt on certain tariffs will remain when the global supply chain gets back on track, but it is easy to see why this is the second biggest concern for responding firms.

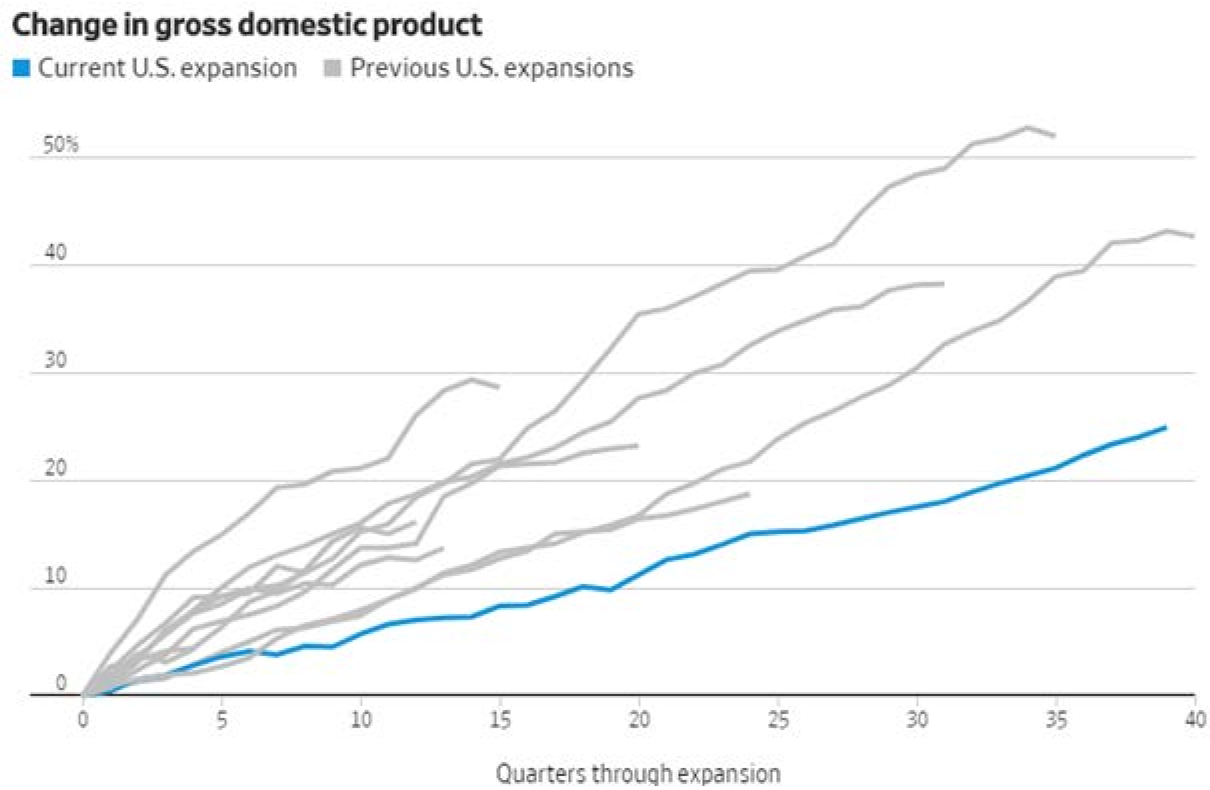
The next biggest concern comes from rising healthcare costs. Until there is serious structural change within the insurance industry, these costs will most likely remain an issue. Low unemployment only enhances this issue as firms must offer competitive benefits in order to attract qualified workers.

The only other issue that more than 50% stated as a concern is a weaker domestic economy, which directly will affect sales. Obviously, there was a right to be concerned about this as we are heading into a recession.

The manufacturing sector persevered through what we thought was the most tumultuous time they have seen in the last decade. The United States-Mexico-Canada Agreement has been passed, and trade tensions with China have finally begun to ease. However, just as quickly as the outlook improved, a negative sentiment has been cast over the industry. As supply chains continue to be interrupted and sales fall, it is important for manufacturing firms to have a plan for a variety of scenarios. Everything from inventory management to employment numbers must be reevaluated in an attempt to push through these uncertain times and come out on the other end either unscathed or with the capability to recover.

2020 Economic Outlook

As mentioned previously, the current expansion continues to break its own record for the longest that has ever been recorded since 1857, the first year this data was tracked. With that being said, the rate of growth has been lower than most previous expansions. It is also anticipated that this expansion will end and the second quarter will bring on the emergence of a recession.

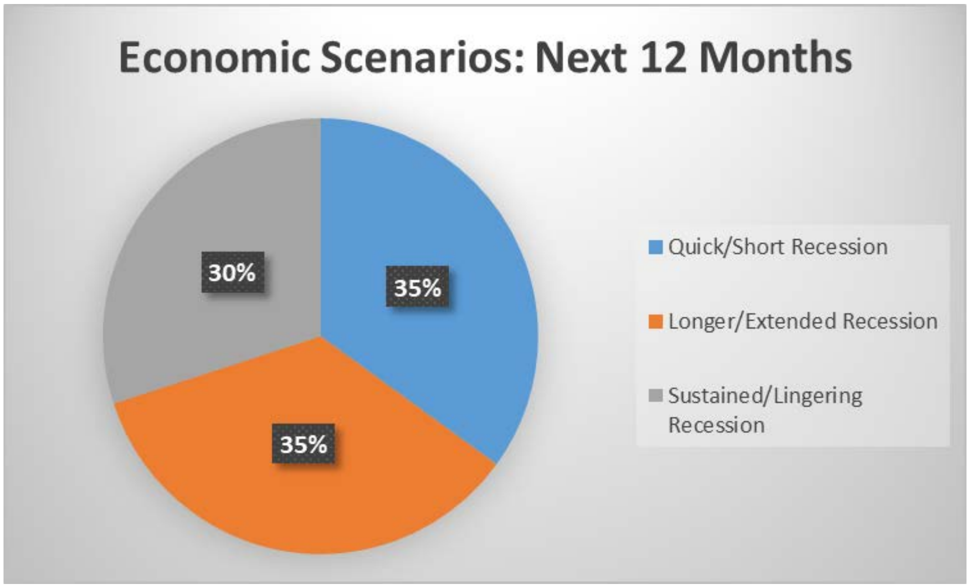


WSJ

Almost every expansion that the U.S. has seen has experienced much higher rates of growth, but none have had the legs of the one that followed the Great Recession. Most are willing to trade a high-growth economy for one that yields slower, longer, and steadier growth. History does tend to repeat itself, however, which means that as expansions continue, the chances increase that we dip into a recession.

At the beginning of March, it appeared that the country may have been able to weather the storm and avoid recession, but as the number of infections continued to rise, the country stepped up its tactics to combat the spread. Through April, much of the country remained shut down, aside from essential business. This shows that the country mostly agrees that these shutdowns are necessary as we see the public value health and human safety over business which is necessary for recovery.

How long will the recession last? There are a few different timetables that are possible. A quick/short recession means that there will be positive growth in the third quarter of 2020 while a longer/extended recession means that we may not see this recover until the fourth quarter. A sustained/lingering recession would mean that the U.S. will not see positive growth until at least the beginning of 2021.



PIA

In a more traditional recession scenario, growth typically reemerges after a couple of quarters of negative growth but could last long or recover sooner depending on the severity. Anticipated growth for the first quarter is near 1% and we can expect an even worse performance for the second as this is when the economy will really begin to feel the effects of the many imposed restrictions.

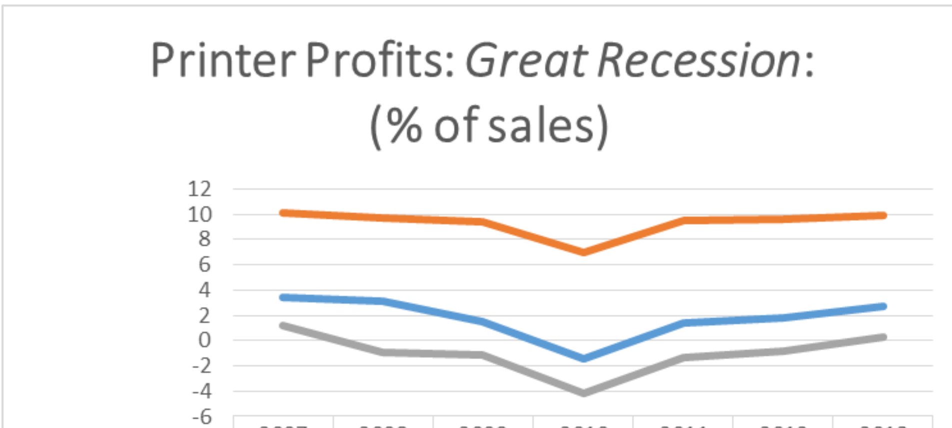
In order for our best case scenario to materialize, most of the following must occur in a swift manner:

- A quick end to the virus threat with deaths and cases declining rapidly
- Rapid recovery of global supply chains
- A quick end to the trade wars with signed agreements between the U.S. and China
- Some reduction in the range of political uncertainty with the upcoming elections
- Significant intervention by the Fed
- A quick recovery in optimism and financial markets

- Fast repairs and adjustments to global supply chains
- The kicking in of pent-up demand to make up for the business lost in the first quarter
- Consumer confidence rises and normal spending habits resume.

In our most likely scenario of recovery in the fourth quarter, most of these would have to happen, but at a more realistic pace. If adjustments cannot be made quick enough, or if the virus spreads at a pace that is beyond control, then we may not see any growth until 2021.

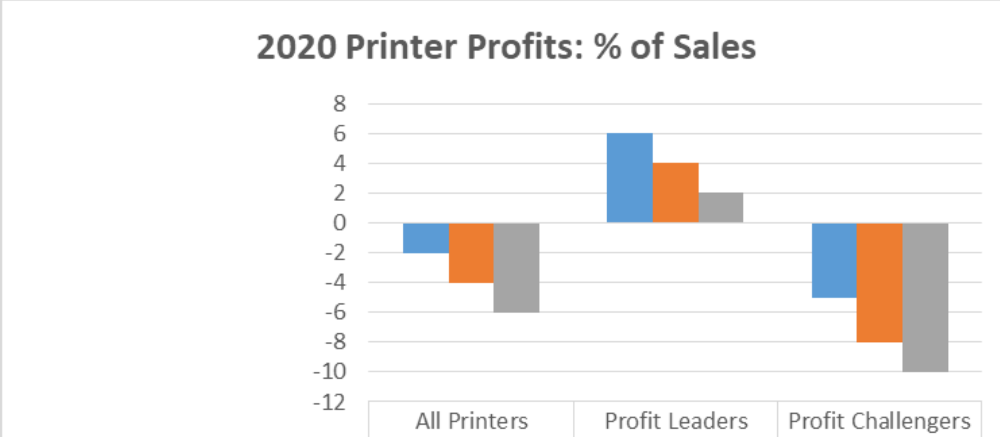
Now that we know that a recession is inevitable, it is important to know what to expect. Although each recession is unique, we could look back to the Great Recession to see how printer profits were affected.



	2007	2008	2009	2010	2011	2012	2013
All Printers	3.4	3.1	1.5	-1.4	1.4	1.8	2.7
Leaders	10.1	9.7	9.4	7	9.5	9.6	9.9
Challengers	1.2	-0.9	-1.1	-4.2	-1.3	-0.8	0.3

It is clear to see that there was a dip in profits between 2009 and 2011, with the average printer and profit challengers being the most affected. Leaders were still able to keep positive margins, but a 2.5% drop is still dramatic for any company. As has been said, each recession is different, so it will be interesting to see how the results differ this time around as we are seeing more severe supply chain disruptions.

When anticipating print profits, it is also important to consider the length of the recession. The following chart provides expected print profits for each of the three recession scenarios.



	All Printers	Profit Leaders	Profit Challengers
Quick/Short Recession	-2	6	-5
Longer/Extended Recession	-4	4	-8
Sustained/Lingering Recession	-6	2	-10

In every scenario, the average printer will face losses while leaders should be able to maintain at least some sort of profit.

So what will print look like after all of this passes? Beneath the aggregate printing industry trends in sales and profits there will be significant structural modifications. Expect the unexpected. This is a recurring pattern in cycles of recession and recovery, but this time they may be more prevalent. Once prosperity returns, print will remain a large, viable industry. Sectors such as packaging, labels, wrappers, and signage will grow. Direct marketing will return. Books, magazines, catalogs, and newspapers will survive. However, the mix of print product demand will change in new and unpredictable ways. Other structural changes to the industry might include some of the following:

- A likley speedup in changes to print production and distribution
- Labor force disruptions and adjustments as a result of new regulations and saftey nets
- New patterns of industry supply chains
- Changes to the size structure of the industry, e.g., larger firms gaining an advantage over smaller or medium-sized pritners
- Significant reduction to the overall number of printing firms in the U.S.

As the economy recovers from the unanticipated external shocks that have presented themselves the past few months, the economy will rely on the following forces to anchor or hinder recovery growth once the recession is over.

Upward Driving Forces

- **Internal momentum—**The U.S. economy has a built-in bias for growth. Typically, this trend is broken by outside forces or external shocks. There is no reason why the economy can't continue to begin another long-term expansion once we recover. After all, what we thought was one of the worst recessions in U.S. history in 2009 was followed by a record breaking expansion.
- **Logistical smoothing of inventory cycle—**One internal dynamic that can destabilize a growing economy has historically been the inventory cycle. Good times breed enhanced expectations that lead to increased production, and this can lead to overproduction and ultimately cutbacks. Many observers believe that modern logistics and just-in-time inventory have nearly eliminated the inventory cycle, reducing this as a destabilizing force.
- **Services domination over goods—**Today's modern economy produces more services relative to goods than yesterday's economy. This fact further reduces the impact of the inventory cycle since there is no inventory of services. While you could argue that services inventories are embedded in labor, this factor still reduces the inherent likelihood of recession.
- **Size and scope dynamics—**The U.S. economy produces around $22 trillion in GDP per year, almost one-fourth of global GDP. As such, it has enough size and scope to almost (but not quite) go its own way and push through global headwinds.
- **Federal Reserve accommodations—**Over the last few decades, the Federal Reserve has been biased against too much growth. The perspective that growth itself causes inflation has led the Fed to raise interest rates and slow monetary growth as insurance against inflation if the economy grew too fast or too long. A new perspective recognizes that growth itself, in terms of more goods and services, is a restraint on inflation, allowing the Fed more accommodating postures. Obviously the Fed had to step in during the crisis but it now better understand the stances that it needs to take during the good times.
- **Labor force dynamics—**Over the last few years, the U.S. labor force has proven more dynamic and elastic than predicted a few years ago. As the demand for labor increased with the expansion, the labor force has grown as many older workers have not retired or have come back into the labor force. Additionally, many others that had left for various reasons have returned, adding to the growth of the economy without inflation.
- **Energy self-sufficiency**—A final upward force is the increasing domestic supply of energy driven by increased investment and innovation in producing oil and natural gas.

Downward Driving Forces

As always, there are counter forces and risks driving the economy downward that could override the upward forces and knock us off the growth trajectory. Eight of the most likely include:

- **Global headwinds—**There will always be foreign issues that affect the U.S. economy either directly or indirectly, so once we recover, this will not change.
- **Traditional external shocks—**Traditional external shocks that have usually knocked the economy off course include geopolitical tensions in the Middle East and North Korea that could disrupt normal trade flows and the global economy.
- **Escalating trade frictions—**This could be included in the first downward force, but it has become a separate force with the U.S.-China trade war. Although things have begun to clear up in regard to this, nothing is certain and there is a slight chance that things may escalate again once Covid-19 fears end.
- **Rekindling inflation—**Although inflation is generally in check, there has been a recent uptick. This could result in the Federal Reserve forcing up interest rates. While there is probably some room for small rate increases without harming the economy, there is always a risk that the economy could slow with rate increases. Although a rate increase is highly unlikely at the moment due to the state of the economy, it is important to keep this factor in mind for the recovery period.
- **Federal Reserve miscalculations—**Although monetary policy is not very effective at juicing up the economy, it is super effective in slowing it down or even pushing it into recession. On the upside, monetary policy is like pushing a string, but on the downside, it is like pulling a string. Any overcorrection for inflation has the risk of pulling too hard, so a miscalculation on the downside could bring a recession.
- **Political and public policy errors—**Included in this litany of errors could be new, over burdensome business regulations and excess minimum wage regulations at the federal or state level in the short run. In the long run, errors include a failure to start addressing the federal structural budget deficits and entitlements.
- **Longer-term slowing—**Over the longer term (since the 1950s), the growth rate of the U.S. economy has been slowing. The average annual growth rate of inflation-adjusted GDP has generally slowed by decade since the 1950s. Indeed, the decline is more than two percentage points since the 1950s and over one percentage point since the 1970s and 1980s. There are many reasons for this, but the primary ones are the recovery of post-war Europe and the emergence of several Asian economic powers.
- **Wild-card issues—**These include major changes that may come about due to a new administration.

The Print Economy and Book Manufacturing

Recently, the Census Bureau released their Country Business Patterns (CBP) report for 2017, which gives an accurate account of employment and the number of establishments for every NAICS segment. Between 2016 and 2017, there was a decrease in employment and the number of establishments for commercial print and print-related media, but one of the most interesting occurrences came out of the book industry (511130). This industry saw a decrease in the number of establishments, but a relatively hefty increase in the number of employees. This shows that consolidation within the industry has been helpful and was necessary in order to increase production. Shipment values have not been updated by the Census Bureau and the numbers shown remain from the 2016 Annual Survey of Manufacturers.

2017 Print and Publishing Market Overview			
Commercial Print and Related Support Activities (NAICS 323)			
NAICS segment	Employment	Establishments	Shipments ($1,000s)
323111 Commercial print	333,132	18,194	$61,863,993.76
323113 Commercial screen	64,671	5,178	$11,520,933.72
323117 Commercial book	21,891	500	$3,633,362.22
323120 Support activities	24,501	1,375	$4,486,433.13
Total	**444,195**	**25,247**	**$81,504,722.8**
Print-Related Media (Publishing) (NAICS 511)			
	Employment	Establishments	Shipments ($1,000s)
511110 Newspaper	169.421	7,222	$22,460,177.20
511120 Periodical	82,451	5,279	$24,286,000.00
511130 Book	71,935	2,440	$25,945,054.92
511140 Directory and mailing list	14,948	756	$7,491,545.03
511191 Greeting card	21,467	120	$4,576,600.00
Total	**360,222**	**16,539**	**$84,759,377.1**
NAICS 323+511	**804,417**	**41,786**	**$166,264,100.0**

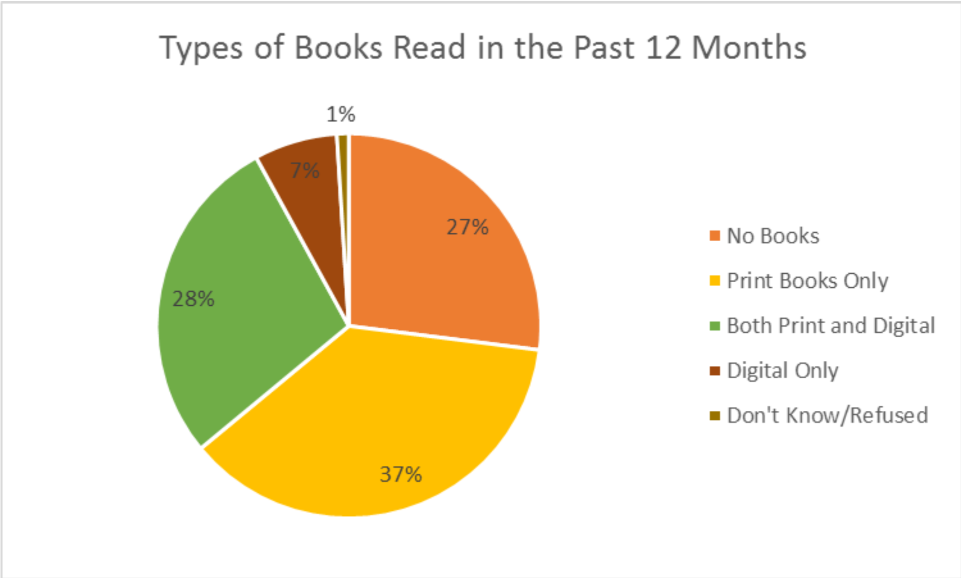
Census Bureau

Employment

BLS

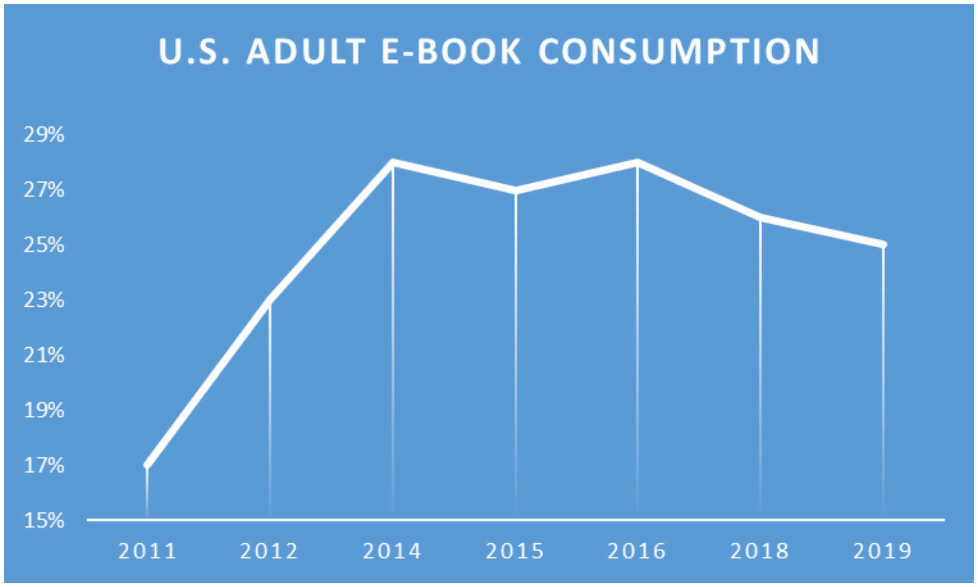
The Great Recession of 2009 kicked off a heavy decline in employment within the publishing industry. After employment bottomed out in 2015, the numbers remained steady, with a slight uptick in 2016 before returning to previous levels. Since the beginning of 2018, however, we have seen a steady increase in the number of employed, and 2019 has brought even more growth to the industry as we are nearing our pre-recession levels once again. Any negative economic growth can have an adverse effect on employment as layoffs may be necessary for some firms, but it is integral to not panic and cut to the point where you cannot operate at an appropriate capacity. In a situation where layoffs aren't required and the economy regains its footing, it is important to understand that it may be hard to find qualified workers. The conclusion of this report touches on this scenario in more detail.

Key Trends in Book Readership, Consumption, and Demand



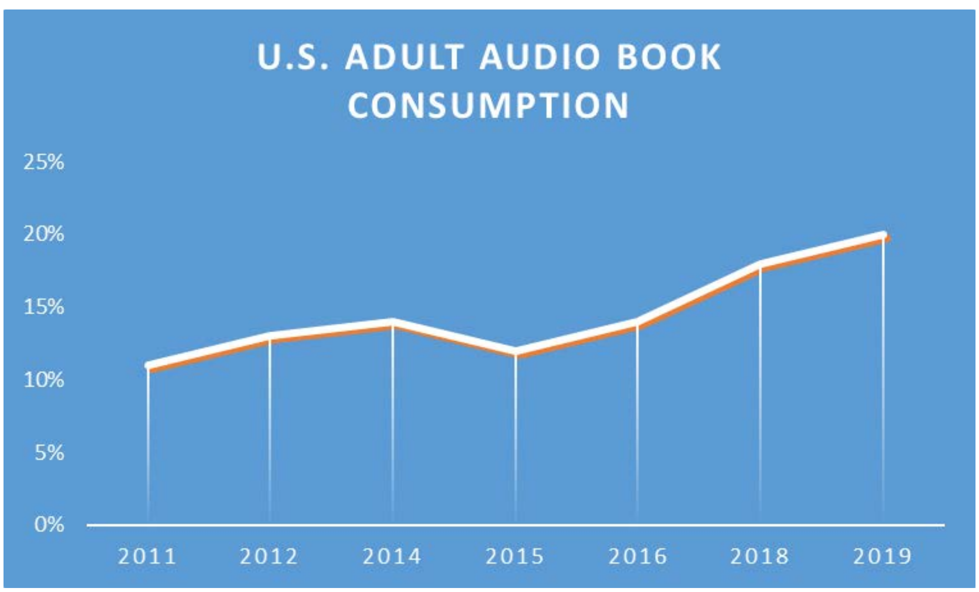
Pew

When asked which types of books they have read within the past 12 months, about two-thirds of adults said that they have read at least one printed book. Thirty-seven percent said that they only read physical copies, while 28% said they preferred a mixture between print and digital. The number of readers who stuck to print saw a significant rise since last year's iteration of this report, which showed the number closer to 27%. This is a positive sign, as it shows that people are not straying away from this traditional medium, even as more options become available.



Pew

Another positive sign for print comes in the form of declining e-book readership. Between 2009 and 2013, we saw the first rollouts of the Nook by Barnes & Noble and the Kindle by Amazon. At first, it seemed like these devices were poised to take over print as we saw huge spikes in adoption right away, but it appears that the peak may have come in 2014 as consumption has fallen and looks as if it may soon level out.



Pew

Another alternative to physical books comes from the rise in popularity of audio books. The percentage of adults in the U.S. who say that they have listened to an audiobook has reached 20% for the first time. If children between 12 and 18 were also included in this data, the results would likely be driven up significantly. As the ease of access to audiobooks increases, we anticipate that consumption will continue to rise. Libraries are beginning to offer audiobooks through their own online interfaces, but the biggest player in the game is Audible, which is a subscription service from Amazon. By subscribing to this service, the user receives one audiobook each month along with the option to listen to several Amazon exclusive audiobooks for free. Although this service is seemingly taking over, there does seem to be a cap as people may be less inclined to pay an additional fee to get more books on top of their subscription price. Another factor contributing to the rise of audiobook popularity comes from the rise of dashboard technology in vehicles. In 2018, more people were listening to these types of books while at home as compared to when they were driving, but in 2019, these numbers flip-flopped. Nineteen percent of Americans have in-dash technology in their cars, and of these people, 62% said they have listened to an audiobook while driving. People can now “read” at times when they otherwise could not, making audiobooks a significant alternative.

Another type of media that is experiencing a meteoric rise and is in a similar realm to audiobooks are podcasts. As people commute and even spend their evenings at home, they are replacing reading with different podcast series. More than 50% of all Americans have listened to a podcast in the last year, up from 44% in 2018. Thirty-two percent listen to at least one podcast a month and 22% listen weekly. Popularity is continuing to rise as companies are investing huge sums of money into podcasts as the ads provide great revenue streams (Spotify has been on a flurry of purchasing, and plans to spend about $500 million to increase their share in the market by the end of this year). There are podcasts in every category, but they typically are competing in the nonfiction sector as there aren’t too many that provide original stories. Crime, history, sports, and politics have a large market share in terms of podcast categories, and they generally provide more scoped versions of what could be found in a whole book on a particular subject. It is assumed that podcast popularity will continue to rise and can be considered by some as an indirect threat to books, although others may argue that these cannot provide a complete narration on particular topics and may lead people to further their research and pick up books on the subject matter.

American Booksellers Association

One thing that has made a positive contribution to the book industry recently has been the rise of independent bookstores in the U.S. As chain stores continue to struggle and shutter locations because of the rise of Amazon, these independent stores are finding their niche. In an increasingly online world, these stores are thriving off of a need for in-person and social interaction amongst people of all ages. By hosting community events, bringing in speakers and authors, and providing an atmosphere where like-minded people can gather together, they are differentiating themselves from the big chains. The rise of self-publishing also contributes to this trend, as these types of stores are able to stock works from local authors who may not have been able to spread their work otherwise.

	Read a book in any format	Read a print book	Read an e-book	Listened to an audiobook
U.S. Adults	72%	65%	25%	20%
Men	67	60	24	17
Women	76	70	27	22
White	76	70	27	22
Black	65	58	19	13
Hispanic	59	54	20	15
18–29	81	74	34	23
30–49	72	65	28	27
50–64	67	59	22	16
65+	68	63	17	8
Less than high school	32	25	5	6
High school grad	61	55	15	12
Some college	75	70	26	17
College +	90	82	41	34
Below $30,000	62	56	18	14
$30,000–$49,999	67	63	19	13
$50,000–$74,999	78	71	28	27
$75,000 +	86	78	38	30
Urban	75	68	27	23
Suburban	74	68	27	19
Rural	66	58	20	18

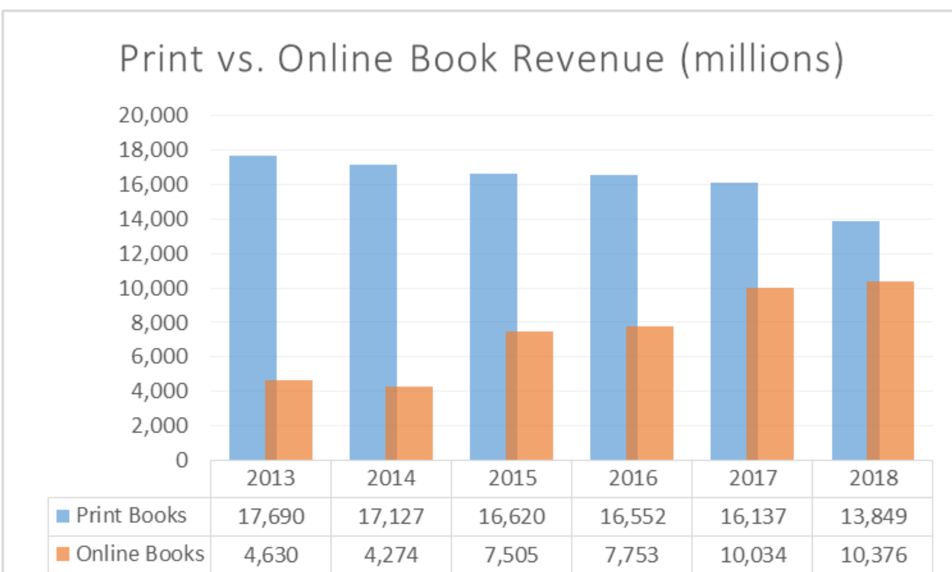
Pew

The demographics of readership in the United States shows us both positives and negatives in regard to the future of the industry. Looking at the age groups shows us that younger people (18–29) are reading print books more than anyone. Obviously, this is important, as it seems that the younger generation has not let technological advancements get in the way of traditional reading quite yet. The negative from this age group is that they are also consuming e-books and audiobooks at a clip that is higher than the national average, and this number will most likely rise (particularly audiobooks) as they age. Those ranging from 30–49 years old read fewer physical copies than their younger counterparts but also consumed more audiobooks. Overall, from this data, we could see that most still used physical books, whether because of personal preference or because they have yet to adopt the new tech.

Total Sales of Print Books (thousands)			
	January 2019	January 2020	Change YTD
Total	12,140	12,509	2.80%
By Category (thousands)			
	January 2019	January 2020	Change YTD
Adult nonfiction	6,083	6,253	2.40%
Adult fiction	2,234	2,262	2.90%
Juvenile nonfiction	824	885	5.90%
Juvenile fiction	2,244	2,363	4%
Young adult fiction	343	344	-1.90%
Young adult nonfiction	40	46	7.20%
By Format (thousands)			
Hardcover	3,251	3,410	2.60%
Trade paperback	6,958	7,240	4.60%
Mass market paperback	805	702	-10.80%
Board books	572	587	-2.80%

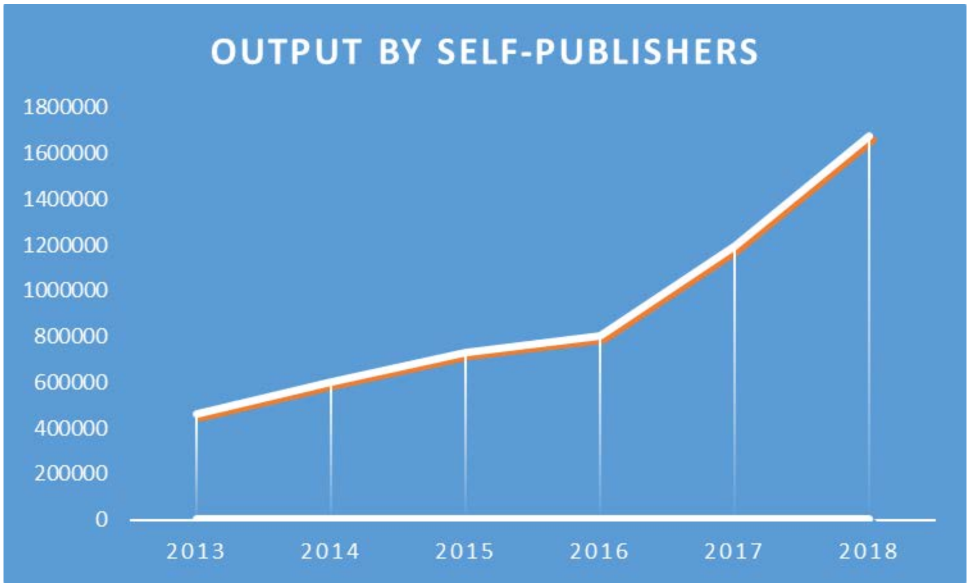
NPD Group

The NPD Group tracks unit sales of print books annually, and their research covers about 80% of the market. Between the beginning of 2019 and 2020, there was about a 2.8% jump in unit sales. When looking at different genres, one positive sign is that all but one saw an increase, with only young adult fiction decreasing in demand. It appears that demand from this demographic moved towards nonfiction within the past year, and this number is anticipated to continue its growth.



Census Bureau: Service Annual Survey, 2018

In terms of revenue, print books still create more cash flow than their online counterparts, but it is easy to see the convergence between the two. Print revenue has seen a slight and steady decline since 2013, and online revenue has seen the opposite as it continues to rise. Within the next few years, it appears that online sales may pass print sales unless the online market faces some sort of drastic interruption.



Bowker

As products continue to face shorter life cycles, self-publishing rises, and technology improves, the need for print-on-demand continues to increase. In order to cut down on inventory costs and maintain margins, more and more people are requesting that their works be printed as needed. These types of services can be provided more easily than ever with the rise of digital print and should be offered by anyone who would like to take advantage of this relatively new trend. Self-publishing output increased by over 40% between 2017 and 2018 with even higher projections in the near future.

Stock Watch			
Company	**December 2018**	**December 2019**	**% Change**
News Corp.	11.55	14.14	22%
B&N Education	4.01	4.27	6.50%
John Wiley	46.97	48.52	3.30%
Scholastic	40.26	38.45	-4.50%
Educational Dev. Corp.	8.53	6.18	-28%
Quad Graphics	12.13	4.33	-64.3%
RR Donnelley	3.62	3.93	8.6%
Pearson	11.94	8.43	-29%
Houghton Mifflin Harcourt	8.86	6.25	-29%
TC Transcontinental	15.74	12	-23.8%
LSC Communications	7	0.37	-95%
Publishers Weekly Stock Index	139.12	126.61	-9%
Dow Jones Average	23327.46	28538.44	22%

Publisher's Weekly

(The stock prices reflect the price at the end of 2019 to highlight movement throughout the year and to eliminate temporary effects of the recent major selloffs.)

While the overall stock market yielded healthy returns in 2019, the same didn't hold true for all publishers during the same time frame. While News Corp, anchored by its diverse portfolio, experienced a huge jump, some traditional publishers and manufacturers experienced major declines in stock price. Typically, situations like this tend to lead to industry consolidation, which has already been attempted by two of the biggest names in the business.

Consolidation is always a growth solution for firms when they may not be able to do so organically. In 2019, we almost saw two of the biggest names in print join forces in order to upend RR Donnelley as the largest printer in North America. Quad Graphics and LSC Communications agreed to merge, but the deal was struck down by the U.S. Department of Justice's antitrust division. Instead of fighting a lengthy and expensive legal battle, both firms agreed that it was in their best interests to simply terminate the merger and continue separate operations. According to recent data, approximately 6% of Quad's revenue came from their book printing operations. Although 6% may seem small, it is important to remember that their annual revenues in 2018 were equal to about $4.2 billion, which means that book revenue was equal to about $252 million. LSC's book operations make up an even larger portion of their revenue stream of approximately $3.9 billion. These operations account for 27% of their revenue, or $1.05 billion. This merger would have created a mammoth in the industry, which most likely would have spurred innovation but may have driven smaller firms out or caused them to consolidate with others.

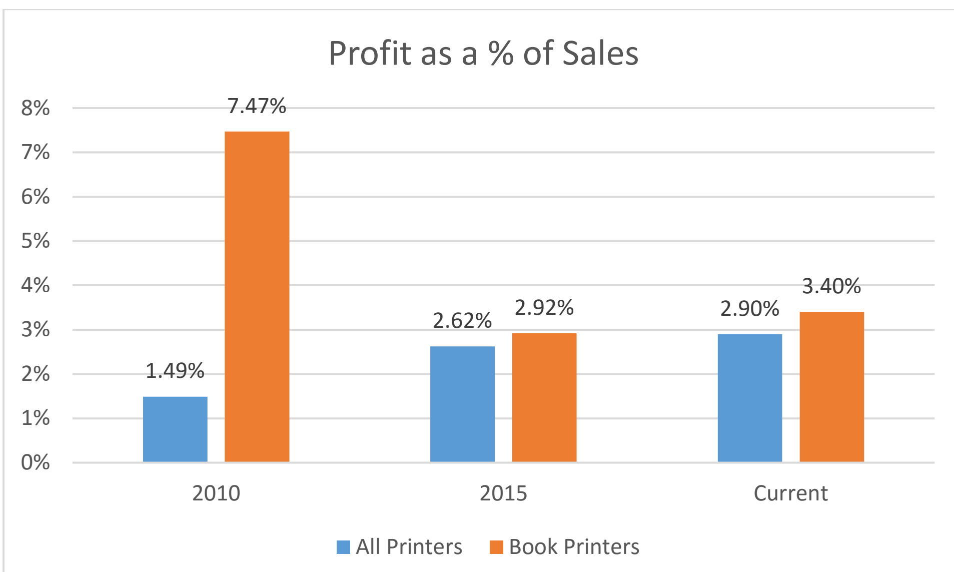
Fallout from the failed merger resulted in Quad choosing to divest and sell their book business. They believe that this segment of their business was underperforming and was not a key component of their future strategy, but with its current clientele and future prospects, it can be a great addition to another book producing firm that is looking to expand.

Book Manufacturers' Income and Operating Metrics

What about trends in income and operations for book manufacturers? In this section, we present key income and operating metrics for book manufacturers and how they have changed over the years. The statistics are based on the 2009–10, 2014–15, and 2018 *Ratios* surveys from Printing Industries of America and are specific to book manufacturers. The 2009–10 *Ratios* reflect the segment's initial reaction to the Great Recession, which is important to see as history tends to repeat itself. It then shows the metrics from 2014–15 and 2018 to emphasize what the industry looked like at different points of the expansion.

Profit

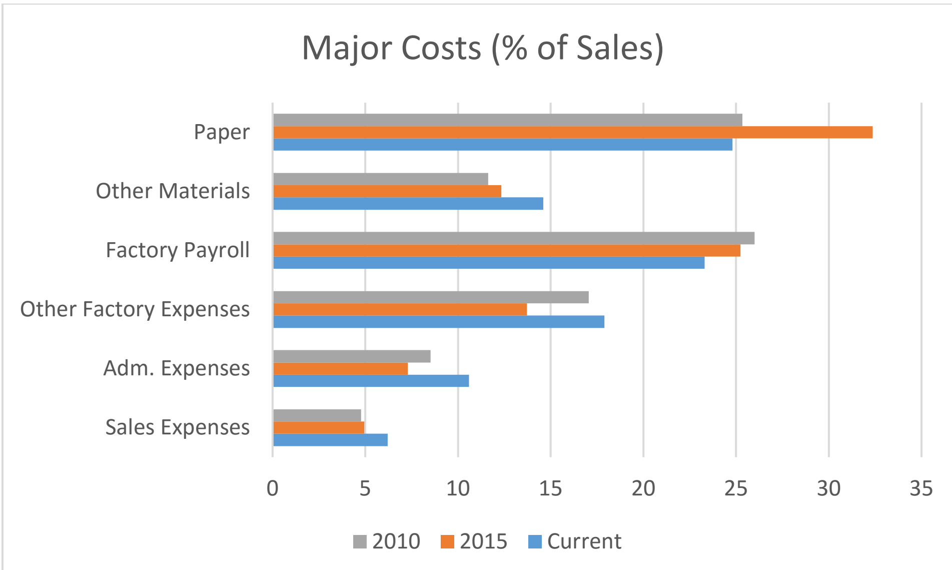
Book manufacturers participating in the most recent *Ratios* survey averaged before-tax profit on sales of 3.4%. This rate was significantly higher than the all-printer average of 2.9%. Following the recession, it is clear to see that all printers were affected adversely and experienced nearly half the profits that they are seeing today. However, book printers actually saw the opposite. They saw huge profit boosts in the year following, but since then, the number has returned to normal levels.



PIA Ratios

Major Costs

The major cost items for book printers are people and paper. The number one expenditure in relation to sales is total payroll cost, which is around 41%. Paper cost comprised an additional 25% and other materials accounted for an additional 15%. The percent of sales spent on paper remains at the same levels that it did following the recession, aside from a significant bump in 2015 that likely resulted from a bump in pulp prices at the time. Firms are also spending less on factory payroll than they have in the past, and this is likely explained by firms' evolving employee profiles, which are discussed in more detail below.



PIA Ratios

Paper Prices

Paper has always been a major cost item for printers across the industry. In fact, paper is the second largest expense (behind only people costs) and accounts for approximately 21% of operating costs for the average printer. For book manufacturers, paper is even more important as it is typically the largest expense and contributes to nearly 25% of operating costs. With that being said, it is obvious that any price increase or decrease on paper can have a major effect on how firms within the industry operate.

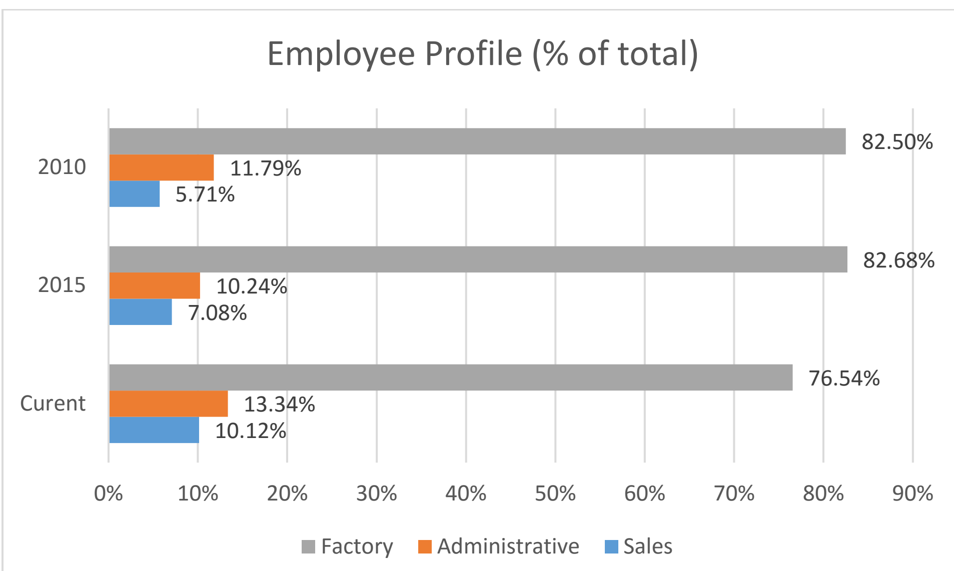
Starting in January 2017, print companies began to face the burden of rising paper prices, and prices continued to rise until they reached their all-time peak in December 2018. Between January 2017 and January 2019, prices increased by about 24.7% according to the Producer Price Index (PPI), a metric provided by the Bureau of Labor Statistics. Since then, however, the price of raw pulp has subdued, which has held paper prices relatively stagnant. This is obviously a good sign for book manufacturers at the moment, especially if they get their paper from a domestic supplier. On the other hand, if paper deliveries are coming from overseas, particularly China, then there is much more to worry about. Supply chain disruptions can hinder on-time deliveries, which could create bottlenecks in the production process. As a result of this, demand for domestic paper could increase, which can potentially drive up price. It is important to keep an eye on this issue as the current global situation develops.

What could lead to rising paper prices in the future?

- Increases in the price of raw pulp
- Paper mill closures/consolidations and lack of mill capacity
- Repurposing of mill equipment
- Increased demand/lower supply

Employee Profile

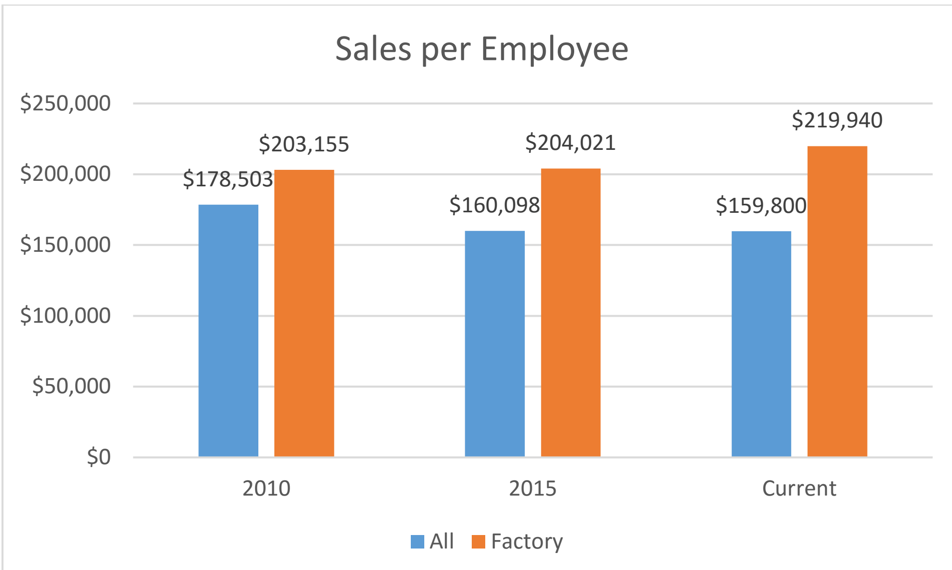
The employee profile for a book manufacturer demonstrates the preponderance of production employees, with more than three quarters of employees in this category. The remaining employees were almost equally divided between administrative/executive and sales employees. As time goes by, relatively static industries tend to figure out how to create their product with fewer people, which is relevant to book manufacturers as there has been a neat 6% drop in factory employees since the beginning of the decade. These positions have been mostly replaced by new employees in the sales department and a small increase in administrative workers.



PIA Ratios

Sales per Employee

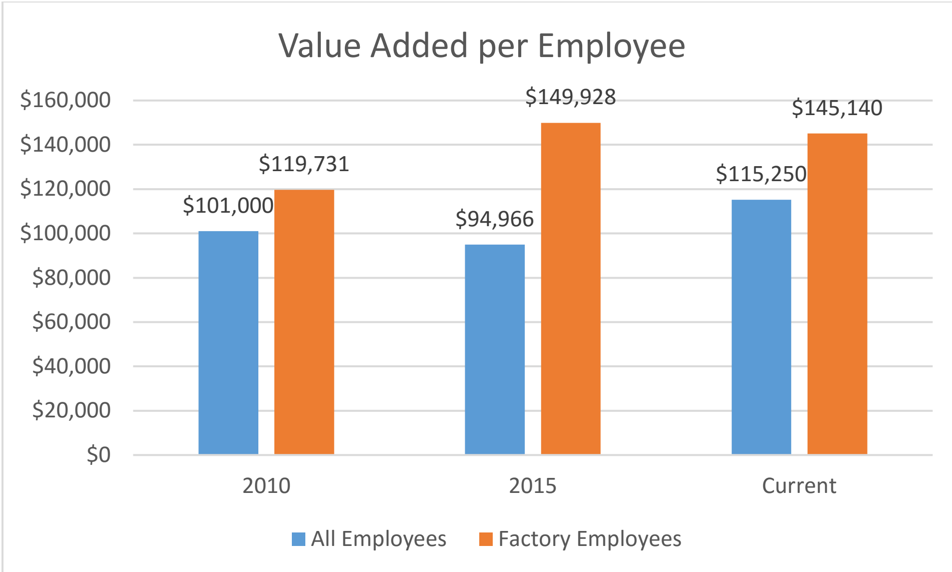
What about productivity? Our key metrics of productivity are sales per employee and sales per factory employee. During the 2017–2018 period, book manufacturers averaged almost $160,000 in sales per employee and almost $220,000 for factory employees. Over the years, these numbers have moved inversely, with sales per factory employee rising while sales per all employees dropped. This is most likely a symptom of the graph above, which shows that factory employees are making up a smaller percentage of the firm as the share of employees in administrative and sales positions rises.



PIA Ratios

Value Added

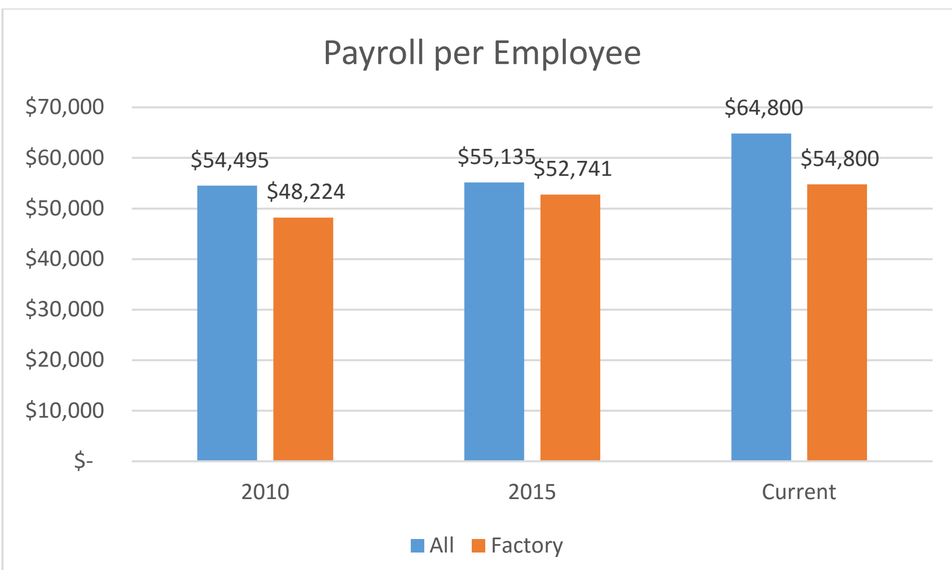
Other key productivity metrics include value added per employee. During the 2017–2018 period, book manufacturers averaged over $115,000 in value added per all employees and over $145,000 for factory employees. The current numbers reflect the relationship that they had in 2010, as 2015 was a slight deviation from the typical trend.



PIA Ratios

Payroll

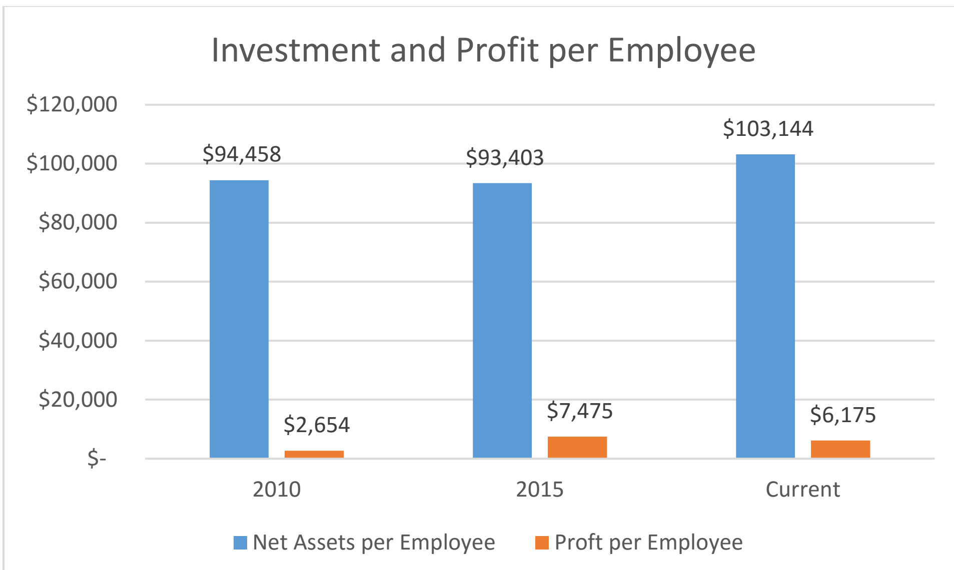
Book manufacturers pay high wages and offer competitive benefits. During the 2017–2018 timeframe, book manufacturers paid an average total compensation of $64,800 for all employees and just under $55,000 for factory employees. Although the pay gap between factory employees and all employees closed slightly in 2015, it has since widened even more, which is likely a symptom of higher wages going to sales employees.



PIA Ratios

Investment

Book manufacturers also exhibit high levels of investment in plant and equipment, with an average of over $103,000 per employee. This investment is directly related to the productivity and employee compensation metrics cited above. At the same time, profit per employee is also related to investment. This metric averaged $6,175 in 2017–2018. Although trends show that the metrics looked pretty similar for 2010 and 2018, this particular one does not. As seen previously, profit rates were much higher in 2010, but the profit per employee number does not reflect this. The most likely explanation for this is that firms were most likely hanging on to too many factory employees. As fewer and fewer were needed, even fewer administrative and sales employees were brought on to replace them. This means that firms now have found ways to become more efficient, and increased investment has brought increased profit per employee.



PIA Ratios

Key Management Issues for Book Manufacturers in 2020

Make sure you are operating at full capacity by attracting a competent workforce.
Although some firms will need to temporarily lay off workers during the impending recession, it will be integral to eventually bring workers back. Some may even be lucky and make it through this time at the same capacity as before. In any case, workers are a company's most valuable asset which means that good recruiting and hiring practices are a must.

- Utilize all avenues of recruitment.
    - Job boards, recruitment agencies, social media (LinkedIn), high school/college job fairs
- Offer competitive salaries and benefit programs.
- Explore a pool of workers that you may not have considered in the past.
    - Many firms are beginning to work with prison programs that prepare workers for a future position in manufacturing and assist with the process of integrating these potential employees into the workforce.
    - Around 600,000 adults are released from prison each year putting a significant number of capable workers into the workforce.
    - Inmates that participate in correctional education programs in prison have recidivism rates 28% lower than those who do not.
    - 60–75% of ex-offenders are holding the same job one year after their release.
    - 95% of arrests are for non-violent or non-sexual crimes.
    - Voluntary turnover is 12.2% lower for those with prior convictions.

*If payroll and utilities become an issue financially, make sure to check out loans being offered by the SBA through the Paycheck Protection Program (PPP).

Take advantage of the increase in popularity of print-on-demand.
If possible, make sure that you are able to offer this service, as increased efficiency is necessary in a world of tight margins increased competition. Before offering this, make sure it is financially feasible first, and if not, do not stray away from what you do best.

Managing in Chaos
Managing in extreme chaos and uncertainty is tremendously difficult. Remaining positive is a challenge. The first imperative is to somehow have a positive attitude and accept the challenge if you want your firm to be one of the survivors and ultimately one of the many success stories. Once prosperity returns, print will remain a large, viable industry.
So, what can print firm owners and managers do in this tough environment?

- First, most obviously, stay positive and focus on the real issues—your family, your employees, and your own health.
- Forced downtime provides a chance to rethink your business models. There will be new waves of opportunity in print. There will be new print processes and new efficiencies in print and package delivery. There will be new ways to utilize employees, new ways to cut cost, and new ways to increase sales.
- The United States still has the strongest, most viable economy and political system in the world. In the end, we will persevere.
- The economy will recover. Print will recover. This happened as we recovered from the *Great Recession* almost 11 years ago, and it will happen again.
- Preserve cash in anticipation of reduced sales. Use previously arranged lines of credit and watch your expenses.
- Speaking of expenses—do all you can to control expenses and move fixed expenses to variable expenses.
- Remain strategic. Rethink and reaffirm or change your longer-term strategic plans even if you need to delay or adjust them in the short term.
- Reach out for help from your local PIA Affiliate and from the national organization. We have many resources that give you a competitive advantage over non-members.
- Above all, remain positive. Better times will return. In fact, better times are the norm. The American economy consistently expands in over 90 percent of quarters and years, so bad times are the exception not the rule. Both the economy and the printing industry will return to health soon.