

## Package deal: Demand for industry services will increase as consumer spending continues to grow

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# IBISWorld Industry Report 56191 Packaging & Labeling Services in the US

May 2019 Anna Miller

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## **About this Industry**

#### **Industry Definition**

Industry operators primarily package client-owned materials on a contract or outsource basis and provide labeling and imprinting package services. The industry excludes activity related to the manufacture of packaging or labeling products.

#### **Main Activities**

#### The primary activities of this industry are

Blister packaging services or skin packaging services

Cosmetic kit assembling and packaging services

Textile and apparel folding and packaging services

Labeling services

Mounting merchandise on cards

Packaging services (except packing and crating for transportation)

Product sterilization and packaging services

Shrink-wrapping services

Gift-wrapping services

#### The major products and services in this industry are

Assembly and fulfillment services

Labeling services

Packaging services

Other

#### **Similar Industries**

#### 31-33 Manufacturing in the US

This sector contains some companies that package and label their own goods.

#### 32213 Paperboard Mills in the US

This industry manufactures products and materials used by packaging and labeling services companies.

#### 32221 Cardboard Box & Container Manufacturing in the US

This industry manufactures products and materials used by packaging and labeling services companies.

#### 32599 Chemical Product Manufacturing in the US

This industry provides aerosol packaging services.

### 32611 Plastic Film, Sheet & Bag Manufacturing in the US

This industry manufactures products and materials used by packaging and labeling services companies.

#### 33243 Metal Can & Container Manufacturing in the US

This industry manufactures products and materials used by packaging and labeling services companies.

#### 48899 Freight Packing & Logistics Services in the US

This industry provides packing and crating services related to transportation services.

## **About this Industry**

#### **Additional Resources**

#### For additional information on this industry

www.packworld.com

Packaging World

www.contractpackaging.org

The Association for Contract Packagers and Manufacturers

www.pmmi.org

The Association for Packaging and Processing Technologies

IBISWorld writes over 1000 US industry reports, which are updated up to four times a year. To see all reports, go to www.ibisworld.com

## Industry at a Glance

Packaging & Labeling Services in 2019

**Key Statistics** Snapshot

Revenue \$10.3bn

**Profit** \$802.7m \$2.3bn

Annual Growth 14-19 5.0%

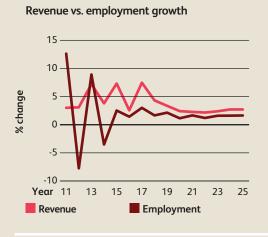
Annual Growth 19-24 2.4%

**Businesses** 

10,068

#### **Market Share**

There are no major players in this



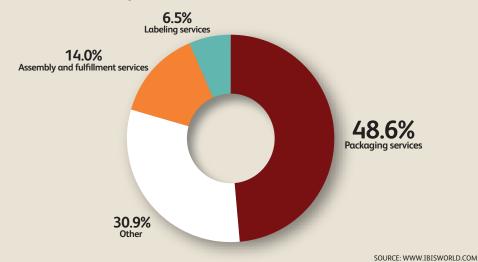


#### **Key External Drivers**

**Consumer spending** E-commerce sales Demand from snack food production Demand from cosmetic and beauty products manufacturing Corporate profit Demand from generic pharmaceutical manufacturing

p. 24

Products and services segmentation (2019)



#### **Industry Structure**

| Life Cycle Stage    | Mature |
|---------------------|--------|
| Revenue Volatility  | Medium |
| Capital Intensity   | Low    |
| Industry Assistance | Low    |
| Concentration Level | Low    |

| Regulation Level       | Medium |
|------------------------|--------|
| Technology Change      | Medium |
| Barriers to Entry      | Low    |
| Industry Globalization | Low    |
| Competition Level      | High   |

FOR ADDITIONAL STATISTICS AND TIME SERIES SEE THE APPENDIX ON PAGE 29

Executive Summary | Key External Drivers | Current Performance Industry Outlook | Life Cycle Stage

#### **Executive Summary**

Revenue for the Packaging and Labeling Services industry generally fluctuates in line with consumer spending trends, as industry operators earn most of their revenue from contract package and labeling services provided to fast-moving consumer goods (FMCG) and pharmaceutical product manufacturers. Industry companies primarily package and label customer goods, adding value for clients through efficiency gains. Accordingly, improved consumer spending over the five years to 2019 has supported industry growth. As US consumption has risen, manufacturers

Economic growth during the five-year period, particularly in the form of increased consumer spending, has driven industry revenue growth

have expanded production, thereby increasing the number of products that need to be packaged and thus increasing demand for industry services. Overall, industry revenue is anticipated to increase an annualized 5.0% to \$10.3 billion over the five years to 2019. In 2019 alone, revenue is expected to increase 3.4%.

Economic growth during the five-year period, particularly in the form of increased consumer spending, has driven industry revenue and profit growth. The unemployment rate declined significantly, putting upward pressure on

wages and per capita disposable income. This drove increased consumer spending during the period, driving discretionary consumer purchases of FMCG. Manufacturers responded with increased production, and industry operators gained more business as a result. Concurrently, packaging requirements for medical and pharmaceutical goods have become more stringent, raising demand for industry services from clients lacking the appropriate capabilities to perform such tasks in-house. Demand for industry services has also grown from e-commerce retailers that require dimensionally efficient packaging that simultaneously portrays their brand to consumers during unboxing.

Over the five years to 2024, IBISWorld anticipates that the industry will continue growing, albeit at a slower pace than it has over the past five years. During the coming five-year period, industry revenue is expected to increase an annualized 2.4% to \$11.6 billion. Growth in the number of adults aged 65 and older is expected to drive growth for pharmaceutical products. Meanwhile, as implementation of the Drug Supply Chain Security Act (DSCSA) continues, this will drive demand for industry services as pharmaceutical manufacturers seek to become more operationally efficient in light of alreadyincreasing costs. Consumer spending and e-commerce sales are also expected to continue driving growth.

#### **Key External Drivers**

#### **Consumer spending**

Higher consumer spending directly affects the number of goods that manufacturers need to package to sell. Industry operators act as a key cog in the supply chain between manufacturers and consumers. Therefore, when spending increases, revenue tends to follow. In 2019, consumer spending is expected to increase.

#### E-commerce sales

E-commerce sales represent a growing segment of total retail sales. In general, higher reliance on e-commerce tends to reduce the number of physical locations that companies maintain as they seek to compete for higher-margin online sales. As a result, these companies are more likely to outsource packaging and

## Key External Drivers continued

labeling services. In 2019, e-commerce sales are expected to increase, representing a potential opportunity for the industry.

#### Demand from snack food production

The Snack Food Production industry (IBISWorld report 31191) produces snack foods such as potato and corn chips, pretzels, roasted and salted nuts, nut butters, popcorn and other similar snacks. These products need to be packaged before being sent to consumers and retail outlets. Therefore, an increase in snack food production increases demand for industry services. In 2019, demand from snack food production is expected to increase.

## Demand from cosmetic and beauty products manufacturing

This industry prepares, blends, compounds and packages cosmetics and other beauty products. Cosmetic and beauty product manufacturers might choose to outsource the packaging and labeling process to industry operators. As a result, an increase in the manufacturing

of such products increases demand for industry services. In 2019, demand from cosmetic and beauty product manufacturing is expected to decrease slightly, presenting a potential threat to the industry.

#### **Corporate profit**

Corporate profit measures the amount of corporate profit earned across all industries. As profit increases, businesses are more likely to purchase industry services to fulfill their packaging needs. In 2019 corporate profit is anticipated to increase.

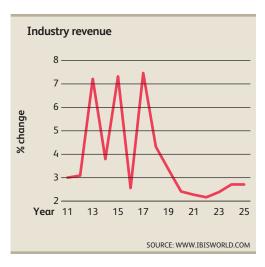
## Demand from generic pharmaceutical manufacturing

Generic pharmaceutical manufacturers tend to use industry services at a greater rate than other pharmaceutical industries. These operators are more likely to use contract packaging to improve margins due to the high level of price competition between generic pharmaceutical manufacturers. In 2019, demand from generic pharmaceutical manufacturing is expected to increase.



#### Current Performance

Contract packaging and labeling service providers depend on demand for manufactured goods that need to be packaged and labeled before being transported to retail destinations or consumers. As a result, the Packaging and Labeling Services industry is vulnerable to general macroeconomic trends that affect levels of consumption, particularly the consumption of consumer packaged goods (CPG) and fast-moving consumer goods (FMCG). Over the five years to 2019, steady growth in employment and consumption have increased demand for CPG and FMCG, thereby increasing demand for packaging and labeling services. Over the five years to 2019, total revenue for the Packaging and Labeling Services industry is



expected to grow an annualized 5.0% to \$10.3 billion, including anticipated growth of 3.4% in 2019.

## Demand for industry services

Demand for industry services is largely dependent on the level of demand for a large variety of consumer items, including pharmaceuticals, cosmetics, personal care products, toys, electronics, hardware and various foodstuffs. As a result, demand for industry services is sensitive to changes in economic conditions that affect consumer retail expenditure, particularly on CPG and FMCG. Favorable economic conditions have supported industry growth during the period. Most notably, the level of consumer spending is expected to increase an annualized 2.9% over the five years to 2019, supported by sustained low unemployment and rising per capita disposable income. Increased consumer spending has raised demand for the manufacture of consumer goods which, in turn, increases demand for contract packaging and labeling services.

E-commerce sales, in particular, have been a main driver for consumer expenditure during the period. Over the five years to 2019, IBISWorld estimates that e-commerce sales have increased at an annualized rate of 13.7%. As consumers continue to do more of their shopping online, providers of consumer goods have had to rethink packaging strategies to adapt to the shifting environment. For example, the shipping of e-commerce goods is based on dimensional weight, by which shipping providers determine the cost of shipping based on dimensional calculations. To minimize shipping costs, producers of consumer goods have sought industry services and expertise to optimize the dimensional weight of their packaging. In addition, the rise in e-commerce sales has meant that more goods are sent straight to the consumer without ever sitting on store shelves. As a result, companies have put a greater focus on the consumer unboxing experience, which is primarily determined by the packaging. For many companies, this has increased the need for efficient or specialty packaging design, which often means outsourcing the task to industry operators.

For many industry operators, clients that heavily import and export or that

## Demand for industry services continued

produce a wide variety of products contribute significantly to industry revenue. Packaging and labeling are considered to be noncore functions for these companies, but manufacturers still need to comply with increasing federal and state regulations pertaining to safety and consumer product information.

Moreover, companies that are concerned

about the potentially damaging effects of product tampering, such as those in the over-the-counter pharmaceuticals and foods industries, need specialized secure packaging solutions, which tend to cost more. Again, this makes it more likely that packaging services will be outsourced to industry operators, particularly as demand for such products rises.

## Industry structure and trends

Larger, vertically integrated industry operators can benefit from economies of scale by maintaining packagemanufacturing segments alongside actual packaging services. This integration aids in controlling input prices and enables industry operators to better meet clients' packaging preferences. For example, this has enabled industry operators to tailor their products to match current trends, such as the use of sustainable materials and package designs that are flexible and space efficient. Further, some operators, including Verst Logistics Inc., have integrated several supply-chain functions such as fulfillment, packaging, warehousing and transportation, enabling them to act as turnkey-service providers to clients. This type of integration has rendered industry operators more attractive to increasingly important e-tailers that are looking to optimize the speed of their supply chains. This has also attracted demand from retailers attempting to focus on core competencies or minimizing their number of service provider contracts.

This has been especially true for pharmaceutical companies. Enacted in 2013 just prior to the current period, the Drug Quality and Security Act (DQSA) outlines requirements for manufacturers, re-packagers, wholesale distributors, dispensers and third-party logistics providers. Title II of DQSA outlines the process for building an electronic, interoperable system to identify and trace

# Larger, vertically integrated industry operators can benefit from economies of scale

certain prescription drugs as they are distributed in the United States. The goal is to enhance the US Food and Drug Administration's ability to control and prevent the distribution of counterfeit, stolen, contaminated or otherwise harmful drugs. This has increased regulations and the complexity of the labeling process as its implementation has been realized over the past five years. As a result, this has meant more pharmaceutical companies are outsourcing packaging and labeling services to become more efficient or because they do not have the in-house capabilities to comply with current regulations.

During the past decade, the industry has experienced a high amount of merger and acquisition (M&A) activity. The consolidation effect of such M&A activity has outpaced the number of new operators entering the industry, thus resulting in a slight decline in the number of establishments and enterprises. Once an industry with a majority of private family owned businesses, contract packaging businesses have held increasing interest for private equity firms, which have contributed in large part to the accelerated M&A activity experienced during the period. Over the

## Industry structure and trends continued

five years to 2019, the number of enterprises in the Packaging and Labeling Services industry has declined an annualized 0.2% to 10,068 companies.

Conversely, growing demand for services has driven an increase in the number of industry employees, which is estimated to grow an annualized 2.1% during the period to 57,131 individuals in 2019. Profit margins (measured as

earnings before interest and taxes) steadily increased during the period, growing from 6.3% in 2014 to an estimated 7.8% in 2019. The price of plastic materials and resin is estimated to decrease an annualized 1.4% over the five years to 2019, contributing to overall profit growth during the period by decreasing the purchase cost of plastic packaging materials.

## **Industry Outlook**

Over the five years to 2024, macroeconomic growth and stability will continue to be the primary growth drivers for the Packaging and Labeling Services industry. In particular, low unemployment, rising consumer spending and increased regulations surrounding pharmaceutical packaging are anticipated to boost demand for industry services. As a result, IBISWorld projects industry revenue to grow an annualized 2.4% to \$11.6 billion over the five years to 2024.

#### **Driving demand**

Consumer spending is crucial for industry growth over the next five years. IBISWorld expects consumer spending to continue to grow, increasing at a projected annualized rate of 1.7% during the outlook period. Unemployment is expected to remain at a low level, putting continued upward pressure on wage levels. As a result of both these factors. per capita disposable income is expected to grow at an annualized rate of 1.3% over the five years to 2024. Growth in household and individual disposable income will likely lead to greater consumer spending on items that require packaging, spurring greater demand for industry services.

Moreover, the increased presence of e-commerce is expected to benefit the industry moving forward. Packaging needs are particularly high for operators that primarily sell online. These operators tend to minimize their physical footprints to improve margins, so contract packaging services can be used to limit facility use to core operating activities. Online retailers will likely

#### The increased presence of e-commerce is expected to benefit the industry moving forward

continue to focus on making packaging as dimensionally efficient as possible and use packaging that portrays their brand to consumers in a flattering and attractive manner. As a result, packaging is expected to become increasingly complex, driving demand for the Packaging and Labeling Services industry.

Food products will represent a steady source of demand for industry services over the next five years. Revenue for the Snack Food Production industry (IBISWorld report 31191) is expected to grow an annualized 3.4% over the five years to 2024. As one of the largest sources of revenue for the industry it will provide a consistent source of demand for industry services. Small manufacturers of snacks and supplements will continue to enter the

## Driving demand continued

market and will also require outsourced packaging services.

The number of people over the age of 65, which are relatively more reliant on medical treatment than other demographics, is expected to continue growing during the five-year period at an annualized rate of 3.2%. This is expected to support demand for contract packaging services from pharmaceutical manufacturers, both branded and generic. The packaging-related regulations associated with the continued implementation of the Drug Supply Chain Security Act (DSCSA) are

anticipated to drive more drug manufacturers to outsource packaging and labeling activities to industry operators. In addition, drug companies are increasingly investing in new biopharmaceutical products. These products are highly sensitive to environmental factors and are new to the market, putting these companies under a particularly high degree of regulatory and public scrutiny. As a result, the growing need for highly specialized, careful and thorough packaging and labeling could further drive demand for industry services from the medical and pharmaceutical sector.

#### Profit and landscape

Due to projected growth in demand from consumers and outsourcing manufacturers, IBISWorld expects industry competition to increase as some packaging manufacturers expand their operations to include packaging and labeling services or industry operators integrate supply-chain services to serve as turnkey-service providers. Vertical integration will enable these operators to better control input costs such as paper and plastic, giving them an advantage over other companies.

Alongside an expected increase in vertical integration, the Packaging and Labeling Services industry is expected to continue to undergo a high amount of merger and acquisition activity. As a result, the number of industry enterprises is projected to continue falling at a marginal annualized rate of less than 0.1% to 10,049 companies in 2024. However, total wage expenditure is expected to expand slightly, as the

### Vertical integration will enable operators to better control input costs, such as paper and plastic

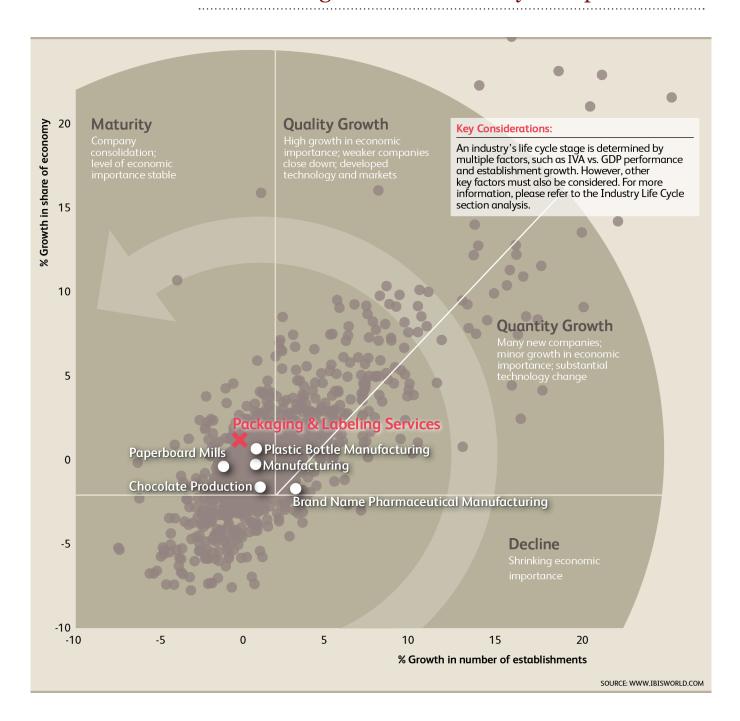
number of employees and the average wage per employee are both expected to grow. Therefore, total industry wage expenditure is anticipated to increase at an annualized rate of 1.5% to \$2.5 billion in 2024. Profit margins (measured as earnings before interest and taxes) are expected to reach 8.5% of revenue in 2024, as revenue growth is anticipated to outpace growth in wage expenditure and the price of plastic materials is expected to stagnate. Industry operators are also expected to realize cost efficiency gains as they vertically integrate and provide higher-value services such as specialty packaging design.

Life Cycle Stage

Businesses are focusing on improving operating efficiency

Manufacturers are increasingly outsourcing packaging and labeling operations

Industry companies are consolidating, resulting in a declining number of industry enterprises



#### **Industry Life Cycle**

This industry is **Mature** 

The Packaging and Labeling Services industry is in the mature phase of its life cycle. Industry value added (IVA), which measures the industry's contribution to the US economy, is expected to increase at an annualized rate of 3.5% over the 10 years to 2024, while US GDP is forecast to grow at an annualized rate of 2.1% during the same period. Although higher IVA growth than GPD growth is indicative of an industry in its growth life cycle phase, other characteristics of this industry point to its maturity.

Larger operators tend to have an advantage in the industry because they have more capital and are better able to absorb investments in high-tech packaging and labeling equipment, which helps improve operating efficiencies, and offer higher margin high-tech services. As is typical of a mature industry, growth for the Packaging and Labeling Services industry is driven by overall economic growth as well as acquisitions, mergers and vertical integrations that enable operators to differentiate themselves in a highly competitive environment. Also typical of a mature industry, the Packaging and Labeling Services industry

has experienced a high level of merger and acquisition activity which has reduced the number of companies operating in the industry due to its rapid rate of consolidation.

Outsourcing activity from companies within highly regulated markets, such as food manufacturing and pharmaceuticals, is also a major source of industry growth. Changes in regulation may necessitate quick and significant changes in packaging and labeling, and companies may consequently choose to outsource packaging and labeling, rather than develop and maintain the internal expertise and equipment necessary to keep up with quick, regulatory-driven changes. Although some industry operators offer services featuring highertech products, such as radio frequency identification tags and pressure-sensitive bar code labels, the industry's services are not expected to change significantly over the 10 years to 2024. In addition, the Packaging and Labeling services industry is characterized by complete market saturation as its services are used by a wide variety of US industries. This also indicates the industry's maturity.

Supply Chain | Products and Services | Demand Determinants Major Markets | International Trade | Business Locations

#### **Supply Chain**

WWW.IBISWORLD.COM

#### **KEY BUYING INDUSTRIES**

| 31135                                   | Chocolate Production in the US This industry uses packaging and labeling services for the packaging of chocolates and confectionery, including candies related to specific holidays such as Halloween, Christmas and Easter. |
|---|--|
| 32541α                                  | Brand Name Pharmaceutical Manufacturing in the US  |
|   | Brand name pharmaceutical manufacturers and medical companies often outsource  |
| • | packaging and labeling operations to industry participants.  |
| 32541b                                  | Generic Pharmaceutical Manufacturing in the US   |
|   | Generic pharmaceutical manufacturers and medical companies often outsource packaging   |
|   | and labeling operations to companies in the industry.  |
| 33251                                   | Hardware Manufacturing in the US   |
|   | Industry participants are contracted by hardware manufacturers to package and label  |
|   | hardware products, such as nails and screws.   |
| 33639                                   | Auto Parts Manufacturing in the US   |
|   | Auto parts manufacturers outsource packaging and labeling operations to industry   |
|   | participants.  |
| 44-45                                   | Retail Trade in the US   |
|   | Industry participants often provide retailers with packaging and labeling services for a variety of goods, including toys, electronics and clothing.   |

#### **KEY SELLING INDUSTRIES**

| 32221 | Cardboard Box & Container Manufacturing in the US This industry supplies cardboard containers and tubes that are used for packaging services.                       |
|-------|---|
| 32616 | Plastic Bottle Manufacturing in the US This industry supplies plastic containers to meet client packaging requirements.   |
| 32721 | Glass Product Manufacturing in the US This industry supplies glass containers in various shapes and sizes to meet client packaging requirements.                    |
| 33243 | Metal Can & Container Manufacturing in the US This industry supplies steel and aluminum cans and containers used for packaging services.                            |
| 33392 | Forklift & Conveyor Manufacturing in the US  This industry supplies equipment that is used to handle pre-packaged goods, materials and finalized packaged products. |

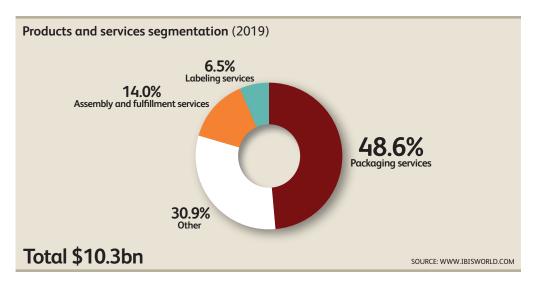
#### **Products and Services**

Packaging contains, protects and preserves goods as they are transported from the manufacturer to the retailer and, ultimately, to the consumer. In addition to completely containing and protecting an item, packaging and labeling companies also provide products with full color retail markings and textual descriptions, including any relevant documentation inside the packaging. Package design permits retailers to display products on their store's shelves,

while graphics and artwork attract consumer attention, provide product information and facilitate brand appeal.

The Packaging and Labeling Services industry mainly provides packaging and labeling services for the consumer goods manufacturing industries, such as personal care and pharmaceutical manufacturers. Manufacturers of these products generally find it more cost effective to hire companies from this industry to package their products, rather

## Products and Services continued



than set up internal packaging operations. The Packaging and Labeling Services industry also engages in assembly and fulfillment, product labeling and several other smaller services.

#### Packaging and labeling services

This segment packages for manufacturers and distributors in markets, such as cosmetics, pharmaceuticals, foodstuffs, toys, home and garden decor, sporting goods and small hardware. The service of packaging can be done remotely or on-site depending on the industry operator's capabilities and the customer's needs. Several processes are contained within the umbrella term of packaging. This includes bagging, wrapping and bundling, cartoning, case packing, filling and repacking using a variety of techniques including shrink banding, blister and clamshell packaging. Demand for consumer products represents the largest source of downstream demand for packaging services. Overall, packaging services are anticipated to account for 48.6% of revenue generated by this segment in 2019. Typically, packages and materials are purchased from package and plastic goods manufacturers, although some larger companies maintain manufacturing segments internal to their overall operations.

Labeling is also typically provided by industry operators. This is expected to make up 6.5% of total revenue generated by this segment. Functions of this service include external package labeling services including, coding, marking and internal labeling. Internal labeling includes any warnings or directions incorporated with the product. IBISWorld expects consumer spending levels to rise over the next five years. As a result, packaging and labeling services are expected to grow in proportion with demand for industry services.

#### Assembly and fulfillment services

Assembly and fulfillment services include any production done by industry operators with the finished client-owned products. This does not include mixing ingredients, as in the case of some beverage bottling plants, which is considered a manufacturing activity. Assembly activities for industry operators include folding textiles and arranging products for display and package size optimization. For specific point-ofpurchase displays, companies will assemble the stands and shelves to client specifications. Assembly and fulfillment services are expected to account for 14.0% of industry revenue in 2019.

## Products and Services continued

#### Other services

In addition to traditional packaging services, industry participants also provide support services for their clients, that are not necessarily considered to be industry relevant. This includes support in packaging design, testing, re-packaging,

logistical services and warehousing. Other services do include activities ancillary to packaging and fulfillment, which primarily involves sterilization activities and various smaller services. Overall, other services are estimated to constitute 30.9% of industry revenue in 2019.

#### Demand Determinants

Demand for packaging and labeling services is dependent on the outsourcing of packaging and labeling operations by product manufacturers. Traditionally, these companies outsource packaging and labeling services when it is more cost effective to hire industry companies than it is to set up internal packaging operations. This occurs when manufacturers need to meet short-term requirements, require special machinery, can save by shipping in bulk or are downsizing operations. Manufacturers can thereby focus on core operations while avoiding extra labor and equipment costs.

Industry operators provide services to a variety of industries, including pharmaceutical, cosmetic, toiletry, toy, food and confectionery manufacturing. Most products that are packaged and labeled are for personal consumption, so demand for industry services is sensitive to economic conditions and consumer spending. Demand for services is not highly seasonal, although revenue is slightly higher in the second half of the year due to US consumption trends. Manufacturers will outsource packaging and labeling to minimize overhead and costs during periods of increased sales.

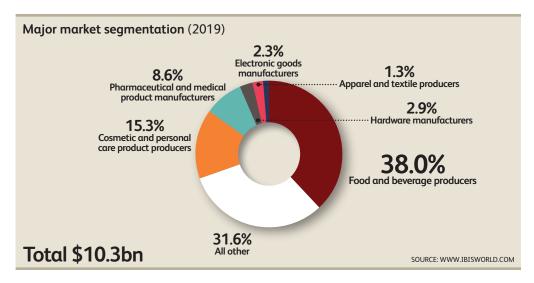
#### Regulation and specialization

Demand for industry services is also linked to the regulatory environment of the markets it serves. Federal agencies heavily regulate food and pharmaceutical

companies, requiring companies to provide detailed product labels and warnings for consumers. Federal agencies also require these companies to meet safety standards regarding the packaging of their products, necessitating measures such as childproof caps and the application of specialized sealing techniques. Manufacturers may turn to industry operators if regulation dictates a specific packaging or labeling need that the company is incapable of providing in-house. Increases in packing specialization prompt the use of industry services. Industry operators are typically more flexible than large manufacturers in adapting to changes in regulations since packaging services represent their core operating activity.

Regulations regarding shipping and storage conditions can also affect demand for industry services. Customers with highly specialized packaging needs (such as computer component manufacturers or biotechnology companies) often require sterile or cool conditions to store products. Markets that are required to meet stringent quality-control standards, such as food manufacturers or drug companies, may also have special requirements for the storage of their products. Changes in such requirements will further influence demand for industry services because industry operators generate additional revenue from providing packaging services optimized for more stringent demands.

#### **Major Markets**



The Packaging and Labeling Services industry provides services to a variety of markets. The majority of industry services are related to consumer goods.

#### Food and beverage manufacturers

This industry does not include packing and crating services for agricultural products nor does it include processing client-owned materials into a different product. Therefore, some food manufacturers would not be considered part of the customer market. However, packaging for food product and snack manufacturers that do not require the aforementioned services are considered part of this industry's customer market. In 2019, food, beverage and snack food manufacturers are expected to account for 38.0% of revenue for the Packaging and Labeling Services industry. Snack foods represent the majority of this market portion, and food producers have increased their demand for industry services in response to consumer demands for increased product information on food packaging. In addition, packaging has long been used by food product manufacturers to convey food quality and achieve product differentiation amid high competition.

### Personal care and cosmetics manufacturers

This market is composed of consumer goods producers that operate in the personal care and cosmetics manufacturing markets. In total, this market is expected to account for 15.3% of industry revenue in 2019. The volume and variety of products produced by these operators drives demand from these industries. Products requiring packaging include lipstick, mascara, skin cleansers, lotions, shampoo, hair styling products, perfumes and colognes. Companies involved in producing these products typically use contract packaging at a greater rate since most of them are small manufacturers and do not have the necessary packaging capabilities. Therefore, this generates significant value to cosmetics manufacturers due to supply chain efficiency gains.

### Pharmaceutical and medical manufacturers

Pharmaceutical and other medical products must be packaged according to strict sterilization and regulatory standards; accordingly, the Packaging and Labeling Services industry labels these products with a variety of

## Major Markets continued

mandatory information, including precautions, dosages and ingredients. Pharmaceutical manufacturers also rely on packaging services to contain, protect, preserve and transport their products. These factors, combined with the scale of the market, results in many companies outsourcing packaging and labeling activities to industry operators. In 2019, this segment is expected to account for 8.6% of industry revenue.

This segment has increased as a share of revenue as generic pharmaceutical manufacturing has grown during the five-year period, requiring more packaging and labeling services. Additionally, generic pharmaceuticals have expanded during the period as more drugs reached the end of their patent period attributing to segment growth. As the population aged 65 and older increases over the next five years, and more people have access to medical insurance due to recent healthcare legislation, this segment is expected to drive growth for industry operators.

#### Hardware manufacturers

In 2019, hardware manufacturers are estimated to account for 2.9% of industry revenue. Hardware products often require a variety of packaging due to the wide variety consumer channels, such as standalone products in retail stores or as part of a larger product kit. Further, hardware manufacturers endure strong

price competition from domestic and foreign producers, making supply chain efficiency and cost minimization critical to success. As a result, hardware producers demand industry services because of the efficiency gains and cost savings associated with outsourcing the packaging and labeling process.

#### Apparel and textile manufacturers

Apparel and textile manufacturers are expected to account for 1.3% of industry revenue in 2019. The US market for apparel manufacturers has diminished over the long-term by competition from foreign companies. As a result, these companies make up a smaller revenue source for industry companies. Much of the revenue from this market is derived from folding and display preparation for packed materials. Many smaller operations require industry services to fulfill orders as they grow their brand.

#### Other

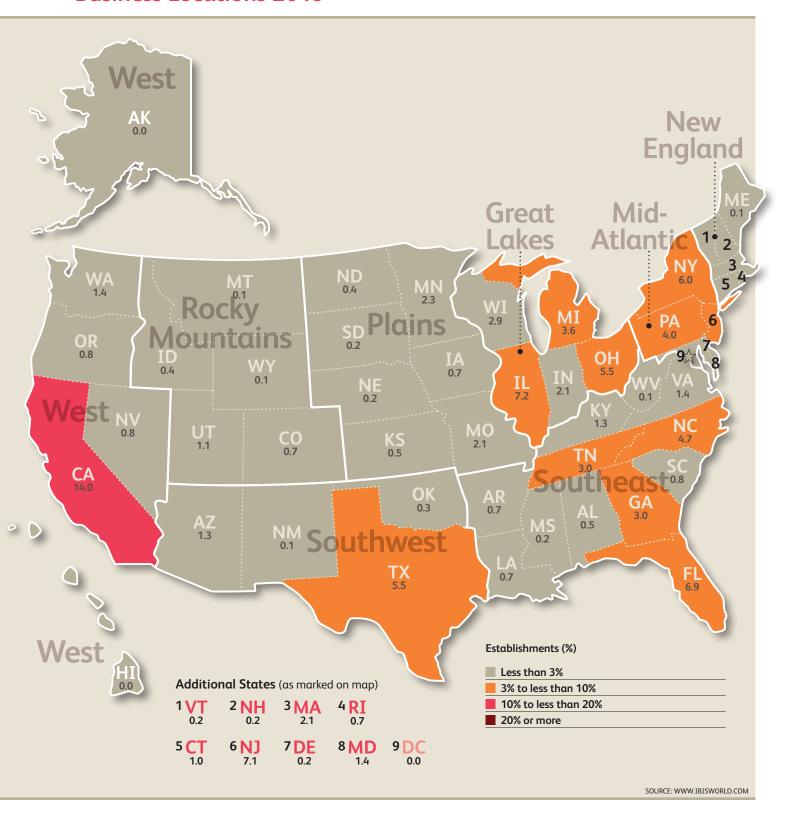
There are many other various markets that act as key sources of demand for industry companies. Other clients include manufacturers of electronics, pet supplies, toys and games, office products, hard goods and other soft goods. In 2019, all other clients are expected to constitute an estimated 33.9% of total industry revenue. Individually, however, these client markets make up less than 5.0% of industry revenue.

#### **International Trade**

This industry's services are not traded internationally. The Packaging and Labeling Services industry does not manufacture or produce package and labeling materials. Instead, the industry provides a service to manufacturers and other producers looking to outsource

packaging and labeling operations. Thus, because participants do not directly sell any products, there is no international trade. For more information on international operations, refer to the Industry Globalization section of this report.

#### **Business Locations 2019**

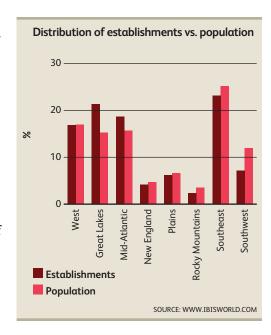


#### **Business Locations**

The geographic distribution of the Packaging and Labeling Services industry closely mirrors that of the US manufacturing sector because participants often set up operations near product manufacturers to reduce distribution and transportation costs. Consequently, these companies are generally located in traditional manufacturing regions or states to efficiently take advantage of demand for industry services.

The industry's clientele includes manufacturers that operate in a variety of industries, including retail, pharmaceuticals, food and automotive parts. Similarly, regions and states that specialize in the manufacturing of these products also have higher portions of industry establishments. For example, there is a significant amount of manufacturing based in the Southeast region, which is home to 23.2% of establishments in the Packaging and Labeling Services industry. Additionally, the Great Lakes region contains an estimated 21.3% of total industry establishments. This region also traditionally has a high concentration of US manufacturers and factories. The Mid-Atlantic region (18.7%) and the West region (16.9%) also contain a significant portion of industry establishments.

California is by far the largest state by number of industry establishments, with an estimated 14.0% in 2019. This is because California holds the nation's largest share of pharmaceuticals manufacturers and also ranks highly in all facets of food production. Since food and beverage producers make up the industry's single largest market many operators are located near these



companies to increase supply chain efficiencies. In addition, California is one of the nation's largest producers of automobile electronics.

Following California, the largest states by number of industry establishments are Florida (6.9%), New Jersey (7.1%), Illinois (7.2%) and New York (6.0%). For the most part, the distribution of industry establishments among these states is largely due to the distribution of the population. New Jersey is, however, a notable exception, holding only 2.8% of the country's population. Like California, New Jersey is home to several large food and pharmaceutical manufacturers. Its proximity to large east coast markets has made it an important player in the manufacturing of consumer goods. Thus, a disproportionate number of industry operators have positioned themselves in the state to take advantage of demand.

Market Share Concentration | Key Success Factors | Cost Structure Benchmarks Basis of Competition | Barriers to Entry | Industry Globalization

## Market Share Concentration

#### Leve

Concentration in this industry is **Low** 

The Packaging and Labeling Services industry has a low level of market share concentration. IBISWorld estimates that the four largest companies in the industry account for less than 10.0% of industry revenue in 2019. Small, regional companies that specialize in specific packaging and labeling functions dominate the industry. Small and medium-sized operators focus on maintaining service contracts with local producers, while large operators rely on close relationships with a few major clients as the main source of revenue. One reason the industry is so highly fragmented is that clients often need

highly specialized packaging and labeling services. As a result, operators make capital and labor investments into packaging and labeling functions specific to one industry or manufacturing sector.

In 2019, small operators with one to four employees account for an expected 45.2% of industry establishments, and these companies tend to serve small manufacturers. Nonetheless, industry companies will continue to pursue mergers and acquisitions over the next five years, which will continue to consolidate the industry. As a result, the industry is expected to become increasingly concentrated.

#### **Key Success Factors**

#### IBISWorld identifies 250 Key Success Factors for a business. The most important for this industry are:

## Ability to manage external (outsourcing) contracts

Operators in the Packaging and Labeling Services industry must be able to manage outsourced packaging contracts.

#### **Effective cost controls**

Successful industry operators must manage costs to maximize their generally small profit margins.

### Access to multiskilled and flexible workforce

Companies in the industry need to have a multiskilled labor force capable of highly specialized tasks.

#### Access to niche markets

It is beneficial for companies in the industry to operate in niche markets that may be less price sensitive.

#### Cost Structure Benchmarks

Similar to other service industries, a large portion of this industry's costs are allocated to wages. However, purchases are high as a proportion of costs due to the input prices of packaging materials. Labor costs include wages for packaging employees as well as employees engaged in administrative and other back-office functions. Industry purchases include packaging and labeling raw materials, as well as any necessary machinery and technology.

#### **Profit**

In 2019, average industry profit, defined as earnings before interest and taxes, is expected to account for 7.8% of revenue. Profit has increased during the period, up

from 6.3% in 2014, due to decreases in the price of plastic materials that were passed on to industry operators in the form of lower purchase costs. The cost of input materials strongly influences industry profit, as profit often fluctuates with the price of commodities or raw materials such as steel, aluminum, recovered paper, paperboard and plastic resins. These materials represent upstream costs that affect the price of packaging inputs. Further, since operators often enter into long-term contracts with clients, in the event of input cost increases, they have little room to modify service fees which thus affects profit margins.

Cost Structure Benchmarks continued

#### Wages

Wage expenses for industry companies include payroll as well as employee benefits such as workers' compensation, health insurance and other similar costs. Although many packaging and labeling processes require human labor, the industry is also reliant on machinery for processing. Over the past five years, as automation has become more widespread, industry employment has grown less rapidly than revenue, and wages' share of revenue is expected to decrease from 24.1% in 2014 to 22.3% in 2019. However, as the trend toward automation continues, IBISWorld expects the average employee wage to increase, even though wages as a share of total revenue declines.

#### Rent

Rent and lease payments are estimated to account for 2.6% of total industry

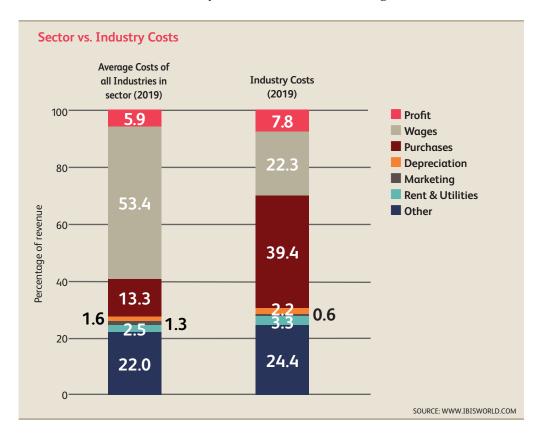
revenue in 2019. This cost component has decreased slightly as a share of revenue during the period, down from 2.7% in 2014.

#### **Utilities**

Utility costs are estimated to account for an estimated 0.7% of total industry revenue in 2019. As a share of total revenue, utility costs have not changed significantly over the past five years.

#### Other costs

Marketing expenses account for an estimated 0.6% of industry revenue in 2019, and depreciation is estimated to account for another 2.2%. Depreciable assets primarily consist of specialized equipment used during the packaging and labeling process as well as operating facilities. Examples of equipment may include conveyors, sealers and filling machines.



#### **Basis of Competition**

Level & Trend

Competition in this industry is **High** and the trend is **Steady** 

#### Internal competition

Since the majority of industry operators are small businesses, competition within the industry is relatively strong. Price competition is one of the primary methods by which industry operators compete. Since the services provided by industry operators is relatively uniform, companies are primarily differentiated based on the price of their services. In an attempt to compete, industry operators will lower prices with negative effects to revenue. However, to mitigate this, some companies have found other ways to differentiate themselves by, for example, specializing in packaging services for clients in specific industries or by using the most sophisticated technology. Operators that cater to pharmaceutical manufacturers will generally require different facility infrastructure than a company that caters to natural food producers.

Secondly, operators also compete based on their reputation for high quality service and on location. Since one of the primary benefits of industry services is gains in supply chain efficiency, a competitive industry operator must be known for being reliable and fast. Location facilitates a company's ability to deliver their service on time to ensure quality and reliability. In addition, being located close to clients also helps decrease operating costs and

therefore enables companies to be more price competitive.

#### **External competition**

The capabilities of large package manufacturing companies pose a threat to the industry. Larger manufacturers can operate smaller divisions that account for packaging design and optimization. This factor positions these companies in relationships with larger producers, however those producers tend to have in-house fulfillment. Moreover, the existing supplier networks that these packaging manufacturing companies have will enable them to better compete on a price basis through access to lower input cost. Their existing relationships with clientele and the scale efficiencies challenge packaging and labeling service industry operators.

Nonpackaging manufacturers may also opt to undertake internal packaging and labeling operations instead of contracting out to industry operators. As companies develop internal facilities, they may offer their services to other companies that manufacture similar products, which would create even more external competition for the Packaging and Labeling Services industry. Small manufacturers will continue to outsource packaging, but as companies grow, internalizing of services may increase.

#### **Barriers to Entry**

Level & Trend
Barriers to Entry
in this industry are
Low and Steady

The Packaging and Labeling Services industry has low barriers to entry due to the relatively low capital investment required to enter. Likewise, the industry has a low level of concentration, with the top four companies expected to account for less than 10.0% of industry revenue in 2019. Most operators are small businesses that service a group of local or regional clients across a select group of industries. As a result, new companies

### Barriers to Entry checklist

| Competition           | High   |
|-----------------------|--------|
| Concentration         | Low    |
| Life Cycle Stage      | Mature |
| Capital Intensity     | Low    |
| Technology Change     | Medium |
| Regulation and Policy | Medium |
| Industry Assistance   | Low    |
|                       |        |

SOURCE: WWW.IBISWORLD.COM

## Barriers to Entry continued

can compete in local markets and provide services to small operators in the manufacturing sector. Initial capital investments are limited to the purchase of a facility and of initial packaging materials. Depending on the type of services provided or the scale of operations, investment in specialty machinery and equipment may also be necessary.

Although entry is not capital intensive, contracts between existing companies and their clients do present a deterrent to entry. Developing contracts and business relationships can take time and often depends on the two parties' needs.

Current relationships are based on industry expertise and effective service, which is difficult to establish for a new entrant. Additionally, federal regulation may also represent a barrier to industry entry depending on the type of manufacturers being served. Industry operators that serve food and pharmaceutical manufacturers are subject to higher federal and state regulations concerning consumer safety. Some food and drug packaging operators must register with the US Food and Drug Administration and pass a series of quality-control checks.

#### Industry Globalization

Level & Trend Globalization in this industry is **Low** and the trend is **Steady**  Globalization in the Packaging and Labeling Services industry is low. The industry is primarily made up of small businesses that only service domestic clients and markets. However, several larger industry participants operate international companies that operate packaging and labeling facilities in multiple countries. For example, Sharp, a division of UDG Healthcare PLC (UDG), provides commercial contract packaging services and clinical trial services to the pharmaceutical and medical markets.

UDG is headquartered in Ireland and its Sharp division has operations in Ireland, the Netherlands, Belgium, the United Kingdom and the United States. In addition, Sonoco Products Company provides services internationally, operating out of facilities located in the United States, Poland, Mexico and Brazil. While some large companies compete on a global basis, for the most part competition is regionally based and most companies operate solely within the United States.

## **Major Companies**

There are no Major Players in this industry | Other Companies

## Other Company Performance

Sonoco Products Company Market Share: 2.9 % Sonoco Products Company (Sonoco) was founded as the Southern Novelty Company in 1899. Today, the company is a global provider of consumer and industrial packaging products and services, with headquarters in Hartsville, SC and 312 locations in 36 countries. In 2018, Sonoco had an estimated 23,000 employees worldwide. The company's operations consist of four segments: Consumer Packaging, Display and Packaging, Paper and Industrial Converted Products and Protective Solutions.

Of the four main operating segments, only the Display and Packaging segment

is relevant to this industry. This segment provides packaging services to a wide variety of markets including, but not limited to, electronics, personal care, baby care, food, cosmetics, fragrances, home and garden, medical and over-thecounter drugs. The segment currently operates 23 facilities located in the United States, Poland, Mexico and Brazil. Revenue for this segment is dependent on a few customers. According to the company, 64.0% of revenue for this segment is attributable to sales from its five largest customers. In 2019, industryrelevant revenue for Sonoco is estimated to be \$302.3 million.

## Other Company Performance

Sharp

UDG Healthcare PLC Market Share: 2.6 % Industry Brand Names UDG Healthcare PLC (UDG) is an international company providing advisory, communication, commercial, clinical and packaging services to the healthcare industry. Currently, the company employs approximately 8,700 people with operations in 26 countries. It is a public company headquartered in Dublin, Ireland. The company is organized into two operating divisions: Ashfield and Sharp.

The company operates in the Packaging and Labeling Services industry through Sharp, providing contract packaging services to pharmaceutical clients around the world. The division

operates locations in the United States. the United Kingdom, the Republic of Ireland, Belgium and the Netherlands. Sharp's commercial contract packaging services include but are not limited to multiple formats such as biotech. bottling, blistering, pouch, stick pack, vial labeling, prefilled-syringe labeling and knitting. In addition, the company also provides package design, labeling and printing services and is a leader in pharmaceutical serialization programs. Currently, the division employs 1,800 employees and is estimated to generate industry-relevant revenue of \$265.2 million in 2019.

## Other Company Performance

**Verst Logistics Inc.**Market Share: 0.5 %

Verst Group Logistics Inc. (Verst), currently based in Walton, KY, is a large logistics and packaging company. The company was started in 1966 when its late founder, William Verst, purchased a warehouse company and pivoted the business to provide a full line of logistics services. The company now has locations in Indiana, Kentucky, Alabama, Ohio and Arizona. Currently,

Verst is estimated to employ over 1,547 people. Business operations are separated into fulfillment, packaging, transportation and warehousing services. Of these segments, the packaging segment is the business unit that generates industry-relevant revenue. In 2019, IBISWorld estimates that Verst will generate \$51.0 million in industry-relevant revenue.

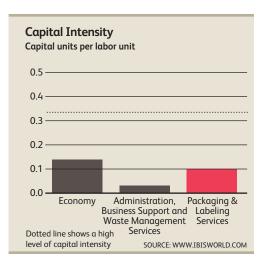
Capital Intensity | Technology & Systems | Revenue Volatility Regulation & Policy | Industry Assistance

#### **Capital Intensity**

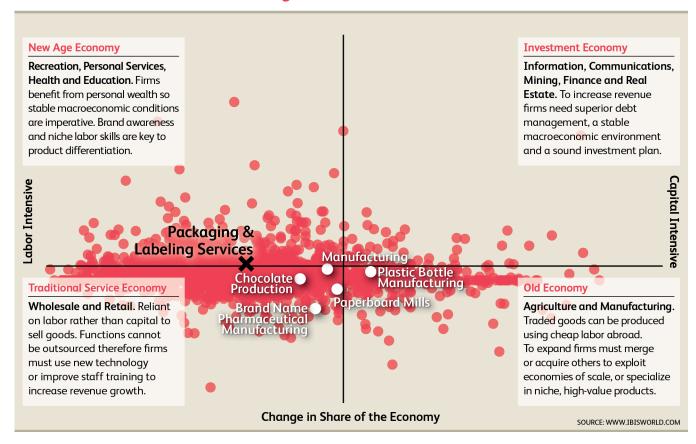
#### Level

The level of capital intensity is **Low** 

The Packaging and Labeling Services industry has a low level of capital intensity. In 2019, the average industry operator is expected to invest \$0.10 in capital expenditures for every \$1.00 they spend on labor. Although machinery and technology are integral to many packaging and labeling processes, the industry still requires labor to supervise the packaging and labeling of products. Further, many companies still package products manually. Labor input is also required at every stage of the quality control process. Nonetheless, capital intensity is expected to increase over the next five years as more industry operators invest in automation technologies.



#### Tools of the Trade: Growth Strategies for Success



## Technology and Systems

#### l evel

The level of technology change is **Medium** 

The Packaging and Labeling Services industry has experienced moderate technological change in recent years. Operators are increasingly relying on automation to reduce labor costs. Industry companies have an interest in keeping wage costs low because profit margins have narrowed due to significant pricebased competition. IBISWorld expects the trend toward automation to continue in this industry. This trend in automation has focused on generating fast, efficient and cost-effective solutions for customers.

Many types of packaging use identification codes, bar codes and electronic data interchange to provide and convey product information or other data relevant to product shipping and storage. Usage of radio frequency

identification labels for these purposes is also increasing. Although operators in this industry do not manufacture labels and packaging, technological trends in these materials can affect industry processes. When goods require specific high-tech labeling (such as pressuresensitive bar codes) or packaging (such as temperature-controlled containers), industry companies must have the technological machinery and skilled labor to apply these labels and packages to the goods. Industry operators are largely embracing new packaging and labeling processes in an effort to bolster profit margins by offering services with higher margins and differentiating themselves from the competition by offering the latest packaging technologies.

#### Revenue Volatility

#### Level

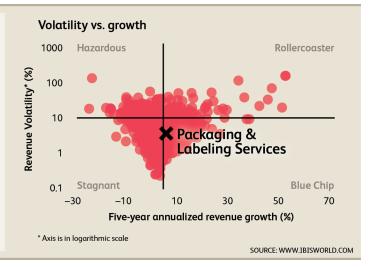
The level of volatility is **Medium** 

Over the five years to 2019, IBISWorld estimates that revenue in the Packaging and Labeling Services industry has exhibited a medium level of volatility. The industry's level of volatility is largely the result of its dependence on the retail and consumer industries, which fluctuate due to changes in economic conditions and consumer demand. Consumer spending has grown consistently and

exhibited a low level of volatility during the period. This has worked to moderate industry revenue volatility by driving consistent growth in revenue during the period. However, the small size of the average company in the industry can contribute to revenue volatility. In addition, since many companies rely on a few clients for the majority of revenue, the loss of a major customer causes



investment decisions it may face underutilized capacity if demand suddenly falls, or capacity constraints if it rises quickly.



## Revenue Volatility continued

significant loss in revenue. Such drastic losses (and potential gains) can add to the overall level of revenue volatility in the industry, particularly because clients that end a contract often opt to package and label internally as opposed to funneling that potential revenue to other industry operators.

#### **Regulation and Policy**

Level & Trend
The level of
Regulation is
Medium and the
trend is Steady

The Packaging and Labeling Services industry is not heavily regulated. While regulation of this industry is light, the federal government regulates all packaging and labeling requirements. The Fair Packaging and Labeling Act (FPLA) and other federal laws and regulations govern the labeling requirements for most consumer products; state laws may also apply to packaging and labeling standards for many products. However, the burden of ensuring that all FPLA requirements are complied with largely falls on the product's manufacturer, not the third-party labeler.

The Food and Drug Administration (FDA) is a key regulating agency because it administers all food and pharmaceutical regulations, as well as the ensuing packaging and labeling requirements. Operators involved in food and drug packaging need to register with the FDA, and any package components that may contact the food must comply with safety regulations. The completed package must also be checked to ensure that the product is safe for its intended shelf life. The key regulation that is affecting contract packagers currently is the Food Safety Modernization Act (FSMA).

This regulation went into effect for non-small human and pet food producers in 2016 and in 2017 for small producers. Very small producers (defined as making less than \$250,000) were required to be compliant at the end of 2018.

The Drug Quality and Security Act (DQSA), signed in 2013, has also had a material effect on the industry. Relevant to this industry, is Title II of DQSA, the Drug Supply Chain Security Act (DSCSA), which outlines the creation of an electronic, interoperable system to identify and trace certain prescription drugs as they are distributed in the United States. As part of the act, manufacturers, wholesale distributors, dispensers and third-party packagers will be required to pass, capture and maintain certain information regarding each transaction. The implementation of product serialization is a specific example of one of the many components of this collaborative system. As a result of this legislation, the process of packaging and labeling pharmaceutical products is anticipated to become more complex. This will continue to motivate more companies to outsource packaging and labeling operations to industry operators to focus on their core competencies.

#### **Industry Assistance**

Level & Trend
The level of
Industry Assistance
is **Low** and the
trend is **Steady** 

The industry receives no direct assistance from the federal or the local government. However, the government supported Small Business Association provides financing and loan assistance to certified small companies. As most operators in this industry are small, there is a certain degree of indirect government support for small players in the industry.

Additionally, the industry receives some assistance through industry associations. For example, the Contract Packaging Association, a national trade association for contract packaging companies, promotes the growth and welfare of member companies. The association also works to set up ethical standards between contract packagers and their customers

## Industry Assistance continued

and provides relevant financial and political information to member companies. Chicago's Summit Media Group also publishes several magazines, including Packaging World, Healthcare Packaging and Contract Packaging, which serve to provide interested companies and individuals with the most up-to-date industry- and sector-relevant news and information.

## **Key Statistics**

| Industry Date               | α                | Industry             |                     |                  |                  |            |            |                  |                    | Consumer          |
|-----------------------------|------------------|----------------------|---------------------|------------------|------------------|------------|------------|------------------|--------------------|-------------------|
|                             | Revenue<br>(\$m) | Value Added<br>(\$m) | Establish-<br>ments | Enterprises      | Employment       | Exports    | Imports    | Wages<br>(\$m)   | Domestic<br>Demand | spending<br>(\$b) |
| 2010                        | 6,828.3          | 2,162.4              | 10,416              | 10,229           | 47,048           |            |            | 1,582.2          | N/A                | 10,643.0          |
| 2011                        | 7,033.3          | 2,876.9              | 11,066              | 10,858           | 52,990           |            |            | 1,976.7          | N/A                | 10,843.8          |
| 2012                        | 7,250.7          | 2,432.4              | 10,418              | 10,247           | 48,883           |            |            | 1,859.5          | N/A                | 11,006.8          |
| 2013                        | 7,773.8          | 2,759.3              | 10,437              | 10,277           | 53,244           |            |            | 1,966.4          | N/A                | 11,166.9          |
| 2014                        | 8,068.7          | 2,645.4              | 10,375              | 10,182           | 51,373           |            |            | 1,943.5          | N/A                | 11,494.3          |
| 2015                        | 8,659.2          | 2,796.5              | 10,325              | 10,119           | 52,669           |            |            | 2,017.2          | N/A                | 11,921.9          |
| 2016                        | 8,880.9          | 2,981.6              | 10,250              | 10,043           | 53,420           |            |            | 2,129.1          | N/A                | 12,248.2          |
| 2017                        | 9,543.9          | 3,137.7              | 10,250              | 10,038           | 55,022           |            |            | 2,202.4          | N/A                | 12,558.7          |
| 2018                        | 9,956.5          | 3,218.8              | 10,259              | 10,045           | 55,932           |            |            | 2,244.8          | N/A                | 12,893.6          |
| 2019                        | 10,290.6         | 3,327.4              | 10,288              | 10,068           | 57,131           |            |            | 2,295.6          | N/A                | 13,233.1          |
| 2020                        | 10,538.9         | 3,402.5              | 10,304              | 10,073           | 57,784           |            |            | 2,324.7          | N/A                | 13,474.0          |
| 2021                        | 10,778.6         | 3,485.2              | 10,255              | 10,028           | 58,742           |            |            | 2,364.7          | N/A                | 13,716.5          |
| 2022                        | 11,012.0         | 3,550.7              | 10,261              | 10,030           | 59,446           |            |            | 2,395.3          | N/A                | 13,956.5          |
| 2023                        | 11,274.6         | 3,631.0              | 10,269              | 10,035           | 60,395           |            |            | 2,435.5          | N/A                | 14,186.8          |
| 2024                        | 11,580.5         | 3,717.5              | 10,286              | 10,049           | 61,369           |            |            | 2,477.4          | N/A                | 14,428.0          |
| Sector Rank<br>Economy Rank | 18/26<br>507/694 | 19/26<br>483/694     | 15/26<br>308/694    | 14/26<br>280/694 | 20/26<br>418/694 | N/A<br>N/A | N/A<br>N/A | 20/26<br>452/694 | N/A<br>N/A         | N/A<br>N/A        |

| Annual Char                 | Revenue         | Industry<br>Value Added<br>(%) | Establish-<br>ments<br>(%) | Enterprises<br>(%) | Employment (%)   | Exports<br>(%) | Imports<br>(%) | Wages<br>(%)     | Domestic<br>Demand<br>(%) | Consumer spending (%) |
|-----------------------------|-----------------|--------------------------------|----------------------------|--------------------|------------------|----------------|----------------|------------------|---------------------------|-----------------------|
| 2011                        | 3.0             | 33.0                           | 6.2                        | 6.1                | 12.6             | N/A            | N/A            | 24.9             | N/A                       | 1.9                   |
| 2012                        | 3.1             | -15.5                          | -5.9                       | -5.6               | -7.8             | N/A            | N/A            | -5.9             | N/A                       | 1.5                   |
| 2013                        | 7.2             | 13.4                           | 0.2                        | 0.3                | 8.9              | N/A            | N/A            | 5.7              | N/A                       | 1.5                   |
| 2014                        | 3.8             | -4.1                           | -0.6                       | -0.9               | -3.5             | N/A            | N/A            | -1.2             | N/A                       | 2.9                   |
| 2015                        | 7.3             | 5.7                            | -0.5                       | -0.6               | 2.5              | N/A            | N/A            | 3.8              | N/A                       | 3.7                   |
| 2016                        | 2.6             | 6.6                            | -0.7                       | -0.8               | 1.4              | N/A            | N/A            | 5.5              | N/A                       | 2.7                   |
| 2017                        | 7.5             | 5.2                            | 0.0                        | 0.0                | 3.0              | N/A            | N/A            | 3.4              | N/A                       | 2.5                   |
| 2018                        | 4.3             | 2.6                            | 0.1                        | 0.1                | 1.7              | N/A            | N/A            | 1.9              | N/A                       | 2.7                   |
| 2019                        | 3.4             | 3.4                            | 0.3                        | 0.2                | 2.1              | N/A            | N/A            | 2.3              | N/A                       | 2.6                   |
| 2020                        | 2.4             | 2.3                            | 0.2                        | 0.0                | 1.1              | N/A            | N/A            | 1.3              | N/A                       | 1.8                   |
| 2021                        | 2.3             | 2.4                            | -0.5                       | -0.4               | 1.7              | N/A            | N/A            | 1.7              | N/A                       | 1.8                   |
| 2022                        | 2.2             | 1.9                            | 0.1                        | 0.0                | 1.2              | N/A            | N/A            | 1.3              | N/A                       | 1.7                   |
| 2023                        | 2.4             | 2.3                            | 0.1                        | 0.0                | 1.6              | N/A            | N/A            | 1.7              | N/A                       | 1.7                   |
| 2024                        | 2.7             | 2.4                            | 0.2                        | 0.1                | 1.6              | N/A            | N/A            | 1.7              | N/A                       | 1.7                   |
| Sector Rank<br>Economy Rank | 3/26<br>108/694 | 3/26<br>135/694                | 22/26<br>458/694           | 22/26<br>447/694   | 11/26<br>221/694 | N/A<br>N/A     | N/A<br>N/A     | 11/26<br>231/694 | N/A<br>N/A                | N/A<br>N/A            |

| Key Ratios                  | IVA/Revenue<br>(%) | Imports/<br>Demand<br>(%) | Exports/<br>Revenue<br>(%) | Revenue per<br>Employee<br>(\$'000) | Wages/Revenue<br>(%) | Employees<br>per Est. | Average Wage<br>(\$) | Share of the<br>Economy<br>(%) |
|-----------------------------|--------------------|---------------------------|----------------------------|-------------------------------------|----------------------|-----------------------|----------------------|--------------------------------|
| 2010                        | 31.67              | N/A                       | N/A                        | 145.13                              | 23.17                | 4.52                  | 33,629.48            | 0.01                           |
| 2011                        | 40.90              | N/A                       | N/A                        | 132.73                              | 28.10                | 4.79                  | 37,303.26            | 0.02                           |
| 2012                        | 33.55              | N/A                       | N/A                        | 148.33                              | 25.65                | 4.69                  | 38,039.81            | 0.02                           |
| 2013                        | 35.49              | N/A                       | N/A                        | 146.00                              | 25.30                | 5.10                  | 36,931.86            | 0.02                           |
| 2014                        | 32.79              | N/A                       | N/A                        | 157.06                              | 24.09                | 4.95                  | 37,831.16            | 0.02                           |
| 2015                        | 32.30              | N/A                       | N/A                        | 164.41                              | 23.30                | 5.10                  | 38,299.57            | 0.02                           |
| 2016                        | 33.57              | N/A                       | N/A                        | 166.25                              | 23.97                | 5.21                  | 39,855.86            | 0.02                           |
| 2017                        | 32.88              | N/A                       | N/A                        | 173.46                              | 23.08                | 5.37                  | 40,027.63            | 0.02                           |
| 2018                        | 32.33              | N/A                       | N/A                        | 178.01                              | 22.55                | 5.45                  | 40,134.45            | 0.02                           |
| 2019                        | 32.33              | N/A                       | N/A                        | 180.12                              | 22.31                | 5.55                  | 40,181.34            | 0.02                           |
| 2020                        | 32.29              | N/A                       | N/A                        | 182.38                              | 22.06                | 5.61                  | 40,230.86            | 0.02                           |
| 2021                        | 32.33              | N/A                       | N/A                        | 183.49                              | 21.94                | 5.73                  | 40,255.69            | 0.02                           |
| 2022                        | 32.24              | N/A                       | N/A                        | 185.24                              | 21.75                | 5.79                  | 40,293.71            | 0.02                           |
| 2023                        | 32.21              | N/A                       | N/A                        | 186.68                              | 21.60                | 5.88                  | 40,326.19            | 0.02                           |
| 2024                        | 32.10              | N/A                       | N/A                        | 188.70                              | 21.39                | 5.97                  | 40,368.92            | 0.02                           |
| Sector Rank<br>Economy Rank | 23/26<br>312/694   | N/A<br>N/A                | N/A<br>N/A                 | 8/26<br>450/694                     | 23/26<br>263/694     | 14/26<br>457/694      | 16/26<br>466/694     | 19/26<br>483/694               |

#### **Industry Financial Ratios**

| Industry Financial Ratios  |                        |                        |                        |                        | Apr 2017 - M      | ar 2018 by com       | pany revenue      |
|--|------------------------|------------------------|------------------------|------------------------|-------------------|----------------------|-------------------|
|  | Apr 2014 -<br>Mar 2015 | Apr 2015 -<br>Mar 2016 | Apr 2016 -<br>Mar 2017 | Apr 2017 -<br>Mar 2018 | Small<br>(<\$10m) | Medium<br>(\$10-50m) | Large<br>(>\$50m) |
| Liquidity Ratios   |                        |                        |                        |                        |                   |                      |                   |
| Current Ratio  | 1.4                    | 1.4                    | 1.5                    | 1.4                    | 1.6               | 1.3                  | 1.7               |
| Quick Ratio  | 0.8                    | 0.9                    | 0.9                    | 0.8                    | 1.2               | 0.7                  | 1.0               |
| Sales / Receivables (Trade Receivables<br>Turnover)                  | 9.1                    | 9.4                    | 10.0                   | 8.8                    | 10.7              | 8.9                  | 7.5               |
| Days' Receivables  | 40.1                   | 38.8                   | 36.5                   | 41.5                   | 34.1              | 41.0                 | 48.7              |
| Cost of Sales / Inventory (Inventory Turnover)                       | 10.4                   | 11.8                   | 9.4                    | 9.0                    | 12.2              | 7.8                  | 9.0               |
| Days' Inventory  | 35.1                   | 30.9                   | 38.8                   | 40.6                   | 29.9              | 46.8                 | 40.6              |
| Cost of Sales / Payables (Payables Turnover)                         | 10.9                   | 10.7                   | 11.3                   | 13.1                   | 14.7              | 13.0                 | 11.7              |
| Days' Payables   | 33.5                   | 34.1                   | 32.3                   | 27.9                   | 24.8              | 28.1                 | 31.2              |
| Sales / Working Capital  | 17.1                   | 18.3                   | 15.1                   | 16.1                   | 13.9              | 16.8                 | 12.4              |
| Coverage Ratios  |                        |                        |                        |                        |                   |                      |                   |
| Earnings Before Interest & Taxes (EBIT) /<br>Interest                | 5.8                    | 4.5                    | 5.8                    | 7.8                    | 13.0              | 6.9                  | 7.2               |
| Net Profit + Dep., Depletion, Amort. / Current<br>Maturities LT Debt | 2.6                    | 2.7                    | 2.6                    | 5.2                    | n/α               | 8.7                  | n/α               |
| Leverage Ratios  |                        |                        |                        |                        |                   |                      |                   |
| Fixed Assets / Net Worth   | 0.9                    | 0.6                    | 0.7                    | 0.9                    | 0.6               | 0.9                  | 1.1               |
| Debt / Net Worth   | 2.6                    | 2.0                    | 1.9                    | 1.9                    | 1.2               | 1.8                  | 2.9               |
| Tangible Net Worth   | 24.7                   | 32.3                   | 14.5                   | 28.9                   | 28.1              | 33.1                 | 22.3              |
| Operating Ratios   |                        |                        |                        |                        |                   |                      |                   |
| Profit before Taxes / Net Worth, %                                   | 26.5                   | 27.5                   | 33.0                   | 26.0                   | 30.7              | 25.0                 | 22.5              |
| Profit before Taxes / Total Assets, %                                | 7.1                    | 9.6                    | 10.6                   | 9.5                    | 15.9              | 9.5                  | 7.3               |
| Sales / Net Fixed Assets   | 12.6                   | 16.5                   | 14.7                   | 15.8                   | 24.1              | 11.8                 | 13.2              |
| Sales / Total Assets (Asset Turnover)                                | 2.6                    | 2.9                    | 2.7                    | 2.4                    | 3.0               | 2.4                  | 2.2               |
| Cash Flow & Debt Service Ratios (% of sales)                         | 20.2                   | 20.0                   | 2/4                    | 20.0                   | 27.6              | 20.7                 | 40.2              |
| Cash from Trading  | 30.2                   | 28.8                   | 34.1                   | 28.9                   | 37.6              | 28.7                 | 19.2              |
| Cash after Operations  | 5.0<br>4.7             | 5.1<br>5.1             | 8.1<br>7.6             | 7.5<br>6.2             | 8.2<br>7.9        | 8.2<br>8.3           | 6.5<br>5.6        |
| Net Cash after Operations  Cash after Debt Amortization              | 1.5                    | 1.9                    | 2.6                    | 2.0                    | 2.3               | 1.8                  | 2.0               |
| Debt Service P&I Coverage  | 2.8                    | 3.1                    | 3.0                    | 2.0                    | 5.9               | 2.3                  | 4.2               |
| Interest Coverage (Operating Cash)                                   | 6.8                    | 8.7                    | 7.9                    | 10.3                   | 13.4              | 7.2                  | 15.4              |
| Assets, %  | 0.0                    | 0.7                    | 7.3                    | 10.5                   | 13.4              | 7.2                  | 13.4              |
|  | 0.0                    | 127                    | 127                    | 10.0                   | 15.0              | 0.0                  | / 0               |
| Cash & Equivalents<br>Trade Receivables (net)                        | 8.8                    | 12.7                   | 12.7                   | 10.0                   | 15.0              | 9.0                  | 4.8               |
|  | 28.1<br>21.2           | 29.4<br>19.3           | 29.0<br>18.4           | 28.6<br>18.8           | 30.5<br>15.1      | 27.0<br>22.2         | 28.8<br>17.7      |
| Inventory All Other Current Assets                                   | 1.9                    | 19.3                   | 2.1                    | 2.2                    | 0.6               | 3.3                  | 2.4               |
| Total Current Assets   | 60.0                   | 62.9                   | 62.2                   | 59.6                   | 61.2              | 61.5                 | 53.7              |
| Fixed Assets (net)   | 26.5                   | 26.0                   | 24.6                   | 24.7                   | 24.7              | 25.0                 | 24.2              |
| Intangibles (net)  | 7.3                    | 5.2                    | 8.0                    | 11.6                   | 10.7              | 9.2                  | 17.3              |
| All Other Non-Current Assets   | 6.1                    | 5.9                    | 5.2                    | 4.1                    | 3.3               | 4.3                  | 4.9               |
| Total Assets   | 100.0                  | 100.0                  | 100.0                  | 100.0                  | 100.0             | 100.0                | 100.0             |
| Total Assets (\$m)   | 2,408.6                | 2,117.8                | 2,508.1                | 2,425.3                | 66.0              | 606.3                | 1,753.1           |
| Liabilities, %   |                        |                        |                        |                        |                   |                      |                   |
| Notes Payable-Short Term   | 12.7                   | 11.9                   | 9.8                    | 9.1                    | 7.9               | 12.2                 | 5.3               |
| Current Maturities L/T/D   | 3.0                    | 3.3                    | 8.5                    | 3.9                    | 3.2               | 4.4                  | 3.9               |
| Trade Payables   | 20.4                   | 20.0                   | 19.8                   | 17.7                   | 17.6              | 17.5                 | 18.2              |
| Income Taxes Payable   | 0.2                    | 0.2                    | 0.2                    | 0.2                    | 0.3               | n/a                  | 0.1               |
| All Other Current Liabilities  | 9.7                    | 8.4                    | 8.8                    | 9.2                    | 12.0              | 7.6                  | 8.4               |
| Total Current Liabilities  | 46.0                   | 43.7                   | 47.1                   | 40.1                   | 41.1              | 41.7                 | 35.8              |
| Long Term Debt   | 15.4                   | 12.7                   | 26.4                   | 16.0                   | 16.2              | 13.0                 | 21.2              |
| Deferred Taxes   | 0.4                    | 0.2                    | 0.4                    | 0.1                    | n/a               | 0.1                  | 0.4               |
| All Other Non-Current Liabilities                                    | 6.1                    | 5.9                    | 3.6                    | 3.3                    | 4.0               | 2.8                  | 3.0               |
| Net Worth  | 32.0                   | 37.5                   | 22.5                   | 40.5                   | 38.8              | 42.3                 | 39.6              |
| Total Liabilities & Net Worth (\$m)                                  | 2,408.6                | 2,117.8                | 2,508.1                | 2,425.3                | 66.0              | 606.3                | 1,753.1           |
| Maximum Number of Statements Used                                    | 122                    | 126                    | 120                    | 111                    | 37                | 48                   | 26                |

**Source**: RMA Annual Statement Studies, rmahq.org. RMA data for all industries is derived directly from more than 260,000 statements of member financial institutions' borrowers and prospects.





## **Jargon & Glossary**

#### **Industry Jargon**

**ANTISTATIC BAGS** A bag used for shipping components that can be damaged by static electricity.

**BLISTER PACKAGING** Packaging consisting of a solid backing with clear plastic formed around the mold of a product.

**CLAMSHELL PACKAGING** Packaging consisting of transparent plastic packages with one or more hinges.

**CONTRACT PACKAGING** The packaging and labeling of goods supplied by manufacturers or importers. Also known as copacking.

**FIELD RATIONS** A prepackaged meal that is easily prepared and eaten by military troops on the battlefield.

**ON-DEMAND PACKAGING** Packaging services that tailor package design on a per-contract basis.

**SHRINK BANDING** Packaging consisting of plastic bands which are heated to shrink and fit tightly around an item or items.

**SHRINK WRAPPING** Packaging consisting of plastic film that binds loose or packaged goods together for transport and display.

#### IBISWorld Glossary

BARRIERS TO ENTRY High barriers to entry mean that new companies struggle to enter an industry, while low barriers mean it is easy for new companies to enter an industry.

CAPITAL INTENSITY Compares the amount of money spent on capital (plant, machinery and equipment) with that spent on labor. IBISWorld uses the ratio of depreciation to wages as a proxy for capital intensity. High capital intensity is more than \$0.333 of capital to \$1 of labor; medium is \$0.125 to \$0.333 of capital to \$1 of labor; low is less than \$0.125 of capital for every \$1 of labor.

CONSTANT PRICES The dollar figures in the Key Statistics table, including forecasts, are adjusted for inflation using the current year (i.e. year published) as the base year. This removes the impact of changes in the purchasing power of the dollar, leaving only the "real" growth or decline in industry metrics. The inflation adjustments in IBISWorld's reports are made using the US Bureau of Economic Analysis' implicit GDP price deflator

**DOMESTIC DEMAND** Spending on industry goods and services within the United States, regardless of their country of origin. It is derived by adding imports to industry revenue, and then subtracting exports.

**EMPLOYMENT** The number of permanent, part-time, temporary and seasonal employees, working proprietors, partners, managers and executives within the industry.

**ENTERPRISE** A division that is separately managed and keeps management accounts. Each enterprise consists of one or more establishments that are under common ownership or control.

**ESTABLISHMENT** The smallest type of accounting unit within an enterprise, an establishment is a single physical location where business is conducted or where services or industrial operations are performed. Multiple establishments under common control make up an enterprise.

**EXPORTS** Total value of industry goods and services sold by US companies to customers abroad.

**IMPORTS** Total value of industry goods and services brought in from foreign countries to be sold in the United States.

**INDUSTRY CONCENTRATION** An indicator of the dominance of the top four players in an industry. Concentration is considered high if the top players account for more than 70% of industry revenue. Medium is 40% to 70% of industry revenue. Low is less than 40%.

INDUSTRY REVENUE The total sales of industry goods and services (exclusive of excise and sales tax); subsidies on production; all other operating income from outside the firm (such as commission income, repair and service income, and rent, leasing and hiring income); and capital work done by rental or lease. Receipts from interest royalties, dividends and the sale of fixed tangible assets are excluded.

**INDUSTRY VALUE ADDED** (**IVA**) The market value of goods and services produced by the industry minus the cost of goods and services used in production. **IVA** is also described as the industry's contribution to GDP, or profit plus wages and depreciation.

INTERNATIONAL TRADE The level of international trade is determined by ratios of exports to revenue and imports to domestic demand. For exports/revenue: low is less than 5%, medium is 5% to 20%, and high is more than 20%. Imports/domestic demand: low is less than 5%, medium is 5% to 35%, and high is more than 35%.

LIFE CYCLE All industries go through periods of growth, maturity and decline. IBISWorld determines an industry's life cycle by considering its growth rate (measured by IVA) compared with GDP; the growth rate of the number of establishments; the amount of change the industry's products are undergoing; the rate of technological change; and the level of customer acceptance of industry products and services.

## **Jargon & Glossary**

## IBISWorld Glossary continued

**NONEMPLOYING ESTABLISHMENT** Businesses with no paid employment or payroll, also known as nonemployers. These are mostly set up by self-employed individuals.

**PROFIT** IBISWorld uses earnings before interest and tax (EBIT) as an indicator of a company's profitability. It is calculated as revenue minus expenses, excluding interest and tax.

**VOLATILITY** The level of volatility is determined by averaging the absolute change in revenue in each of the past five years. Volatility levels: very high is more than  $\pm 20\%$ ; high volatility is  $\pm 10\%$  to  $\pm 20\%$ ; moderate volatility is  $\pm 3\%$  to  $\pm 10\%$ ; and low volatility is less than  $\pm 3\%$ .

**WAGES** The gross total wages and salaries of all employees in the industry. The cost of benefits is also included in this figure.

## At IBISWorld we know that industry intelligence is more than assembling facts

It is combining data with analysis to answer the questions that successful businesses ask

Identify high growth, emerging & shrinking markets
Arm yourself with the latest industry intelligence
Assess competitive threats from existing & new entrants
Benchmark your performance against the competition
Make speedy market-ready, profit-maximizing decisions



#### Who is IBISWorld?

We are strategists, analysts, researchers, and marketers. We provide answers to information-hungry, time-poor businesses. Our goal is to provide real world answers that matter to your business in our 700 US industry reports. When tough strategic, budget, sales and marketing decisions need to be made, our suite of Industry and Risk intelligence products give you deeply-researched answers quickly.

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