

Research returns: Revenue growth will stem from increasing export demand and laboratory funding

IBISWorld Industry Report OD4946 Laboratory Casework Manufacturing in the US

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About this Industry

Industry Definition

Firms in this industry manufacture laboratory furniture (casework), including cabinets, cases, benches, tables and fixtures. This industry excludes dental laboratory furniture as well as laboratory seating.

Main Activities

The primary activities of this industry are

Manufacturing laboratory furniture

The major products and services in this industry are

Cabinets and storage

Carts

Fixtures

Shelving

Tables and surfaces

Similar Industries

33451b Medical Device Manufacturing in the US

Medical device manufacturers make products for downstream healthcare industries.

33712 Household Furniture Manufacturing in the US

This industry manufactures furniture for personal, household and public use.

33721 Office Furniture Manufacturing in the US

Manufacturers in this industry make furniture specifically designed for offices.

Additional Resources

For additional information on this industry

www.laboratorycasework.org

Laboratory Casework

www.sefalabs.com

Scientific Equipment and Furniture Association

www.census.gov

US Census Bureau

IBISWorld writes over 700 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

Laboratory Casework Manufacturing in 2013

Key Statistics Snapshot

Revenue	Annual Growth 08-13	Annual Growth 13-18
\$1.2bn	-6.2%	2.6%
Profit	Exports	Businesses
\$117.0m	\$510.3m	68

Market Share
 OpenGate Capital LLC **8.6%**
 Kewaunee Scientific Corporation **5.9%**

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Revenue vs. employment growth



Research and development expenditure



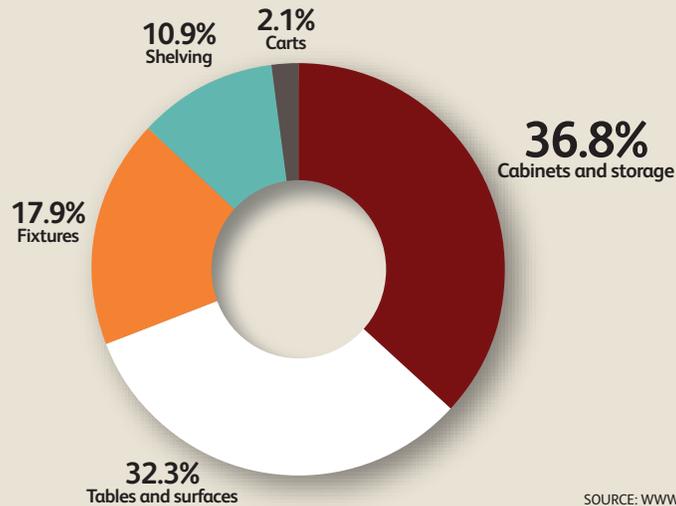
SOURCE: WWW.IBISWORLD.COM

Key External Drivers

- Research and development expenditure
- Trade-weighted index
- Demand from laboratory testing services
- Government funding for universities
- Price of plastic materials and resin
- Total health expenditure
- Corporate profit

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Products and services segmentation (2013)



SOURCE: WWW.IBISWORLD.COM

Industry Structure

Life Cycle Stage	Decline	Regulation Level	Medium
Revenue Volatility	High	Technology Change	Medium
Capital Intensity	Low	Barriers to Entry	Medium
Industry Assistance	Low	Industry Globalization	High
Concentration Level	Low	Competition Level	High

FOR ADDITIONAL STATISTICS AND TIME SERIES SEE THE APPENDIX ON PAGE 30

Industry Performance

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

Executive Summary

The Laboratory Casework Manufacturing industry experienced a shaky past five years. This industry manufactures laboratory casework furniture, including cabinets, cases, benches, tables and fixtures. As the economy began showing signs of weakness and retreated into a recession, demand for industry products fell and revenue declined. When revenue for businesses and laboratories declined, they were no longer able to justify investing in new laboratory furniture. As a result, the industry's revenue is expected to decline at an average annual

2010, the economy began to turn the corner and corporate profit returned. Total R&D expenditure rose 9.2% in 2010 and, after slower growth in 2011, is forecast to rise a further 0.9% in 2013. Despite the cutback in R&D expenditure, the industry has benefited from new product offerings. Industry manufacturers have started to offer upgraded table surfaces, including surfaces that reduce the risk of contamination in the lab setting. Also, laboratory manufacturers are increasingly addressing ergonomic issues by offering furniture with electronic height controls.

Industry revenue is growing consistently as R&D spending rises and exports increase

rate of 6.2% to \$1.2 billion in the five years to 2013, including an astounding 28.1% fall in 2009. However, revenue returned to growth in 2011 and is expected to continue its climb, growing an additional 1.3% in 2013.

Research and development (R&D) spending is tied to total corporate revenue, and as a result, shifts in line with the overall economy. R&D expenditure fell in 2009, which resulted in lower investment in laboratory casework purchases, replacements and laboratory expansions (which also necessitate casework purchases). During

Over the five years to 2018, the Laboratory Casework Manufacturing industry is projected to grow consistently as downstream companies invest in new products again, in turn, increasing their R&D expenses. Industry revenue is forecast to grow at an average annual rate of 2.6% to \$1.4 billion over the next five years. Exports are expected to increase at an annualized rate of 4.4% to \$632.7 million during the five years to 2018, primarily due to rising demand for US laboratory casework products in emerging nations. Strong growth in research capabilities among private, government and educational institutions in Asia and the Middle East (as well as South America) will likely drive this growth in exports.

Key External Drivers

Research and development expenditure

The total amount of R&D expenditure significantly affects industry revenue. The greater the amount of expenditure, the more likely it is that businesses will purchase laboratory casework. R&D expenditure is expected to increase slowly during 2013, presenting a potential opportunity for the industry.

Trade-weighted index

The trade-weighted index (TWI) measures the strength of the US dollar relative to the currencies of its trading partners. When the US dollar depreciates compared with the rest of the world, US manufacturers, such as laboratory casework manufacturers, benefit because domestic products become relatively cheaper for foreign countries and imports become

Industry Performance

Key External Drivers continued

relatively more expensive. The US dollar's strength against other currencies is expected to increase in 2013 and is a potential threat to the industry.

Demand from laboratory testing services

Testing laboratories demand laboratory casework manufactured by this industry. When government regulations rise and more tests are required for consumer products, demand for industry products grows. Demand from laboratory testing services is expected to increase strongly during 2013.

Government funding for universities

As local governments cut spending on education, discretionary spending on laboratory expansions and upgrades that necessitate the purchase of laboratory casework by professors and school administrators will decrease. In particular, schools use industry products for research experiments. Government funding for universities is expected to decrease slowing in 2013.

Price of plastic materials and resin

Plastic resin is an input in a number of laboratory casework products. When the price of plastic resin increases, it typically increases costs for manufactures. Manufacturers can

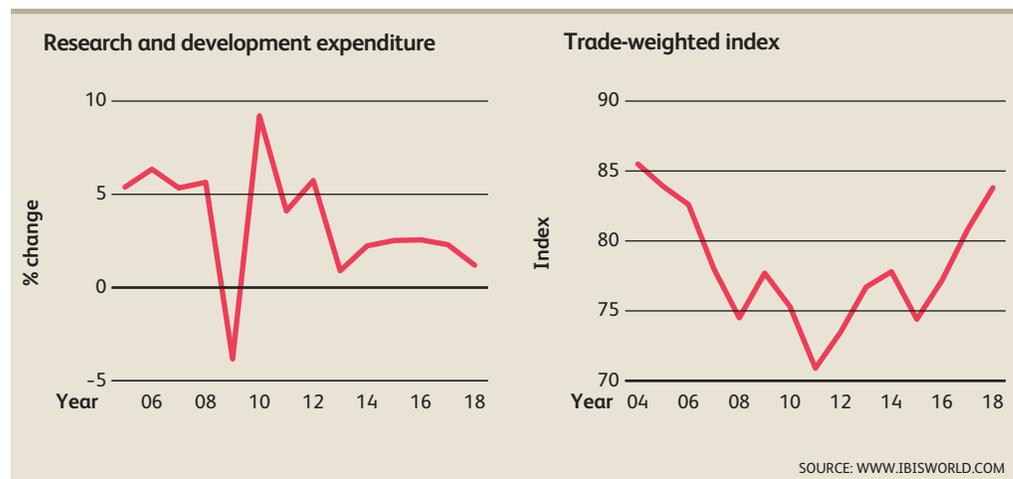
generally only pass a portion of these cost increases onto customers by raising the product's price, eroding their profit margins. The price of plastic materials and resin is expected to decrease in 2013.

Total health expenditure

Total health expenditure consists of public and private spending on activities that aim to promote health and prevent disease, including investment in structures and equipment. Total health expenditure is a proxy that indicates demand shifts for product testing. As private and public spending on health initiatives grows, it positively influences industry revenue because a proportion of this spending goes toward testing to ensure that products meet health and safety standards. During 2013, total health expenditure is expected to increase.

Corporate profit

A company's profit level dictates the amount of expenditure it undertakes. Typically, R&D is one of the first spending cuts a company makes when its profit is squeezed, especially during times of recession. In 2013, IBISWorld expects that corporate profit will increase moderately.



Industry Performance

Current Performance

Revenue growth for the Laboratory Casework Manufacturing industry fell to pieces during the recession as laboratories scaled back their capital investment and research and development (R&D) expenditures. Businesses, universities and other public and private sector research institutions buy laboratory casework to perform laboratory work and testing safely. In 2013, the industry is expected to earn \$1.2 billion, representing an average annual decline in revenue of 6.2% over the five years to 2013. Industry revenue grew 11.1% in 2008 as demand for research and lab expansions increased in response to robust consumer spending. However, as the economy began declining and ultimately retreated into a recession, industry demand and revenue

declined. With revenue for businesses and laboratories falling, there was little justification to invest in new lab furniture. Furthermore, during the recession, laboratories and other companies cut back on their R&D expenses as they shifted their focus to shoring up core business instead of devoting resources to into future products that may never materialize. Consequently, industry revenue fell 28.1% in 2009 and an additional 4.9% in 2010. By 2012, however, the industry's return to grace was in full swing, with growth of 4.2% in response to a larger proportion of resources invested in R&D and other capital expenditures. This trend is forecast to continue in 2013, albeit it a slower rate, as revenue grows an additional 1.3%.

R&D trends

R&D spending is tied to total corporate revenue, and therefore moves closely with the overall economy. As revenue tightens during a recession, businesses tend to cut back on funding research to develop new products. R&D expenditure grew strongly in the four years leading up to the recession and kept pace with the record corporate profit experienced during that time. However, by 2009, R&D expenditure fell 3.8%. The decline in R&D spending resulted in lower investment in laboratory work, which, in turn, reduced demand for laboratory casework purchases and other laboratory expansions. During 2010, the economy started to turn the corner and corporate profit returned, supporting R&D expenditure growth of 9.2% for the year. In the five years to 2013, IBISWorld estimates that R&D expenditure rose at an average annual rate of 3.1%.

Educational institutions are also heavy purchasers of laboratory casework (with the majority of funding for schools coming from the local, state and federal

Declines in R&D spending resulted in lower demand for laboratory casework

governments), while government facilities provide an additional industry revenue source. As a whole, a substantial number of downstream clients depend on government funding in one way or another. The recession caused many people across the nation to lose their jobs, which dramatically shrunk tax income for all government levels. As a result, many states faced budget crises, forcing cuts. During most budget crises, government spending, particularly on education, comes under intense scrutiny and is often reduced. In 2009 and 2010, government funding for universities grew 2.1% and 5.7%, respectively. However, lingering high unemployment led to 5.7% and 5.5% drops in university funding in 2011 and 2012, respectively. Private medical labs also fuel industry revenue,

Industry Performance

R&D trends continued

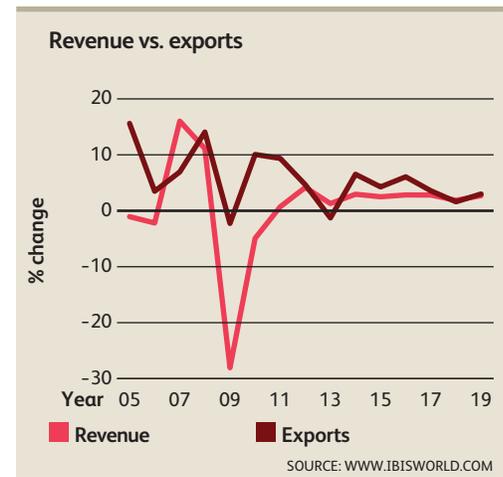
though demand for their services and products largely depends on healthcare funding and expenditure trends. Total health expenditure has increased each year during the five years to 2013, with an average annual growth rate of 3.9% during the period. Still, continued growth in 2013 of 3.9% is largely attributable to an improving economy and escalating Medicare and Medicaid spending. The

improved economic environment will boost per capita disposable income, making healthcare spending more affordable for individuals. Medicare spending is expected to increase due to the rising age of the US population. However, health expenditure growth decelerated when compared with the faster growth experienced during the five years leading up to the recession.

International trade

Industry imports are forecast to increase at an average annual rate of 6.2% to \$572.4 million during the five years to 2013. In that period, Mexico, China and Canada represented strong regions of import growth. The increasing trend of manufacturing activities being relocated to cost-competitive regions in Asia-Pacific, such as China, has driven growth in imports in the past few years. US-based manufacturers are setting up manufacturing operations in Mexico and Canada to take advantage of trade benefits offered by the North American Free Trade Agreement. As a result, imports' share of domestic demand has experienced aggressive growth over the past five years, from 25.0% in 2008 to 44.2% in 2013. Although industry products must adhere to high safety standards, the relative ease of replicating US safety standards has allowed imports to make up an increasing proportion of domestic demand due to their ability to produce laboratory casework at a lower cost.

Industry exports are projected to increase at an annualized rate of 4.0% to \$510.3 million over the five years to 2013. The growth has been supported by rapidly advancing technological and



medical sectors in emerging economies, leading to a rise in demand for laboratory casework products abroad. Additionally, the relative weakness of the US dollar against other major currencies has supported foreign demand for US goods. Canada, Qatar and Mexico are the most significant destinations for US exports. Strong growth in research capabilities among private, government and educational institutions in Qatar has driven growth in exports to that country. In 2013 alone, industry exports to Qatar are expected to increase more than 15 times their 2012 intake.

Industry Performance

Industry trends

Given the vast array of uses for laboratory casework, manufacturers have developed innovative products and designs. Manufacturers are providing adaptable, yet stable, spaces that are capable of housing a variety of electronic and other laboratory equipment for a variety of end uses. These include environments ranging from electronics labs to fume hood intensive chemistry labs. Industry manufacturers have also started to offer upgraded table surfaces (compared with older plastic laminate surfaces), including advanced materials like

Chemguard from Diversified Labs. The industry also offers surfaces that reduce the risk of contamination in the lab setting, such as phenolic resins and chemical-resistant laminates. More specifically, Case Systems has developed a surface that uses an ionic charge to attract microorganisms and physically destabilize their cell membranes on contact. Laboratory furniture manufacturers are also increasingly addressing ergonomic issues, which are important because many technicians spend extended periods of time in their laboratories.

Consolidation and profit

Industry employment is expected to fall an average 6.2% per year in the five years to 2013, from 8,547 in 2008 to 6,206 in 2013. Employment levels dropped when smaller operators were squeezed out of the industry as they struggled to obtain clients during the recession. Many industry employees were temporarily or permanently laid off from their jobs, while others had their work hours reduced. However, a weak dollar and rising exports, which benefit domestic manufacturers, began driving up employment again and the number of employees began to grow in 2012. Overall, total wages fell at a similar rate to employment, slipping 7.2% annually on average to \$260.4 million in 2013. The recession reduced wages in line with closures of smaller firms. However, in line with employment, wages have since increased and returned to growth from

Rising material costs, such as plastics, hurt industry profit in the past five years

2012 as industry revenue and demand have begun to recover.

The average industry profit margin (before interest and taxes) is expected to increase to 9.5% of industry revenue in 2013, up from the previous year of 9.3%. Over the past five years, profitability fell primarily due to rising raw material costs, particularly the price of plastic used in plastic laminate surfaces. The price of plastic resin increased at an average rate of 1.4% per year over the five years to 2013. However, during the past two years to 2013, price increases moderated before prices falling in 2013, supporting industry profit growth in the current year.

Industry Performance

Industry Outlook

The Laboratory Casework Manufacturing industry will be sitting much more solidly over the next five years. IBISWorld forecasts that revenue will increase at an annualized rate of 2.6% to \$1.4 billion through

2018, with revenue growing 3.0% in 2014 alone. Revenue growth will primarily be driven by expanding research and development (R&D) budgets growing on the back of record-high corporate profit.

R&D expenditure

IBISWorld forecasts that total R&D expenditure will rise steadily in the five years to 2018, at 2.2% per year on average. Many of the R&D programs aided by the American Recovery and Reinvestment Act of 2009 started receiving their funding in 2011. This factor will boost the government's share of R&D spending and help drive growth in R&D going forward. Non-manufacturing expenditure returned to growth in late 2012, primarily due to a lagged response to the economic recovery. Total R&D spending will continue to increase for the rest of the five-year period as the economy expands and corporate profit grows, driving demand for laboratory casework purchases and replacements.

Annual health expenditure growth is forecast to continue accelerating under current legislation, increasing at an annualized rate of 6.2% over the five years to 2018. This growth will drive demand for laboratory casework from medical device manufacturers, medical researchers and testing labs. Public spending growth is also projected to rise significantly, largely due to the oldest baby boomers becoming eligible for Medicare. While Medicaid spending growth is expected to slow because of improving economic conditions in 2013, spending will likely accelerate in the early part of the next five-year period as the relatively expensive aged and disabled eligibility groups comprise a larger share of total Medicaid enrollment.

Opportunities abroad

Exports are forecast to increase at an average rate of 4.4% per year to \$632.7 million in 2018. This considerable growth in exports will be due to an increase in demand for laboratory casework products from emerging nations, specifically in Asia and the Middle East. Strong growth in research capabilities among private, government and educational institutions in Asia, the Middle East and South America are expected to continue to drive export growth as they increase their R&D investments significantly.

Large pharmaceutical companies have already begun outsourcing their research operations to India, and stricter health and safety regulations and enforcement necessitates laboratory

Demand growth for laboratory casework products will stem from emerging nations

casework that meets American manufacturers' specifications. China has a five-year plan in place that emphasizes the country's scientific development to shift from being the factory of the world to an innovation leader. All of these goals reinforce the need for modern laboratory casework, in which the United States has a technological advantage in manufacturing (especially

Industry Performance

Opportunities abroad continued

among the new high-technology surfaces). Because of this advantage and the weak US dollar, US companies are poised to experience strides in export growth to emerging regions across the world. However, imports are also

expected to continue rising as a share of domestic demand over the five years to 2018, though at a slower rate than the past five years. Imports are projected to grow from 44.3% of domestic demand in 2013 to 48.8% in 2018.

Changes in the industry's landscape

With more resources and technologies, larger firms can service clients from a wide range of industries. This aspect gives them a competitive advantage with large manufacturers that produce a variety of products. Laboratory casework manufacturers will likely acquire smaller manufacturers in order to increase their service offerings and profitability. IBISWorld projects that the number of enterprises will stagnate, remaining at 68 in 2018. As a result of consolidation, industry profit is forecast to rise over the next five years to 10.8% of industry revenue by 2018, still below prerecession levels of about 12.0%. Demand increases and more stable raw material costs, particularly plastic, will also contribute to an expanding average profit margin. The price of plastic resin is only forecast to grow 1.3% per year on average over the five years to 2018.

Stable material costs and demand increases will contribute to a rising profit margin

IBISWorld projects that the public and private sectors will significantly increase expenditure on R&D activities. Growth in high-tech industries is expected to attract greater R&D investment aimed at developing new products and improving existing products. As product life cycles continue to shorten over the next five years, companies will seek to introduce new products to the marketplace as quickly as possible. As a result, industry employment is forecast to rise at an average annual rate of 1.1% to 6,550 by 2018, while wages are projected to rise 2.0% on average annually to \$287.4 million.

Industry Performance

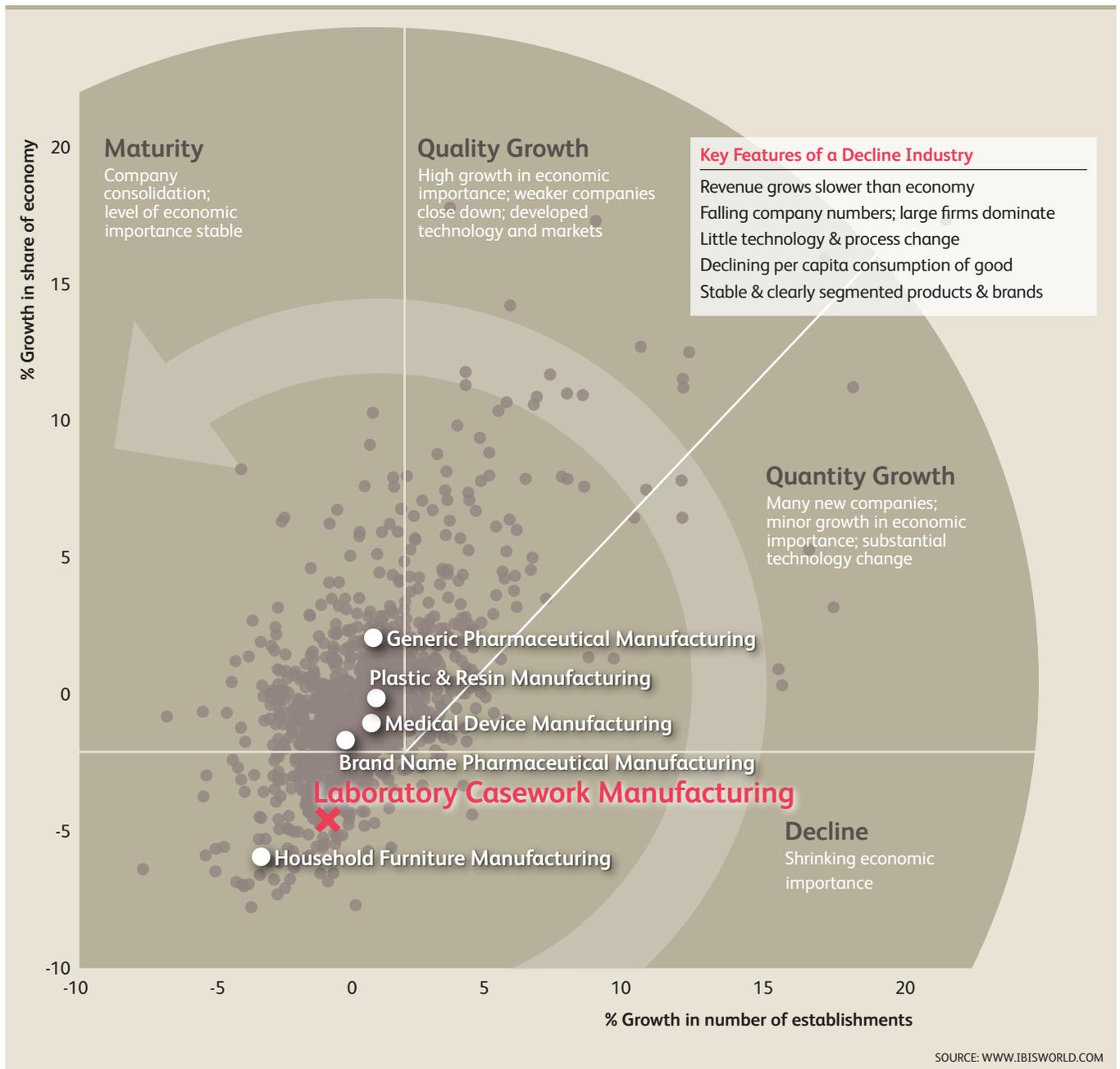
Life Cycle Stage

Industry value added is expected to lag behind growth in GDP over the 10 years to 2018

New technological advancements have not dramatically affected demand

The industry has undergone some consolidation during the past five years

Imports as a percentage of domestic demand are rising rapidly



Industry Performance

Industry Life Cycle

This industry is **Declining**

IBISWorld estimates that the Laboratory Casework Manufacturing industry is in the decline stage of its life cycle. Over the 10 years to 2018, the industry's contribution to the economy, as measured by industry value added, is projected to fall at an average yearly rate of 2.6%, lagging far behind US GDP growth of 2.1%.

Company mergers and acquisitions increased during the past five years, and this trend is expected to continue in the next five years. Because larger industry players generate more profit, they will continue to buy smaller firms to increase their offerings and provide a wider range of services to a larger number of clients. The number of enterprises is expected to be stagnant over the 10 years to 2018, as companies enter and exit or are acquired at similar rates. Industry employment is forecast to fall at a rate of 2.6% per year over the same period.

While a number of new products and innovations were introduced over the past five years, they have not had a substantial impact on industry demand. The majority of demand for industry products is for initial purchases versus replacements. However, as more consumers become informed about the sanitary and ergonomic benefits of new laboratory furniture, product innovations will likely play a larger role in driving industry demand.

Imports are also presenting a rising challenge to domestic demand. In 2008, imports made up 25.0% of domestic demand, though by 2018, they are expected to account for 48.8% of domestic demand. Rising import competition is a threat to domestic manufacturers and will continue to present challenges for the industry going forward.

Products & Markets

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

Supply Chain

KEY BUYING INDUSTRIES

32541a	Brand Name Pharmaceutical Manufacturing in the US Brand name pharmaceutical companies use lab casework in their research and other departments.
32541b	Generic Pharmaceutical Manufacturing in the US Generic pharmaceutical companies use lab casework in their research and other departments.
32541d	Vitamin & Supplement Manufacturing in the US Vitamin and supplement companies use lab casework in their research and other departments.
54138	Laboratory Testing Services in the US Laboratories use casework as part of their everyday operating environment.
54171	Scientific Research & Development in the US Research and development teams use casework as part of their everyday operating environment.
61131a	Colleges & Universities in the US Schools use casework in their science-related labs.
62211	Hospitals in the US Hospitals use casework in specialized labs.

KEY SELLING INDUSTRIES

32521	Plastic & Resin Manufacturing in the US Various plastics form casework components.
32711	Plumbing Fixtures & Bathroom Accessories Manufacturing in the US Some casework features plumbing functionality.
33111	Iron & Steel Manufacturing in the US Stainless steel forms a primary input into lab casework.
33531	Electrical Equipment Manufacturing in the US Some casework features electrical outlets and components.
42331	Lumber Wholesaling in the US Manufacturers purchase lumber as a key input into casework.
42495	Paint Wholesaling in the US Casework usually requires paint to protect the base material.

Products & Services

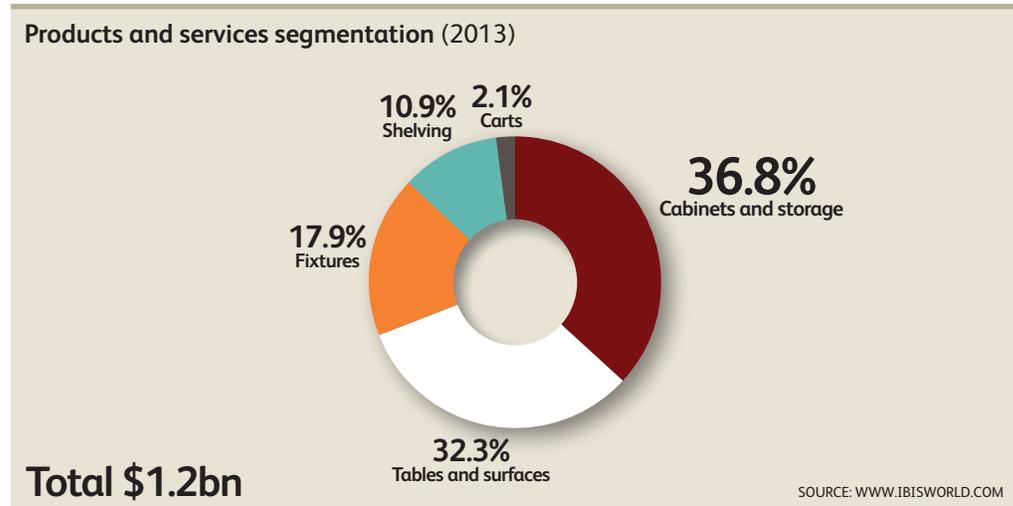
The main products in this industry include metal and wood casework, countertops, fixtures, sinks, tables, workstations, shelving and carts. IBISWorld estimates that the top five industry products are cabinets and storage casework; tables and surfaces; fixtures; shelving; and carts. These segments are expected to remain relatively consistent over time due to the needs of downstream markets and relative prices for each.

Cabinets and storage

Cabinets and storage are expected to represent the majority of industry revenue. Types of cabinets and storage include general, chemical and forensic cabinets, mobile drawers and other casework (a term used for built-in cabinetry). Although there are cabinets for general use, the industry manufactures a number of specialized cabinet products. For example, forensic cabinets are used to hold and safeguard

Products & Markets

Products & Services continued



evidence or samples used in forensic investigations. These cabinets, unlike their general counterparts, are often manufactured using flame retardant materials, can be lined with glass and nearly always have a lock. Mobile drawers are wheeled cabinets that can be moved among workstations with ease. Common materials include stainless steel and wood. Because downstream laboratory markets often expand or contract in line with funding for research and development (R&D), consumers of casework often need to upgrade or downsize their storage capabilities through replacement cabinets. In turn, cabinets and storage units are relatively expensive compared with the other product segments. As such, this segment is expected to represent the majority of industry revenue.

Tables and surfaces

Like cabinets and storage, tables and surfaces represent scalable items with revenue shares that fluctuate in line with funding for R&D activities. Tables and surfaces include freestanding, island, and pedestal tables as well as perimeter tables. The segment also includes demonstration tables, which allow easy access to water, gas, and electricity.

Increased investments will encourage labs to expand their research facilities, in turn raising demand for tables, while decreased funding will reduce table demand. Further, the type of research being performed could necessitate the upgrade of a table's surface from common surfaces like plastic to advanced materials like Chemguard from Diversified Labs. Last, table technology has been increasing through the development of electronically adjustable table heights. However, as tables need to be replaced less often, IBISWorld expects this segment's share of industry revenue remained relatively unchanged during the past five-year period.

Fixtures

Laboratory fixtures encompass a variety of products including faucets and service fixtures. Speaking specifically to service fixtures, these products consist of fine and standard needle and ball valves. IBISWorld estimates that this product segment accounts for about 17.9% of industry revenue in 2013, remaining relatively steady during the past five-year period.

Shelving and carts

Shelving and carts are related, as many mobile carts feature the capacity to be

Products & Markets

Products & Services continued

scaled up or down in terms of onboard shelving storage. This scalability is expected to increase carts and shelving as a share of revenue. As lab capacities fluctuate

and downstream lab markets seek to employ lean practices, the flexibility afforded by modular carts and shelving systems has become more attractive.

Demand Determinants

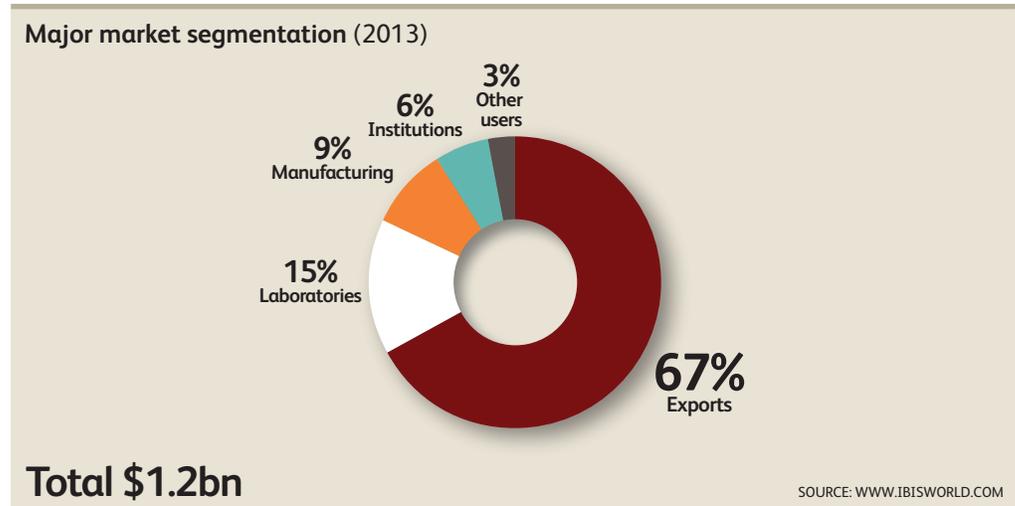
The key factors affecting demand for the Laboratory Casework Manufacturing industry include the trade-weighted index (TWI), overall research and development (R&D) expenditure, corporate profit, demand from laboratory testing services, government funding for universities and total health expenditure. Given the estimated contribution of exports to revenue and the share of imports that accounts for domestic demand, the TWI is expected to be a crucial determinant of overseas demand for US goods. When the value of the US dollar is weak relative to other currencies (as has been the case during the past five years), foreign demand usually increases.

The next two demand determinants are related to each other: overall R&D expenditure and corporate profit. Fluctuations in corporate profit tend to flow through and either help or hinder the overall expenditure on R&D activities.

R&D spending, both by industry and the federal government, drives this market. When profit increases, R&D activities tend to increase as well, thereby driving demand for this industry's furniture. R&D spending is expected to post marginal growth during the five years to 2013 and help the industry.

Government funding for universities drives demand for lab furniture through grants for scientific research. Likewise, the total expenditure on health-related services, from pills to hospitals, helps create a flow-through effect that either drives or limits the ability of industries in the healthcare supply chain to invest in lab furniture. Last, activity in the commercial Laboratory Testing Services industry (IBISWorld report 54138) is closely tied to this industry's demand levels, as laboratories form a key downstream market for related furniture manufacturers.

Major Markets



Products & Markets

Major Markets continued

In general, the major markets for the Laboratory Casework Manufacturing industry tend to be technologically advanced. Unfortunately for US casework producers, cheaper imports have been rising as a share of domestic demand and siphoning away revenue from each of the key downstream industries. Exports have been the silver lining, with demand from emerging economies driving sales in foreign markets. For more information about exports, see the International Trade section.

Laboratories

Laboratories form the dominant market for lab casework. In this market, total expenditure on research and development (R&D) activities helps dictate the ability of downstream research firms to expand or upgrade their operations and invest in new casework. After rising in 2008, R&D funding fell significantly in 2009 in line with overall financial meltdown, thus limiting demand from this market. Since then, many businesses have delayed R&D spending for fear that economic conditions would remain adverse. As a result of these offsetting factors, R&D expenditure is expected to rise marginally during the five years to 2013, and demand from this market is expected to remain relatively stable as well.

Manufacturing

Manufacturers demand laboratory casework for their industrial clean rooms, R&D departments, quality control purposes and assembly workstations. Manufacturers of mechanical, medical and electronic goods demand workstations that increase productivity through versatile adjustment capabilities and modular configurations. Demand from manufacturers is expected to slip during the five years to 2013, as cheaper imports and lower consumer demand have sent many companies overseas or out of business.

Institutions and other users

Institutions include government entities, educational institutions like universities and colleges, and private organizations. The federal government increased education grants as a part of the stimulus plans passed to battle the recession. These grants are expected to flow through to the casework industry and increase the ability of college labs to invest in new or upgraded casework. Other users include private citizens, offices and miscellaneous customers. This market segment consistently forms a minority of industry revenue.

International Trade

Level & Trend
Exports in the industry are **High and Increasing**
Imports in the industry are **High and Increasing**

International trade is estimated to form a substantial part of the Laboratory Casework Manufacturing industry. Imports are expected to rise as a share of domestic demand, thereby lowering the average profit margin as US firms face pressure to compete on price. At the same time, the industry has found some relief in exports, as sales to foreign buyers increased as a share of revenue during

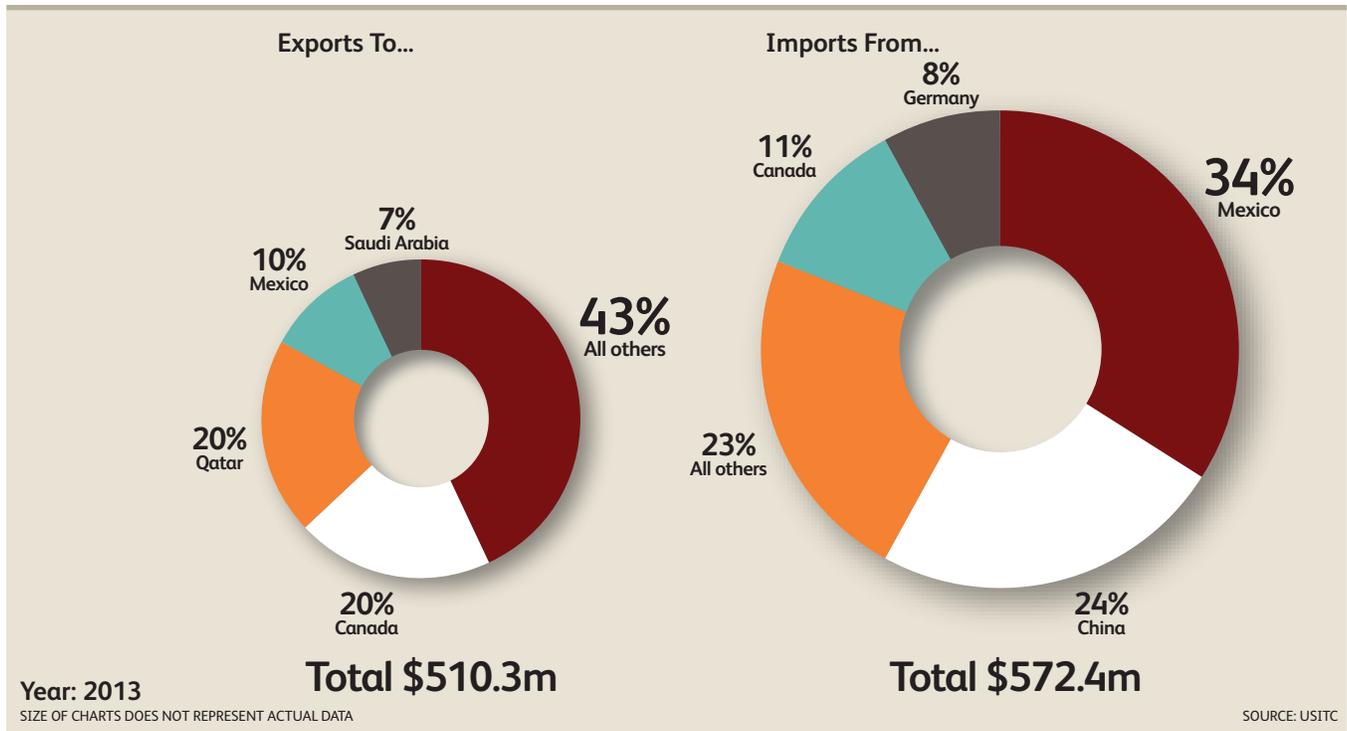
the past five years. Canada and Mexico represent vital trading partners through their shared borders with the United States and the North American Free Trade Agreement (NAFTA). The presence of Qatar and Saudi Arabia as export destinations represents rising demand from emerging economies. Additionally, the presence of China as a key source of Asian imports indicates the ability

Products & Markets

International Trade continued

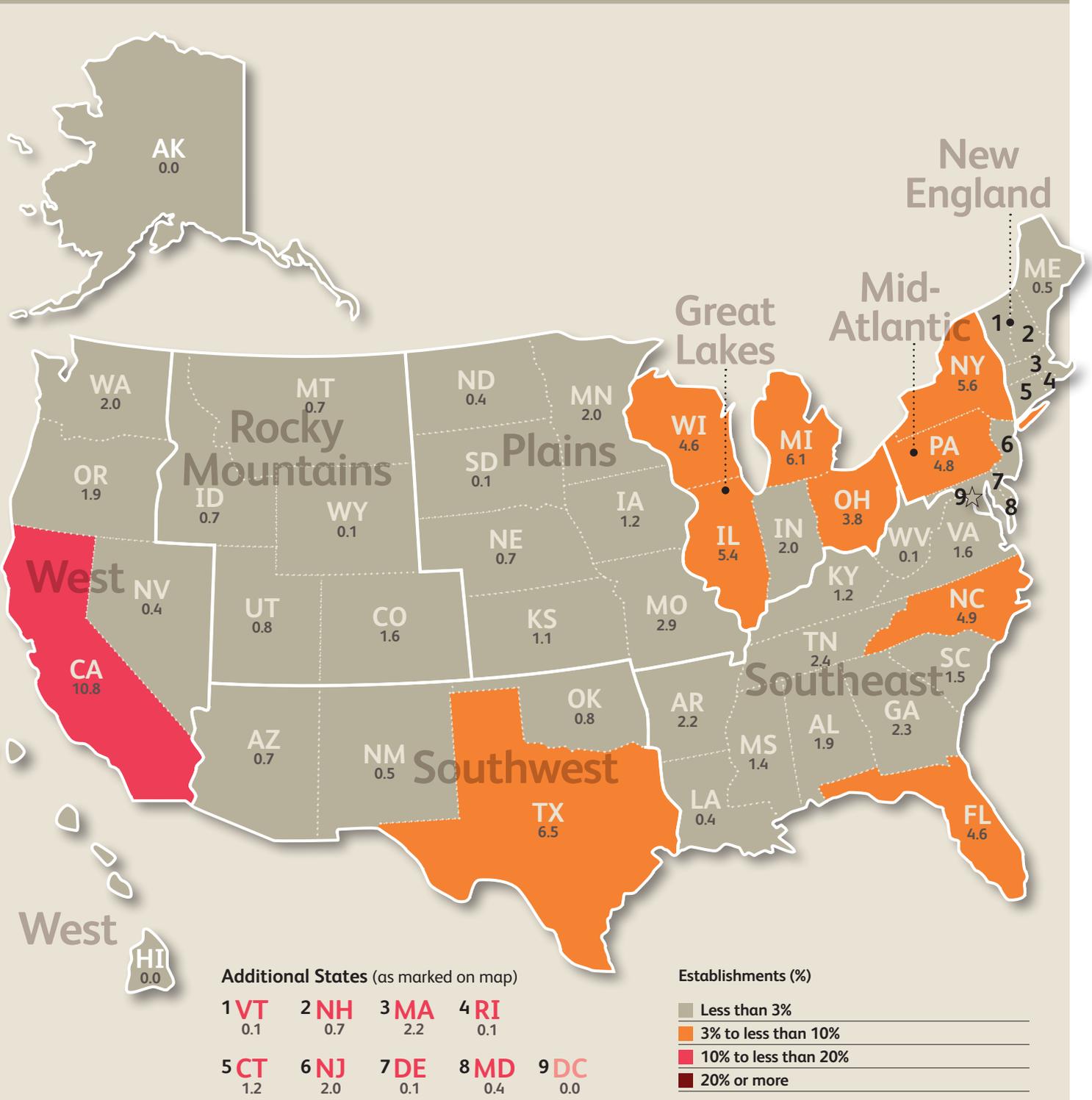
of manufacturers in those countries to operate with relatively lower costs compared with their US competition.

According to data from the US International Trade Commission's DataWeb, exports in this industry are high and increasing, while imports in this industry are also high and increasing. Exports are expected to increase at an annualized rate of 4.0% and total an estimated \$510.3 million during the five years to 2013. During the same period, imports are expected to increase at a faster annualized rate of 6.2%, totaling an estimated \$572.4 million.



Products & Markets

Business Locations 2013



Products & Markets

Business Locations

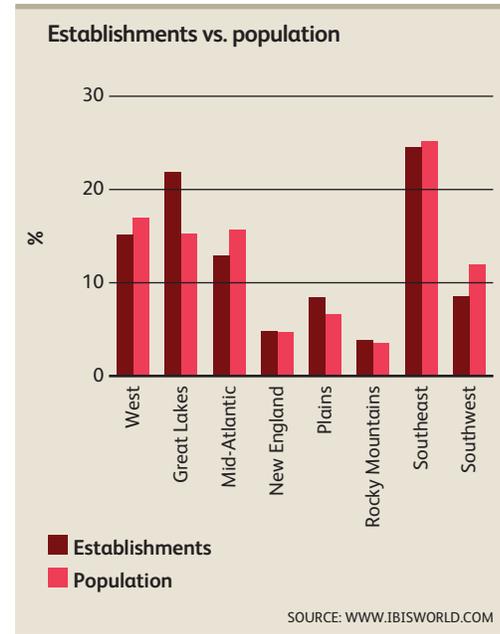
In general, manufacturing industries seek to locate near hubs of economic and commercial activity. Doing so increases supply chain efficiencies for raw inputs while situating distribution closer to end markets. Based on data from the US Census Bureau's County Business Patterns survey, IBISWorld estimates that establishments in the Laboratory Casework Manufacturing industry are most densely concentrated in the Southeast, Great Lakes and West regions. Overall, population densities in these regions help create favorable operating conditions with regard to labor inputs.

Southeast

The Southeast region is estimated to account for about one-fourth of all industry establishments, and this region typically demonstrates high levels of establishment concentration across many manufacturing industries. With regard to casework manufacturing, port access in the Gulf of Mexico and along the eastern seaboard is conducive to the industry's rising export levels. Also, the presence of several universities in Florida and Georgia help generate demand from institutional labs, and suppliers tend to locate close to their downstream markets. Of note, Kewaunee Scientific Corporation bases its headquarters in Statesville, NC.

Great Lakes

At an estimated one-fifth of the industry's total locations, the Great Lakes region is estimated to come in second with regard to establishment densities. The region's shared border with Canada helps promote trade with that country, which is estimated to be the industry's single-largest export



destination. Also, the presence of several universities in Illinois, Michigan and Ohio as well as the automotive industry's high regional concentration helps create demand from institutional and manufacturing markets, respectively.

West

The West is estimated to come in a distant third, at about 15.1% of all establishments. California dominates the nation, with an estimated 10.8% of all establishments, the only state to reach double-digit levels of industry locations. California has extensive port capabilities for overseas trade and also boasts a large number of manufacturing and higher-learning facilities. Further, Genie Scientific, Hanson Lab Furniture and Trespa North America all base their operations in the Golden State.

Competitive Landscape

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

Market Share Concentration

Level
Concentration in this industry is **Low**

Market share concentration is considered to be low in the Laboratory Casework Manufacturing industry. Of the estimated 68 companies in the industry, the top four companies are expected to account for less than one-fifth of total industry revenue. The number of companies fell at an average annual rate of 2.5% in the five years to 2013. OpenGate Capital's acquisition of Thermo Fisher Scientific's

laboratory workstations business has served as evidence of the industry's trend toward consolidation. To this end, new entries are projected to be marginal during the coming five years, resulting in low market share concentration. Instead, industry leaders are more likely to increase their respective shares through continued merger and acquisition activity.

Key Success Factors

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

Environmental compliance

Manufacturers face a range of regulations regarding the generation and disposal of hazardous wastes. Failure to meet compliance can increase operating costs.

Automation

Like most manufacturing activities, the ability to automate processes reduces wages costs and increases efficiencies, thereby improving profit margins.

Effective quality control

The ability to control quality and minimize faulty products reaching the

market will help increase brand loyalty through perceived reliability.

Appropriate outsourcing

Many US companies have manufacturing operations overseas. Such outsourcing reduces operating costs through a leveraging of supply chain efficiencies, low-cost labor and reduced compliance standards.

Ability to win contract bids

Firms often publicly bid for business with downstream markets. Securing such bids ensures product demand.

Cost Structure Benchmarks

Cost structures vary widely among industry players depending on their size, production scales, access to production inputs, use of technology and capital investment. In general, large manufacturers incur lower per-unit costs of production. During the past five years, average establishment sizes have been increasing due to industry consolidation, largely driven by major players.

Profit

Industry profit (as measured by earnings before taxes and interest) fell in the five years to 2013. Low demand in light of the recession reduced sales volumes and limited the ability of manufacturers to liquidate their inventories. At the same

time, prices for plastic resin, a key input into many industry products, were on the rise. Increased purchase costs place downward pressure on industry profitability, as firms must constantly compete with cheaper imports on the basis of price. Although imports have risen rapidly in the past five-year period, the price of plastic and resins is expected to fall during 2013, while demand from laboratories is expected to increase considerably. As a result, IBISWorld estimates that industry profit margins will increase to 9.5% of industry revenue.

Purchases

Plastics represent a key input into many of the industry's products. As such, rising

Competitive Landscape

Cost Structure Benchmarks continued

prices for plastic and resins have increased purchase costs during the past five years. Steel and wood are also major inputs for many types of lab furniture. The price of sawmilled lumber is expected to increase moderately during the period, while the price of steel is expected to fall. The conflicting trends in input prices have eased purchase costs in 2013, which are expected to average 47.3% of industry revenue for the year. However, overall purchase costs have grown during the past five-year period, placing downward pressure on profit margins during the same period.

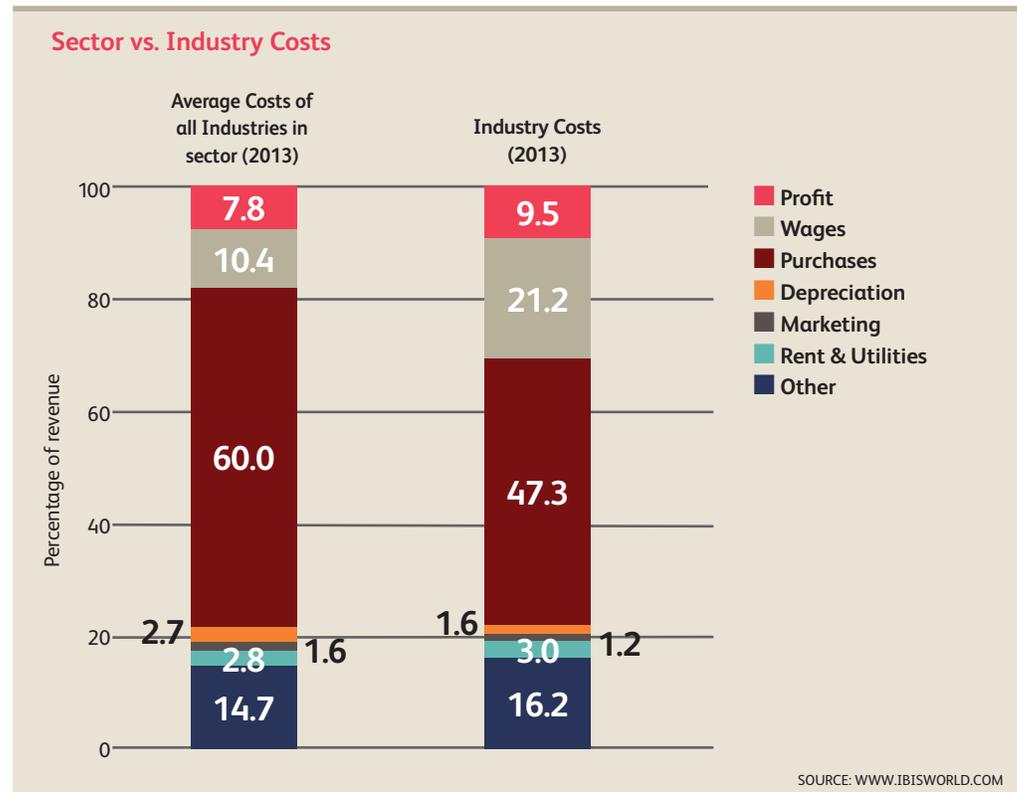
Wages

Wages are expected to represent an estimated 21.2% of the average firm's costs. Wages are expected to post significant declines in line with falling employee numbers. Companies have been reducing their work forces in an

effort to increase operational efficiencies through lean production strategies. As more capital is put toward automation machinery and specialized workers are trained to perform more than one job function, wages will remain suppressed as a share of revenue in line with the slow growth in employees.

Depreciation, marketing, rent and utilities

Depreciation represents the amount of revenue firms invest into capital equipment like process machinery and automated systems. While the initial investment for such machinery can be substantial, the cost is usually spread out over a period of several years, thereby marginalizing depreciation costs across most manufacturing industries. Depreciation costs for this industry are expected to rise on the back of an increasing need to maximize operation



Competitive Landscape

Cost Structure Benchmarks continued

efficiency by reducing human labor and, in turn, wage costs.

Last, marketing consistently represents a marginal share of the average firm's revenue, as products offered are niche and, therefore, serve a well-defined downstream consumer base. Rent and utilities costs are expected to rise slowly during the five years to 2013,

but remain a minority of overall costs.

Other costs

Other costs include computer hardware and software, communication services, and repairs and maintenance. Other costs have risen over the past five years on the back of higher spending on temporary employees during the recessionary period.

Basis of Competition

Level & Trend
Competition in this industry is **High** and the trend is **Increasing**

IBISWorld analysis reveals competition for the Laboratory Casework Manufacturing industry is high and increasing. In general, the industry faces competition on two levels: internal and external. Internal competition regards competitive factors common to all or most firms within the industry, while external competition represents threats based in other industries or from imports.

Internal competition

Within the industry, principal competitive factors include price, product performance and customer service. Additionally, a significant amount of the industry's business takes place on the basis of competitive public bidding. Further, many products require specification or approval by architects, engineers and customers. A failure to gain approval from these markets for design, materials, manufacturing, testing

or quality control adversely affects industry firms. Similarly, technological innovation poses a basis for competition, as firms with new designs and materials can gain an edge over stagnant offerings.

External competition

There are few substitutes for the types of furniture laboratories require, but imports of similar items from foreign countries do represent one form of external competition. Imports generally compete on the basis of price because overseas nations, particularly in Asia, have lax regulations regarding manufacturer compliance and wages. Further, some overseas companies benefit from supply chain efficiencies that help keep their operating costs low, thereby allowing the savings to be passed onto the customer in the form of cheaper prices. Steady gains in import penetration represent much of the increase in competitive pressure.

Barriers to Entry

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

Barriers to entry for the Laboratory Casework Manufacturing industry are estimated to be moderate. In general, a mix of positive and negative operating conditions for new entrants offset each other. On the positive side, some laboratory casework, such as cabinets, tables and shelves, represents a basic good that can be manufactured

domestically or abroad for a relatively small capital outlay. Also, low levels of market share concentration leave room for new entrants, especially in niche or geographic markets. On the negative side, some casework goods, such as specially treated surfaces, require sophisticated scientific knowledge to develop and produce on a mass scale.

Competitive Landscape

Barriers to Entry continued

Further, industry operators are beholden to myriad standards and regulations regarding compliance with casework specifications. Last, the industry's declining life cycle reflects increased import competition. The manufacturing process can be completed more cheaply overseas, and the pressures of a market that competes on price are encouraging many companies to move their operations abroad. These barriers are expected to persist during the coming five years.

Barriers to Entry checklist	Level
Competition	High
Concentration	Low
Life Cycle Stage	Decline
Capital Intensity	Low
Technology Change	Medium
Regulation & Policy	Medium
Industry Assistance	Low

SOURCE: WWW.IBISWORLD.COM

Industry Globalization

Level & Trend
Globalization in this industry is **High** and the trend is **Increasing**

Based on levels of international trade, IBISWorld estimates that the Laboratory Casework Manufacturing industry exhibits a high level of industry globalization that has been growing during the past five years. In 2013, imports are expected to represent an estimated 44.3% of domestic demand. Meanwhile, exports are expected to represent an estimated 41.4% of overall industry revenue. In addition to high levels of import and

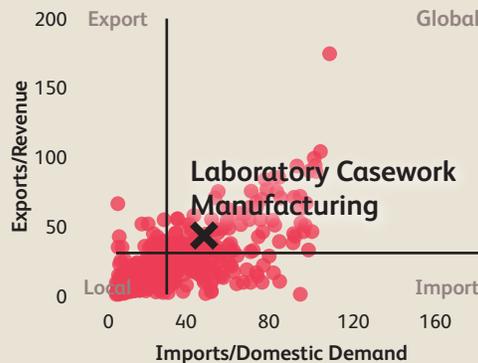
export activity, the industry also exhibits globalization through the willingness of larger companies to offshore their manufacturing operations. For example, in addition to its three US-based manufacturing plants, major company Kewaunee Scientific Corporation keeps a plant in India. Industry globalization is expected to continue growing during the next five years, as trade levels intensify and offshoring persists.

International trade is a major determinant of an industry's level of globalization.

Exports offer growth opportunities for firms. However there are legal, economic and political risks associated with dealing in foreign countries.

Import competition can bring a greater risk for companies as foreign producers satisfy domestic demand that local firms would otherwise supply.

Trade Globalization



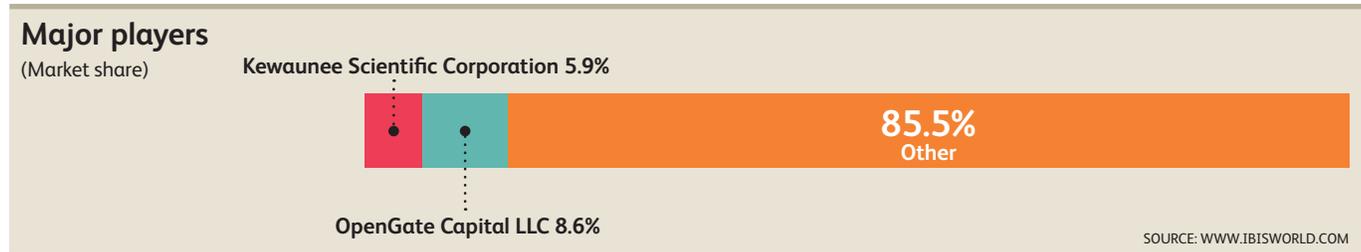
Going Global: Laboratory Casework Manufacturing 2002-2013



SOURCE: WWW.IBISWORLD.COM

Major Companies

OpenGate Capital LLC | Kewaunee Scientific Corporation | Other Companies



Player Performance

OpenGate Capital LLC
Market share: 8.6%

OpenGate Capital LLC (OpenGate) is a private investment firm that specializes in acquiring businesses in the North and Latin Americas and Europe regions. The company's portfolio of businesses operate across a range of industries. The company generates about \$2.0 billion in revenue annually. OpenGate operates in the Laboratory Casework Manufacturing industry through its 2012 acquisition of Thermo Fisher Scientific's laboratory workstations business segment.

Hamilton Scientific

Hamilton Scientific was established in 2012, a result of Thermo Fisher Scientific's divestment of its laboratory workstations business, which was subsequently renamed Hamilton Scientific. The acquisition included laboratory furniture and fume hoods sold under the brands of Advanced

Laboratory Concepts, Hamilton and Collegedale. The acquisition also included the business' manufacturing facilities in Wisconsin, Texas, Arkansas and Mexico as well as an established dealer network spanning the United States, China, India and the Middle East. Hamilton Scientific generates about \$175.0 million annually.

In the five years to 2013, IBISWorld estimates that Hamilton Scientific's revenue fell at an estimated average annual rate of 0.7% to \$105.9 million. Demand for laboratory equipment was strong leading up to the recession, but collapsed as the recession set in. Although revenue and operating income have rebounded from recessionary lows, profitability declined at a faster rate over the past five years due to increases in the cost of oil-based raw material, such as plastic resin.

Hamilton Scientific (US industry-specific segment) – financial performance*

Year	Revenue		Operating Income	
	(\$ million)	(% change)	(\$ million)	(% change)
2008**	109.5	N/C	15.6	N/C
2009**	108.5	-0.9	15.3	-1.9
2010**	88.9	-18.1	12.4	-19.0
2011**	95.8	7.8	13.5	8.9
2012	100.7	5.1	14.3	5.9
2013	105.9	5.2	14.5	1.4

*Estimates; **Estimated revenue generated as a business segment of Thermo Fisher Scientific

SOURCE: IBISWORLD

Major Companies

Player Performance

Kewaunee Scientific Corporation
Market share: 5.9%

Statesville, NC-based Kewaunee Scientific Corporation designs, manufactures and installs laboratory furniture. The company employs about 475 people in the United States and operates three manufacturing facilities in North Carolina. Additionally, Kewaunee has 123 international employees and operates a manufacturing facility in India. The firm's primary products include steel and wood cabinetry, moveable workstations, safety cabinets and laminate casework. Kewaunee also manufactures fume hoods, which are not applicable to this industry.

Kewaunee markets its products to operators of industrial, educational and medical labs through authorized dealers and a national distributor. Under the company's agreement with ISEC Inc., a Colorado-based interior specialty contractor, ISEC represents Kewaunee products in 14 states and the District of

Columbia. Aside from manufacturing, Kewaunee offers an array of value-added services, including equipment installation and testing.

Financial performance

In the past five years to 2013, IBISWorld estimates that the company's US-based industry-specific revenue rose at an average annual rate of 5.7% to \$72.7 million. Kewaunee experienced solid revenue growth leading up to fiscal 2010, when recessionary conditions set in and caused demand to plummet. In response, the company's revenue plunged 5.7% for the year, which was preceded by growth of 21.6% in fiscal 2009. Profitability fell on average largely in response to rising input costs, particularly steel and epoxy resin. The company's complete remodeling and expansion of its Statesville facilities, which was completed in 2011, also affected operating income.

Kewaunee Scientific Corporation (US industry-specific segment) – financial performance**

Year*	Revenue (\$ million)	(% change)	Operating Income (\$ million)	(% change)
2007-08	55.1	9.3	3.5	29.6
2008-09	67.0	21.6	4.8	37.1
2009-10	63.2	-5.7	3.6	-25.0
2010-11	67.6	7.0	2.1	-41.7
2011-12	70.5	4.3	1.7	-19.0
2012-13	72.7	3.1	1.8	5.9

*Year-end April; **Estimates

SOURCE: ANNUAL REPORT AND IBISWORLD

Other Companies

The Laboratory Casework Manufacturing industry is highly fragmented, with a majority of companies generating far less than 5.0%

of industry revenue. Smaller players in this industry typically partner with large distributors and resellers to reach the broadest market possible.

Major Companies

Other Companies continued

Sheldon Labs

Estimated market share: 1.5 %

Sheldon Labs is a Mississippi-based designer and manufacturer of lab tables, casework and furnishings for school and university science laboratories across the United States. Sheldon's industry-relevant products include science laboratory casework, teacher demo desks, student workstations, laboratory storage systems, laboratory service fixtures and family and consumer science furniture. The firm distributes these products through a network of regional managers and distributors throughout the country. Sheldon has designed, built and installed projects in every state in the United States as well as the District of Columbia, with past projects ranging from a high school lab in Florida to a university lab in Mississippi. Sheldon Labs is privately held and does not publish its financial information. However, IBISWorld estimates that the firm's revenue will grow to about \$18.5 million in 2013.

Diversified Woodcrafts

Estimated market share: 1.5 %

Based in Wisconsin, Diversified Woodcrafts is a privately held manufacturer of lab furniture and equipment. The company was founded in 1975 as a small shop that made glass test tubes. As it grew, it developed a line of laboratory furniture and was sold to JBC Holding Co. Industry-relevant products include tables, stools, benches, workstations and casework. The firm also offers fume hoods, eyewash stations and sink units, which are not included in the industry. Over the past decade, Diversified Woodcrafts has more than

doubled the size of its manufacturing operations and consolidated all of its manufacturing to its main plant in Wisconsin. IBISWorld estimates that the firm will generate about \$18.3 million in revenue in 2013.

Thermo Fisher Scientific Inc.

Company exit in 2012

Thermo Fisher Scientific Inc. is a Massachusetts-based provider of analytical instruments and equipment for research and manufacturing. Since its inception in 1956, the company has experienced significant growth. Thermo Fisher employs about 40,000 employees and serves over 350,000 customers worldwide. The company organizes its business into three operating segments: analytical technologies, specialty diagnostics and laboratory products and services. Prior to 2012, the company operated in the industry through its laboratory workstations segment, which was accounted for in the laboratory products and services segment.

However, the company decided to increase its focus on core competencies and sold its laboratory workstations segment to investment company OpenGate Capital LLC. While the value of the sale was undisclosed, it included the company's laboratory furniture and fume hoods sold under the brands of Advanced Laboratory Concepts, Hamilton and Collegedale. The sale also included the business' manufacturing facilities in Wisconsin, Texas, Arkansas and Mexico. As result, the company no longer manufactures laboratory furniture in the United States and, therefore no longer operates in the industry.

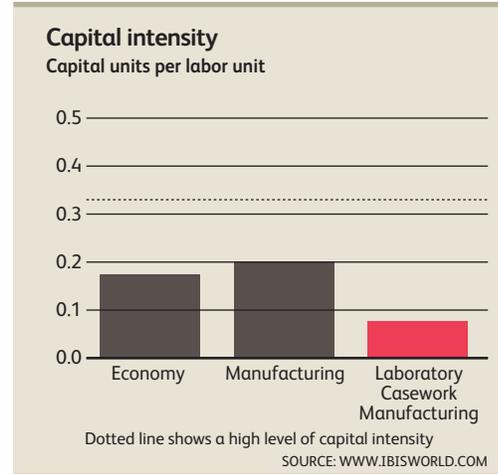
Operating Conditions

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

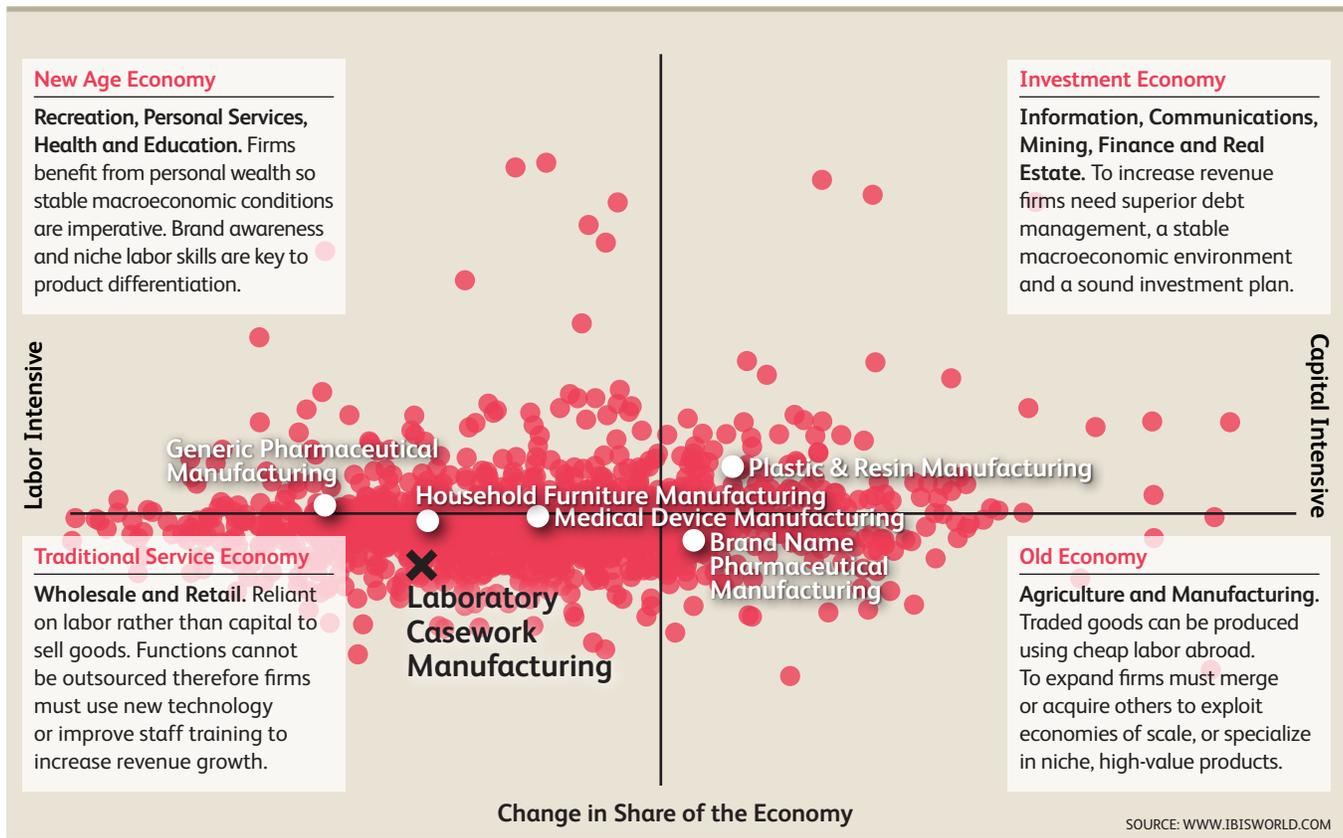
Capital Intensity

Level
 The level of capital intensity is **Low**

IBISWorld analysis reveals that the Laboratory Casework Manufacturing industry exhibits a low level of capital intensity. Although depreciation costs are expected to rise in light of increased automation and more advanced process technology, human labor remains a more expensive input to production. Operators have sought to reduce costs and increase efficiencies as the industry faced adverse conditions during the past five years in light of reduced demand, high input prices and increased competition from imports. The replacement of human labor with automated systems has somewhat eased the profit pressures caused by



Tools of the Trade: Growth Strategies for Success



Operating Conditions

Capital Intensity continued

cheaper imports and higher plastic prices, and industry employment and wages are expected to fall during the five years to 2013. Still, while the initial

investment for machinery can be substantial, the cost is usually spread out over a period of several years, thereby marginalizing depreciation costs.

Technology & Systems

Level
The level of Technology Change is **Medium**

In general, two kinds of technological innovation relate to the Laboratory Casework Manufacturing industry. The first involves the creation and ongoing development of new products. The need to increase efficiency while minimizing production costs drives this type of innovation. Examples include new table surfaces that reduce the risk of contamination in the lab setting, such as phenolic resins and chemical-resistant laminates. More specifically, Case Systems has developed a surface that uses an ionic charge to attract microorganisms and physically destabilize their cell membranes on contact. The protective coatings are chemically bonded and continue to provide protection even after repeated cleanings. Other

product innovations include casework that is fully modular to allow customization and furniture with electronic height controls.

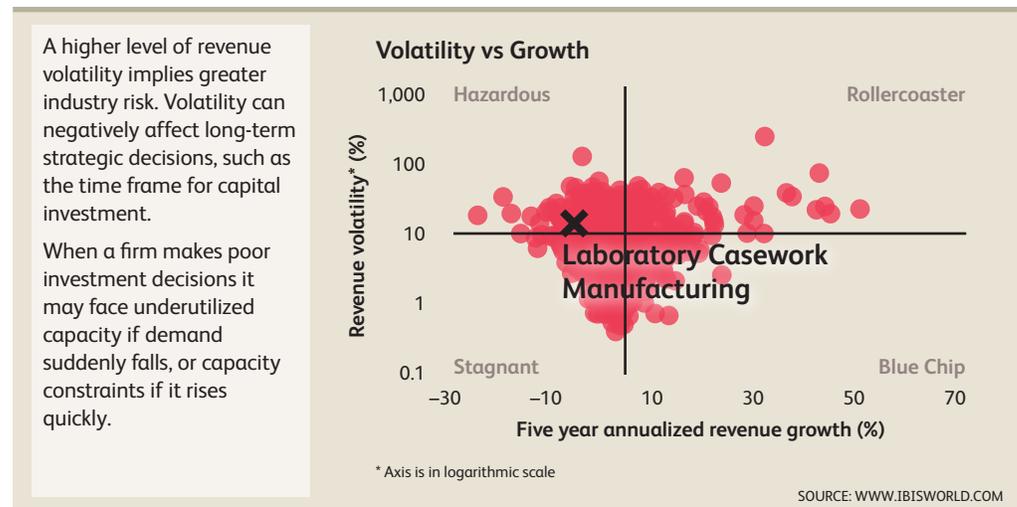
The other type of technological innovation regards the manufacturing techniques used to create the industry's output. Automation and process technology have been increasing among industry companies, thereby improving operational efficiencies through a reduction in employee head count that ultimately lowers wage costs. Further, a push toward lean production techniques, such as just-in-time inventory controls, computer-monitored supply and logistics systems, and the use of manufacturing cells, seek to improve the industry's profit margin in the face of rising input costs and weak demand.

Revenue Volatility

Level
The level of Volatility is **High**

The industry exhibits a high level of revenue volatility. Much of the volatility

exhibited during the past five years stems from double-digit gains in 2008 followed



Operating Conditions

Revenue Volatility continued

by double-digit losses in 2009. As the US economy entered the Great Recession, corporate profit dried up in light of weak consumer spending, thus hindering expenditure into research and development (R&D) and limiting the ability of downstream markets to invest in new lab furniture. Exports have been the industry's positive aspect during the

past five years, with a favorable trade-weighted index encouraging overseas consumers to buy US-manufactured items, while the value of the dollar is low. Volatility is projected to decrease, as unemployment drops, consumer spending rises and companies once again feel confident with investments into overall R&D expenditure.

Regulation & Policy

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

Many of the regulatory issues facing operators in the industry concern product specifications, standards and safety. Regulating bodies include the American Society for Testing and Materials, Labs for the 21st Century and Underwriters Laboratories (UL). In particular, UL provides globalized standardization for product safety and quality through its system of International Organization for Standardization (ISO) codes.

Additionally, blanket regulations regarding the disposal of hazardous waste created during the manufacturing process adversely affect the industry through the imposition of compliance measures that raise operating costs while seeking to mitigate the threat of fines for noncompliance. The Environmental Protection Agency monitors labs for compliance, including institutional and educational labs.

Industry Assistance

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

The Laboratory Casework Manufacturing industry lacks direct government assistance. Some tariffs apply to imports of certain goods included in the industry, but these influences are expected to have a marginal influence on industry revenue given the persistently increasing volume of imports as a share of domestic demand. Beyond the government, the industry receives some assistance from

trade associations such as the Scientific Equipment and Furniture Association, Laboratory Products Association, and Analytical and Life Science Systems Association. These associations provide news and support on relevant topics while also promoting their members and the industry as a whole. Industry assistance is expected to remain marginal.

Key Statistics

Industry Data

	Revenue (\$m)	Industry Value Added (\$m)	Establishments	Enterprises	Employment	Exports (\$m)	Imports (\$m)	Wages (\$m)	Domestic Demand (\$m)	Research & Development Expenditure (\$b)
2004	1,357.7	455.6	71	68	7,350	287.6	241.4	305.0	1,311.5	190.4
2005	1,343.4	469.2	73	70	7,131	332.5	268.6	304.2	1,279.5	200.6
2006	1,314.1	479.1	69	65	6,937	344.1	298.7	298.9	1,268.7	213.3
2007	1,524.7	545.8	71	68	8,158	368.0	345.8	345.3	1,502.5	224.7
2008	1,694.2	601.4	80	77	8,547	419.8	423.9	378.2	1,698.3	237.4
2009	1,218.9	440.3	76	73	6,411	410.3	378.2	281.2	1,186.8	228.3
2010	1,158.8	410.4	74	72	6,179	451.6	428.8	269.7	1,136.0	249.3
2011	1,167.1	389.0	73	69	6,087	493.9	496.1	258.9	1,169.3	259.6
2012	1,215.8	393.2	73	68	6,157	516.9	561.9	260.0	1,260.8	274.5
2013	1,231.5	397.3	72	68	6,206	510.3	572.4	260.4	1,293.6	277.0
2014	1,267.9	415.6	74	69	6,430	543.6	579.0	272.3	1,303.3	283.1
2015	1,299.6	428.6	74	68	6,504	566.8	612.1	278.5	1,344.9	290.3
2016	1,336.4	440.0	74	68	6,534	601.2	648.1	282.5	1,383.3	297.7
2017	1,374.0	450.9	75	69	6,544	622.7	687.4	285.5	1,438.7	304.6
2018	1,399.7	461.0	74	68	6,550	632.7	730.4	287.4	1,497.4	308.2

Annual Change

	Revenue (%)	Industry Value Added (%)	Establishments (%)	Enterprises (%)	Employment (%)	Exports (%)	Imports (%)	Wages (%)	Domestic Demand (%)	Research & Development Expenditure (%)
2005	-1.1	3.0	2.8	2.9	-3.0	15.6	11.3	-0.3	-2.4	5.4
2006	-2.2	2.1	-5.5	-7.1	-2.7	3.5	11.2	-1.7	-0.8	6.3
2007	16.0	13.9	2.9	4.6	17.6	6.9	15.8	15.5	18.4	5.3
2008	11.1	10.2	12.7	13.2	4.8	14.1	22.6	9.5	13.0	5.7
2009	-28.1	-26.8	-5.0	-5.2	-25.0	-2.3	-10.8	-25.6	-30.1	-3.8
2010	-4.9	-6.8	-2.6	-1.4	-3.6	10.1	13.4	-4.1	-4.3	9.2
2011	0.7	-5.2	-1.4	-4.2	-1.5	9.4	15.7	-4.0	2.9	4.1
2012	4.2	1.1	0.0	-1.4	1.2	4.7	13.3	0.4	7.8	5.7
2013	1.3	1.0	-1.4	0.0	0.8	-1.3	1.9	0.2	2.6	0.9
2014	3.0	4.6	2.8	1.5	3.6	6.5	1.2	4.6	0.7	2.2
2015	2.5	3.1	0.0	-1.4	1.2	4.3	5.7	2.3	3.2	2.5
2016	2.8	2.7	0.0	0.0	0.5	6.1	5.9	1.4	2.9	2.5
2017	2.8	2.5	1.4	1.5	0.2	3.6	6.1	1.1	4.0	2.3
2018	1.9	2.2	-1.3	-1.4	0.1	1.6	6.3	0.7	4.1	1.2

Key Ratios

	IVA/Revenue (%)	Imports/Demand (%)	Exports/Revenue (%)	Revenue per Employee (\$'000)	Wages/Revenue (%)	Employees per Est.	Average Wage (\$)	Share of the Economy (%)
2004	33.56	18.41	21.18	184.72	22.46	103.52	41,496.60	0.00
2005	34.93	20.99	24.75	188.39	22.64	97.68	42,658.81	0.00
2006	36.46	23.54	26.19	189.43	22.75	100.54	43,087.79	0.00
2007	35.80	23.01	24.14	186.90	22.65	114.90	42,326.55	0.00
2008	35.50	24.96	24.78	198.22	22.32	106.84	44,249.44	0.00
2009	36.12	31.87	33.66	190.13	23.07	84.36	43,862.11	0.00
2010	35.42	37.75	38.97	187.54	23.27	83.50	43,647.84	0.00
2011	33.33	42.43	42.32	191.74	22.18	83.38	42,533.27	0.00
2012	32.34	44.57	42.52	197.47	21.39	84.34	42,228.36	0.00
2013	32.26	44.25	41.44	198.44	21.14	86.19	41,959.39	0.00
2014	32.78	44.43	42.87	197.19	21.48	86.89	42,348.37	0.00
2015	32.98	45.51	43.61	199.82	21.43	87.89	42,819.80	0.00
2016	32.92	46.85	44.99	204.53	21.14	88.30	43,235.38	0.00
2017	32.82	47.78	45.32	209.96	20.78	87.25	43,627.75	0.00
2018	32.94	48.78	45.20	213.69	20.53	88.51	43,877.86	0.00

Figures are inflation-adjusted 2013 dollars.

SOURCE: WWW.IBISWORLD.COM

Jargon & Glossary

Industry Jargon

CASEWORK Base cabinets, wall cabinets and storage cabinets designed to be used in a laboratory setting and typically made of wood, plastic laminate and metal.

CASTERS Small wheels attached to the bottom of carts, cabinets and workstations that swivel to allow ease of mobility.

ERGONOMIC A design principle that seeks to maximize bodily comfort through strategic placement of the spine and limbs.

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.

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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