High rise: Still wary of homeownership, more consumers are choosing to rent or buy condos

IBISWorld Industry Report 23611b
Apartment & Condominium Construction in the US
April 2013
Deonta Smith
# About this Industry

## Industry Definition

This industry is composed of general contractors responsible for constructing new multifamily residential units, including high-rise apartments, townhouses, condominiums and medium-to-high density units (i.e. units not separated by a ground-to-roof wall). All of the complexes may be constructed for sale as condominiums or cooperatives, or used as rental apartments. This industry does not include speculative builders or contractors who build on their own account for sale.

## Main Activities

The primary activities of this industry are:

- Constructing multifamily residential housing units
- Constructing apartment complexes (high-rise and low-rise buildings)
- Constructing condominiums (attached and detached units)
- Constructing townhouses and duplexes
- Constructing multiunit special-needs complexes (e.g. low-income, senior care and campus housing)
- Construction management of multifamily building projects (home builders and general contractors)

The major products and services in this industry are:

- Construction management services
- General contracting
- Remodeling
- Subcontracting
- Other construction activities

## Similar Industries

### 23 Construction in the US

This industry performs specialized construction on multifamily housing units, generally on a subcontract basis (e.g. plumbing, electrical and tiling contractors).

### 23721 Land Development in the US

These establishments procure and develop land for residential subdivision or nonresidential construction.

### 23611a Home Builders in the US

Companies in this industry erect single-family housing units (detached and semi-detached).

### 53111 Apartment Rental in the US

These establishments develop, construct and operate residential buildings on their own account for investment purposes.

### 54131 Architects in the US

Companies in this industry provide architectural design for buildings.

### 54133 Engineering Services in the US

Firms in this industry provide engineering design and project management services.
About this Industry

Additional Resources

For additional information on this industry

enr.construction.com
Engineering News-Record

www.nahb.org
National Association of Home Builders (NAHB)

portal.hud.gov
US Department of Housing and Urban Development

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
Apartment & Condominium Construction in 2013

Key Statistics Snapshot

Revenue: $31.6bn
Annual Growth 08-13: -0.6%
Annual Growth 13-18: 7.4%
Profit: $2.5bn
Wages: $2.4bn
Businesses: 4,043

Market Share
Lend Lease Corporation Limited: 4.7%

Revenue vs. employment growth

Rental vacancy rates

Products and services segmentation (2013)

Key External Drivers
Rental vacancy rates
Homeownership rate
Urban population
National unemployment rate
30-year conventional mortgage rate

Industry Structure

Life Cycle Stage: Mature
Revenue Volatility: High
Capital Intensity: Medium
Industry Assistance: Medium
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 35
Industry Performance

Executive Summary

Demand for the Apartment and Condominium Construction industry is ramping up. In the wake of economic recovery, decreased vacancy rates and lower rent prices have facilitated growth in multifamily complex starts. In addition, declining homeownership rates, aggressive lending into the multifamily sector and gains in both employment and disposable income have all boosted demand for apartments and condominiums. In light of these recent trends, IBISWorld expects revenue to jump 14.8% to $31.6 billion in 2013. Nevertheless, the collapse of the real estate market and subsequent recession devastated demand for industry services, as vacancy rates for multifamily units escalated. The effects of the downturn ultimately dragged down the industry’s five-year performance, causing revenue to fall at an average annual rate of 0.5%.

The industry is currently experiencing growth in demand as multifamily homes emerge as one of the strongest sectors in the real estate market. A number of factors have led to this increase in demand; for example, as a result of improved income and lower unemployment, younger college students who moved back home or lived with friends during the economic downturn are increasingly seeking a place of their own. Additionally, young professionals are increasingly opting to rent instead of buy. An attributing factor to this phenomenon is the high debt these professionals leave college with.

Over the five years to 2018, the current growth trend will likely continue, with revenue anticipated to increase at an average annual rate of 7.4% to $45.2 billion. As demand for construction rises, so will industry employment. Consequently, the number of employees is projected to rise at an average annual rate of about 4.1% to 53,012 people. Although there have been improvements in homeownership rates and economic conditions, the demand for multifamily construction is expected to increase due to the continued migration of the US population toward metropolitan areas, where these complexes are more common.

Key External Drivers

Rental vacancy rates
Traditionally, the need for new apartment complexes often depends on vacancy rates: higher vacancy rates signal weak demand or overdevelopment. Occasionally, vacancy rates can rise during periods of strong economic growth and property valuation as developers and property owners look to cash in on the rapid appreciation of real estate prices. Still, vacancy rates are often an important indicator of industry demand, because the need for new property rises as vacancy rates fall.

Rental vacancy rates are expected to increase during 2013 and present a potential threat for the industry.

Homeownership rate
The homeownership rate is an important component of understanding real estate affordability. If it rises too high too fast, home values rise, and individuals become less able to afford property. This factor ultimately increases the demand for rental units. The homeownership rate is expected to increase during 2013, posing a potential opportunity to apartment construction projects.
Industry Performance

**Key External Drivers continued**

**Urban population**
The urban population level is an important indicator of industry growth because the majority of multifamily developments are in or near major metropolitan areas. As Americans continue to migrate toward major city centers, the need for new multifamily complexes will rise, supporting growth. The urban population is expected to increase slowly during 2013.

**National unemployment rate**
The demand for multifamily complexes diminishes as unemployment rises and buyers and renters look to cut living expenses. High unemployment often encourages renters to move in with relatives or roommates, while buyers tend to delay purchases. During periods of low unemployment, the number of households increases more quickly, supporting the need for new residential developments. The national unemployment rate is expected to decrease during 2013 in favor of industry growth.

**30-year conventional mortgage rate**
About 30.0% of industry revenue is associated with condominiums and other multifamily complexes that are for sale. As a result, interest rates are an important determinant of industry demand because most property purchases are financed by mortgages. Lower rates and looser credit standards reduce the cost of borrowing and increase the availability of credit, which makes purchasing property possible for more people. The 30-year conventional mortgage rate is expected to increase during 2013.

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![Graphs of Rental vacancy rates and Homeownership rate](source: www.ibisworld.com)
Industry Performance

Downturn followed by recovery

In the three years to 2010, industry revenue declined at an average annual rate of 10.8% due to the real estate market collapse. During this period, vacancy rates shot downward as demand for rental units grew with instability in the housing market, a rising aversion to homeownership and the slow economic recovery. With virtually no new multifamily buildings delivered to the market at a time when demand was rising and rental vacancy rates were quickly decreasing, investment began to flow into multifamily construction. According to US Census data, rental vacancy rates have fallen 2.1% in the five years to 2013, which is indicative of high demand for renting and has helped to increase the value of apartment properties, push rents up and encourage new multifamily construction starts.

Another factor driving industry growth over 2013 is the availability of and access to capital. Interest rates are holding at record lows, which is encouraging investment in new multifamily construction. Multifamily complex owners, developers, investors and real estate investment trusts are

Current Performance

Following strong performance in the early and mid-2000s, the Apartment and Condominium Construction industry endured a sharp contraction in the five years to 2013 as a result of the Great Recession. When the subprime crisis developed and the real estate bubble burst, the demand for real estate across almost every sector waned as consumers, banks and investors suffered from the effects of declining property values, rising unemployment and a drop in per capita disposable income. As a result, many new multifamily complex developments were put on hold or delayed indefinitely. Consequently, despite having one of the strongest recoveries in the construction sector in 2011 and 2012, revenue for the Apartment and Condominium Construction industry is estimated to decline at an average annual rate of 0.5% to $31.6 billion in the five years to 2013.

The majority of the industry’s growth depends on the rental market, which accounts for roughly 70.0% of revenue. The need for new apartment complexes is often dependent on vacancy rates, with higher rates signaling weak demand or overdevelopment. At the same time, the demand for apartments also fluctuates with overall economic cycles.

In addition to consumer trends, other changes within the US economy affect development activity due to operators’ reliance on credit, investment returns and property values. Demand for the industry’s services is strong during times of accessible credit and low interest rates because developers and property owners are able to develop land at lower costs. Additionally, property values appreciate with consumer demand because owners can charge higher rent. Consequently, property values often fall during economic downturns due to weak demand for new space.
Industry Performance

Downturn followed by recovery continued

expected to ramp up construction of new projects as they take advantage of low interest rates. Furthermore, due to tightened lending standards, many consumers are still finding it difficult to get approval for home loans. Unable to finance home purchases, these consumers generally turn to the rental market, adding additional demand for new multifamily construction. As a result, IBISWorld expects industry revenue to jump 14.8% during 2013.

Larger firms diversify to weather the storm

Companies that have significant operations in single-family and multifamily residential real estate have suffered a more severe decline in revenue than companies that operate in other areas of the construction sector. Residential contractors have been forced to scale back or cease operations in many regional markets, while also offloading land holdings and finished stock to ensure cash flow. In contrast, companies like The Turner Corporation, Clark Construction and Lend Lease were better able to handle the residential real estate market’s collapse since all three companies contain substantial nonhousing construction operations; the companies responded to the slump in housing by redirecting funds to commercial, municipal or institutional building construction.

Profit, enterprises and employment

Low fixed costs allow industry participants to increase and decrease expenses rapidly because most employee and capital costs are based on the demand for new projects. Nonetheless, during the recession, profit collapsed from its 2006 peak of 12.8% to a meager 2.2% in 2010. After hitting bottom in the first half of 2010, industry margins have expanded rapidly with demand for new multifamily complex construction. In 2013, IBISWorld expects profit to expand to 8.0% of revenue.

Like other construction sectors, the number of employees generally fluctuates with revenue because the majority of construction projects are contract-based. As demand for rental properties rises, industry employment is expected to increase at about 0.4% annually on average to 43,439 workers. Operators are expected to increasingly use subcontractor labor for certain aspects of construction activity, which will allow contractors to remain flexible by keeping overhead low.
Industry Performance

Margins will increase as economy recovers

The Apartment and Condominium Construction industry’s revenue is forecast to increase at an average annual rate of 7.4% to $45.2 billion in the five years to 2018, including an estimated 11.4% expected increase in 2014. During this period, a recovery in the multifamily real estate market, including improvements in property values and transaction volumes, will support industry growth. And as the economy recovers, the demand for property will rise, particularly in the rental market. Specifically, the urban population is expected to increase over the next five years, spurring demand for complex development, especially as sentiment toward housing remains low.

As the demand for rental property strengthens, demand for industry services will rise. The conversion of rental units into condos will also support demand for industry services. As the market improves, investors, developers and owners will try to sell rather than rent these holdings. Additionally, industry growth will be supported by increased funding for affordable housing, particularly from 2012 to 2014, due to the Obama administration’s stimulus package and other real estate initiatives.

Finally, the industry will continue to benefit from investments in higher-valued, master-planned community developments and luxury apartments, which are targeted at professionals and retirees for either purchase or rent. Stronger activity in this market will likely benefit larger-scale contractors operating close to high-density population areas like New York City and Chicago, and tourist and retirement regions like Miami and Southern California. Similarly, industry participants will benefit from increased demand for lifestyle centers, which are mixed-use developments of apartments, condos, stores, gyms, theaters and parks.

Nevertheless, housing investment will still remain below 2006 levels as the industry continues to suffer from high vacancy rates from the overdevelopment of multifamily complexes that occurred during the real estate boom. Similarly, property investment is forecast to decrease because the slow pace of the economic recovery will be unable to restore household wealth and property values to prerecession levels in the near term.

Demand for rental properties will increase due to poor sentiment toward homeownership

Industry profit (i.e. earnings before interest and taxes) is forecast to rise from about 8.0% of industry revenue in 2013 to 9.4% by 2018. Higher property values will help drive the increase in profit. Larger, more complex projects are also set to drive profitability by providing participants with stable income due to the length of time needed to build these developments. Additionally, these projects are more expensive for customers because they are more difficult to build.

These higher-cost projects also provide participants with the flexibility to negotiate input costs because materials can be supplied in larger quantities. Despite the inflationary impact of high gasoline prices, material costs are expected to remain flat because many supply industries, including glass manufacturers, concrete suppliers and steel companies, have excess capacity.
Industry Performance

Job growth will follow revenue

In the five years to 2018, the number of employees is expected to increase an average of 4.1% per year to 53,012 workers as firms strive to meet the increased demand for industry services. Similarly, wages are forecast to rise at an average annual rate of about 5.1% to $3.1 billion, with a shortage in skilled workers forcing companies to offer more attractive wages, especially as the job market makes significant improvements in the later part of the period.

In contrast to employment and wages, the number of enterprises is forecast to rise only 3.8% per year on average to 4,876 companies due to consolidation activity. Larger companies will gain market share as they continue to expand and diversify operations in an attempt to lower operation risks.
Industry Performance

Life Cycle Stage

The industry is entering a period of accelerated demand

A growing urban population is benefiting the industry

Future industry growth rates are exaggerated by the severe revenue decreases during the Great Recession

Life Cycle Stage

SOURCE: WWW.IBISWORLD.COM

Maturity
Company consolidation; level of economic importance stable

Quality Growth
High growth in economic importance; weaker companies close down; developed technology and markets

Quantity Growth
Many new companies; minor growth in economic importance; substantial technology change

Key Features of a Mature Industry
Revenue grows at same pace as economy
Company numbers stabilize; M&A stage
Established technology & processes
Total market acceptance of product & brand
Rationalization of low margin products & brands

Decline
Shrinking economic importance

Ready-Mix Concrete Manufacturing
Real Estate Investment Trusts
Land Development
Home Builders
Lumber Wholesaling

Apartment & Condominium Construction
Industry Performance

Industry Life Cycle

The industry is in a mature stage of its life cycle. The industry’s contribution to the overall economy, measured by the industry’s value added (IVA), is expected to increase at an annualized rate of 1.9% in the 10 years to 2018. By comparison, US GDP is forecast to rise at an annualized 2.1% over this same period. Typically, an industry is considered mature or growing if IVA mirrors or outperforms GDP growth. However, the rise in IVA is largely a result of a spike in construction demand after the economic downturn.

Over the five years to 2018, the industry is forecast to grow strongly as the economy continues recovering from the recession and the demand for new multifamily complexes rises. As this happens, industry growth is forecast to outpace US economic growth. Industry revenue is expected to surpass its prebubble peak of $40.2 billion, reaching about $45.2 billion in 2018. This growth will be supported by technological improvements, including the demand for environmentally friendly LEED-certified buildings.
### Supply Chain

**KEY BUYING INDUSTRIES**

<table>
<thead>
<tr>
<th>Industry Code</th>
<th>Industry Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>52</td>
<td>Finance and Insurance in the US</td>
<td>Commercial banks, insurance companies and other financial institutions finance the majority of home purchases and capital for new development projects.</td>
</tr>
<tr>
<td>52593</td>
<td>Real Estate Investment Trusts in the US</td>
<td>Real estate investment trusts are a major source of demand for industry services because these types of institutions own most large residential complexes.</td>
</tr>
<tr>
<td>53111</td>
<td>Apartment Rental in the US</td>
<td>Residential property developers initiate and provide funding for multi-family housing construction.</td>
</tr>
<tr>
<td>61</td>
<td>Educational Services in the US</td>
<td>Support industry demand related to the construction of student apartments and dormitories on campus.</td>
</tr>
<tr>
<td>62</td>
<td>Healthcare and Social Assistance in the US</td>
<td>Demand multi-family construction services for aged care and long-term residential care communities.</td>
</tr>
<tr>
<td>92</td>
<td>Public Administration in the US</td>
<td>State and Federal Departments (including the military), fund the construction of multi-family public housing and subsidize welfare recipients to compete on rental markets. Notably Department of Housing and Urban Development subsidizing housing.</td>
</tr>
</tbody>
</table>

**KEY SELLING INDUSTRIES**

<table>
<thead>
<tr>
<th>Industry Code</th>
<th>Industry Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>23</td>
<td>Construction in the US</td>
<td>Subcontractors supply a substantial proportion of specialist construction services to this industry (e.g. electrical contractors, plumbers and crane operators)</td>
</tr>
<tr>
<td>32732</td>
<td>Ready-Mix Concrete Manufacturing in the US</td>
<td>Ready-mixed concrete manufacturers are a principal supplier of building materials used by the housing construction industry (e.g. concrete foundations, driveways and paths).</td>
</tr>
<tr>
<td>42331</td>
<td>Lumber Wholesaling in the US</td>
<td>Timber is a principal building material used in the housing construction industry (e.g. framework, formwork, exterior cladding).</td>
</tr>
<tr>
<td>42332</td>
<td>Stone, Concrete &amp; Clay Wholesaling in the US</td>
<td>Wholesale supply of construction materials used in the construction of multi-family housing.</td>
</tr>
<tr>
<td>42333</td>
<td>Roofing, Siding &amp; Insulation Wholesaling in the US</td>
<td>Wholesale supply of roofing materials (metal, shingles, tiles), siding (vinyl, aluminum), and insulation materials used in the construction of multi-family housing.</td>
</tr>
<tr>
<td>42339</td>
<td>Manufactured Home Wholesaling in the US</td>
<td>Wholesale supply of a wide range of material inputs into multi-family housing construction (e.g. paints, floor coverings, steel, glass, concrete pipes etc.).</td>
</tr>
<tr>
<td>42371</td>
<td>Tool &amp; Hardware Wholesaling in the US</td>
<td>Wholesale supply of a wide range of material and equipment inputs into multi-family housing construction (e.g. tools, fasteners, paints, plasters etc.)</td>
</tr>
<tr>
<td>42381</td>
<td>Construction &amp; Mining Equipment Wholesaling in the US</td>
<td>Wholesale supply (lease and purchase) of machinery and equipment inputs into construction (e.g., cranes, hydraulic pumps, lifting equipment, and scaffolding systems etc.).</td>
</tr>
<tr>
<td>52219</td>
<td>Industrial Banks in the US</td>
<td>The mortgage finance market is underpinned by government-back private mortgage guarantee companies Fannie Mae, Freddy Mac and Ginnie Mae.</td>
</tr>
</tbody>
</table>
The Apartment and Condominium Construction industry comprises contractors that are primarily responsible for the complete construction (i.e. new work, additions, alterations, maintenance and repairs) of multifamily homes. About 98.3% of industry revenue is generated from industry operators that act as the main contractor on construction projects, with the remaining services associated with operators that act as subcontractors (1.7% of industry revenue).

**General contracting**

About 51.7% of industry revenue is derived from industry participants that operate as “prime” general contractors or design-builders on the construction of buildings on land owned by others. Typically, construction firms obtain contracts through tendering or quoting a price accepted by the property developer. Contracts normally require the general contractor to oversee all aspects of the project, from quantity surveying and material purchase to skilled labor and subcontractor recruitment to construction and lockup. The general contractor is expected to consult with the project’s architects, financial providers and building regulators.

Over the past five years, the majority of general contracting business is associated with construction of buildings on land owned by others, but there is a growing tendency for firms to partially or fully finance property developments. This segment is anticipated to increase over the next five years, in line with demand for apartment construction services.

**Construction management services**

Construction management accounts for about 42.8% of industry revenue, according to 2012 IBISWorld estimates. Demand for construction management services has grown over the past five years. The provision of these services comprises many of the same elements performed by the general contractor or design-builder. However, unlike general contractors, construction managers do not undertake any construction activities; instead, all the work is done by subcontractors.

Like general contractors, firms supplying construction management services oversee all aspects of the project and consult with the project’s architects, financial providers and building regulators. In the next five years, IBISWorld anticipates construction management services to account for a larger share of revenue, as subcontracting practices increases.
Products & Markets

**Demand Determinants**

Apartment and Condominium construction is heavily focused on the supply of rental accommodation for low- to medium-income households, and currently about two-thirds of America’s rental households (or 23.5 million households) live in multifamily housing units. Households renting apartments tend to be younger and smaller than the average US household (under 35 years and of one or two persons), and are typically in the low-to-medium income bracket. The National Multifamily Council reports that 40.0% of households living in apartments generate revenue below $20,000 per year, and a further 23.0% generate income of $20,000 to $34,999 per year (compared with 23.0% and 18.0% respectively for all US households). Only 9.0% of households living in multi-unit housing earned income exceeding $75,000 per year, while 26.0% of total US households generated income in this range. Therefore the principal determinant for demand for multifamily housing construction is the projected demand for rental accommodation (i.e. growth in rental population), and the returns to residential property investors.

**Demand for rental accommodation**

The demand for rental accommodation relates to trends in household income/wealth, housing affordability and to a lesser extent by medium- to long-term trends in demographic change. The impact of current economic conditions on household confidence has great bearing on the demand for rental accommodation. Consumers must be confident of job security and future household income to commit to buying instead of renting housing. The recent fallout from the collapse of the subprime mortgage market has brought the tightening of lending practices and a record level of housing foreclosures (mainly for the lower-income households), which has pushed more people into the rental market. The prevailing level of housing affordability has great bearing on the demand for rental accommodation. Consumers must be confident of job security and future household income to commit to buying instead of renting housing. The recent fallout from the collapse of the subprime mortgage market has brought the tightening of lending practices and a record level of housing foreclosures (mainly for the lower-income households), which has pushed more people into the rental market.

**Other construction activities**

Remodeling contracts are expected to account for about 1.6% of industry revenue in 2013. The majority of remodels occur when a manufacturer or industrial company develops a new product that requires an existing structure to be altered for production to take place. Remodels also include the expansion of an existing building or structure, which occur when a firm needs to increase production to meet additional demand. Subcontracting is expected to account for about 1.7% of industry revenue in 2013, an increase from its 2008 lows. Most subcontractors provide specialized services, such as framing, carpentry and excavation work. Additionally, the industry relies on subcontractors for specialty services, such as engineering, architecture and brokerage activities, which accounts for about 0.6% of industry revenue. Other construction activities are forecast to account for about 2.2% of industry revenue in 2013. These services mainly relate to subdivision activities, land development, heavy construction and civil engineering; IBISWorld expects other construction services portion of industry revenue to remain constant over the next five years.
availability and price of finance), and the price of land, labor and materials inputs. Long-term demographic factors directly impact on the demand for rental accommodation. These include population growth rates, trends in net migration, population dispersion, the age composition of the population and the rate of household formation.

Residential property investment
The current and projected rental yield on properties underpins investor activity in this market. Low rental vacancy rates and solid rental yields encourages new investment into rental stock. Government policy measures to encourage the construction of high- and medium-density dwellings, such as municipal government “inner-city living” initiatives, policies covering strata or multiple property titles, conveyance regulations and costs, urban renewal and zoning and tax treatment of investment into property. Federal and municipal government urban renewal programs have provided significant stimulus to industry growth in high population centers, such as San Francisco and Washington, DC.

Residential property investors (notably real estate investment trusts), are partly insulated from the wider cyclical fluctuations in the regular home owner single family housing market, as rental demand often strengthens during downturns in the economy (particularly evident in the recent spate of housing foreclosures), and from government assistance through Department of Housing and Urban Development (HUD) support for low-income housing and rent subsidization. Investment into rental apartments is directly influenced by the availability of loans and the mid-2007 collapse of the subprime mortgage finance market has resulted in the tightening of lending practices by banks and mortgage initiators. This has significantly dampened investment into new housing.

Housing preferences
Trends in household size and the preferences in size of accommodation impact demand for multifamily housing relative to single-family housing. Over the long term, there has been a downward trend in average household size in the United States but also a notable upward trend in the size of the average home, including multifamily housing. The trends in location preferences also impact demand for multifamily housing. There has been a long-term preference for older couples to move to tourist or retirement regions, such as Florida, and live in multifamily housing communities close to amenities and recreational features (e.g. the seaside and golf courses).

One-off factors
Natural disasters, such as the damage caused by Hurricane Sandy in 2012, and damage to property from bush fires and earthquakes, can stimulate short-term demand for new multifamily housing construction irrespective of the underlying trends in housing demand. Hurricane Sandy is estimated to have rendered many houses uninhabitable in the Greater New Jersey and Connecticut regions, and reconstruction of replacement housing stock continues over the next five years. The increase in size of military personnel over recent years has contributed to demand for construction of single and multifamily accommodation adjacent to defense installations.
Multifamily housing starts are grouped into three categories based on the number of units constructed per site: projects comprising more than five units account for 88.0% of housing starts and typically include inner-urban and tourist zone multistory apartments and condominiums; projects comprising two units account for about 6.0% of total housing starts and include suburban and city townhouses and villas; and projects comprising three and four units account for a further 6.0% of housing starts and include tourist and retirement region apartments and suburban home units.

**Real estate investment trusts**
Many of the largest apartment owners and managers are structured as real estate investment trusts, which are privately owned or publicly listed tax vehicles for corporate investment into real estate (reduces or eliminates income taxes). These entities rely on industry operators to expand existing portfolios and construct new developments. Overall, this segment is estimated to account for about 30.0% of industry demand in 2013.

**Tourist and retirement communities**
The construction market for lifestyle (often retirement), tourist apartments or condominiums for sale to home buyers contributes about 20.0% of industry activity (notably in the coastal regions of Florida and California). This segment of the market, which has grown significantly over the past decade, tends to be more volatile than most as it generally relies on the large-scale property development.

**Special needs accommodation**
The market for the construction of multiunit accommodation for special-needs purposes (including defense housing, residential aged care and campus student accommodations) is estimated to account for about 15.0% of industry revenue. The increase in the permanent size of the US military over recent years has contributed to strong growth in contracts for the construction of military accommodation, which
Products & Markets

Major Markets

comprises both multifamily and single-family housing construction. This segment of the market, along with student campus accommodation, is expected to continue to grow at a faster pace than the total industry over the next five years.

Owner-operated construction
Larger well-capitalized multifamily home builders develop and construct multifamily complexes on property that they own. These operators often directly sell or rent these developments to young professionals, married couples and large families. Operators also build complexes that they later sell to property management firms, real estate investors or other financial companies. Larger multifamily home builders that have the experience and financial capacity required to compete in that arena generally undertake this type of activity.

Owner-operated developments are much costlier than suburban buildings because of the scarcity of land, but margins tend to be higher because of increased demand and the ability for operators to build high-rises. Overall, this segment is estimated to account for about 8.0% of industry revenue in 2013.

Refurbished or converted buildings
Refurbishment of existing buildings for residential use (such as warehouses and offices) is estimated to account for about 5.5% of industry revenue in 2013. The conversion of existing buildings for residential use has been a growth area within this industry over the past decade as property values surge in inner city locations and changing lifestyle preferences encourages home buyers/developers to convert aging commercial building stock. This trend is expected to strengthen over the five years to 2018.

International Trade

The industry is composed of companies that specialize in multifamily home building and remodeling, so there is no international trade within this industry as goods are not passed from one country to another. The majority of industry participants are small or medium-sized firms, but there are some multinational companies that offer construction services in a wide variety of markets, including industrial, municipal, multifamily and commercial. Multinational construction firms include both foreign-owned operators in the United States and US operators that offer services abroad. For more information on international trends, please see the Industry Globalization section of this report.
Products & Markets

Business Locations 2013

Additional States (as marked on map)

<table>
<thead>
<tr>
<th>State</th>
<th>Establishments (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>VT</td>
<td>0.2</td>
</tr>
<tr>
<td>NH</td>
<td>0.4</td>
</tr>
<tr>
<td>MA</td>
<td>2.9</td>
</tr>
<tr>
<td>RI</td>
<td>0.4</td>
</tr>
<tr>
<td>CT</td>
<td>0.5</td>
</tr>
<tr>
<td>NJ</td>
<td>4.1</td>
</tr>
<tr>
<td>DE</td>
<td>0.3</td>
</tr>
<tr>
<td>MD</td>
<td>1.9</td>
</tr>
<tr>
<td>DC</td>
<td>0.2</td>
</tr>
</tbody>
</table>

Establishments (%)

- Less than 3%
- 3% to less than 10%
- 10% to less than 20%
- 20% or more

SOURCE: WWW.IBISWORLD.COM
Products & Markets

Business Locations

The distribution of industry activity does not uniformly correspond to the distribution of US population due to differences in topography, land values, demographic factors and changing consumer preferences.

The concentration of industry establishments and employment is in the Southeast, West, Mid-Atlantic and Great Lakes regions, with activity concentrated on the states with the largest metropolitan populations (i.e. Florida, New York and California). The relatively high land values in and around major cities add to the demand for higher-density apartment accommodation rather than the low-density single-family homes. The National Multi-Family Housing Council (NMHC) reports that 23.0% of New York state population rented apartments, and the proportions were also high for California (16.0%), Florida, Texas and New Jersey (11.0% to 13.0%).

The Southeast region accounts for the largest share of industry establishments (23.1%), which corresponds with the region’s share of US GDP and the national population (22.0% to 25.0%). Activity is largely concentrated in Florida, Louisiana and North Carolina, which have high levels of condominium development in coastal areas and retired population seeking medium- to high-density accommodation.

The West region accounts for 14.8% of industry establishments. However, the region has a much higher proportion of industry employment and payroll (19.5% to 20.5%), which marginally exceeds the region’s share of the national population and economy but reflects the preponderance of high-density residential developments in the inner urban areas of San Francisco, Los Angeles and San Diego, along with condominium developments in coastal regions. The Mid-Atlantic region, which includes the major metropolitan population centers New York City, Philadelphia and New Jersey, accounts for about 21.6% of industry establishments, which corresponds with the higher preference for apartment accommodation.

The concentration of industry activity in the Great Lakes region is highest in Illinois and Ohio due to the higher-density housing developments in the major cities (e.g. Chicago). Industry activity in the Southwest region is underrepresented due to the higher prevalence of single-family housing construction. Multifamily housing construction is concentrated in Texas, particularly in Houston and Dallas where high land values favor the construction of low-cost, high-density dwellings.

The Plains region is characterized by its highly dispersed, lower-density population. The relatively lower land values encourage the construction of larger single-family housing. The Rocky Mountains region accounts for about 4.7% of industry establishments, which...
corresponds with the region’s share of national population and economic activity, although most multifamily housing construction is confined to the bigger urban centers in Colorado and snowfield developments.
Competitive Landscape

Market Share Concentration

Level
Concentration in this industry is Low

This industry is characterized by its many small to medium-size contractors that operate in relatively narrow regional markets. The four largest players currently generate less than 10.0% of industry revenue, but many participants operate on a national basis and within other industries, including single-family housing construction, non-residential building and property development, to lower income fluctuations and decrease downturn risks. The demand for property construction generally fluctuates with economic cycles, but individual market conditions are also important as the residential sector may expand, while the commercial sector is declining, or vice versa. Firms are also offering services across several states or metropolitan areas in an attempt to lower downturn risks associated with local markets.

According to IBISWorld estimates and the survey of County Business Patterns, only about 1.5% of establishments employ more than 100 people, and about three-quarters of establishments employ fewer than 10 people. The industry’s few larger-scale contracting firms typically have multiple establishments, with branches and equipment yards located in geographically dispersed markets.

Key Success Factors

Having a high prior success rate (including completed prior contracts)
Prospective clients are drawn to contractors with an established reputation for having the financial, managerial and technical capacity to construct often-complex medium- to large-scale projects.

Effective product promotion
Having a strong marketing department to generate forward orders and pre-lease existing projects is essential in this industry.

Development of a symbiotic relationship with another industry
The leading players look to establish symbiotic relationships with other industries, such as financial institutions and residential property developers, to ensure an adequate flow of funding and new contracts.

Access to multiskilled and flexible workforce
The industry has a particularly heavy reliance on subcontracted labor, which accounts for about 80.0% of the total industry workforce and absorbs about 50.0% of annual industry revenue.

Cost Structure Benchmarks

The Apartment and Condominium Construction industry is characterized by small and medium-size general contractors that use subcontractors and other temporary employees on a per-project basis, which allows operators to maintain operational flexibility. The industry’s capital intensity is low because

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**Distribution of establishments by employment size**

<table>
<thead>
<tr>
<th>No. of employees</th>
<th>Share (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 to 4</td>
<td>59.6</td>
</tr>
<tr>
<td>5 to 9</td>
<td>16.7</td>
</tr>
<tr>
<td>10 to 19</td>
<td>11.4</td>
</tr>
<tr>
<td>20 to 49</td>
<td>8.3</td>
</tr>
<tr>
<td>50 to 99</td>
<td>2.5</td>
</tr>
<tr>
<td>100 to 244</td>
<td>1.2</td>
</tr>
<tr>
<td>250 to 499</td>
<td>0.3</td>
</tr>
<tr>
<td>500 or more</td>
<td>0.0</td>
</tr>
</tbody>
</table>

*Estimate

SOURCE: US CENSUS BUREAU AND IBISWORLD
Competitive Landscape

Cost Structure

Benchmarks continued

the most expensive equipment, such as cranes and earthmoving vehicles, are leased on a per-project basis. However, multifamily construction is highly labor intensive, with total wage costs estimated to account for more than 50.0% of revenue, when factoring in subcontractor payments.

Profit

The industry's profit, or earnings before interest and taxes, is expected to account for about 8.0% of revenue in 2013, down from a prerecessionary peak of 12.8% in 2006, but up from a low of 2.2% in 2010. Despite a dramatic decline in revenue during the recession, the industry has been able to maintain profitability due to its reliance on subcontractors and leased equipment. Because most employee and capital costs are based on the demand for new projects, industry participants are able to increase and decrease expenses rapidly thanks to low fixed costs.

At the same time, margins are still susceptible to changes in demand because contractors, developers and remodelers aggressively compete on price during periods of low demand. As a result, the industry's gross profit is expected to decline at an annualized 13.9% in the five years to 2013 due to weak market conditions experienced during the Great Recession and subprime mortgage crisis.

Wages

The industry is very labor intensive, with total wages, including subcontracted and directly employed labor, accounting for 51.9% of revenue. Directly employed construction workers account for about 41.5% of total wage expenses, while administrative staff and subcontractors account for 58.5% of total wage expenses.

The majority of industry expenses are

![Sector vs. Industry Costs](source: www.ibisworld.com)
Competitive Landscape

Cost Structure

Basis of Competition

The industry maintains a high degree of internal competition, particularly on a regional basis, because the industry is characterized by its many small-scale players. Competition is based on price differentiation, however, contractors must first be invited to tender on a project and developers must be satisfied by the contractor’s track record on delivering projects on time, within budget and meeting technical specifications.

Economies of scale are limited in this industry due to the labor-intensive nature of construction; although, the larger building companies may achieve some competitive advantage from economies in marketing projects, the purchase of construction materials, the acquisition of land for development, and access to skilled subcontractors.

Only larger scale builders are capable of promoting sales through construction of speculative developments, as this practice involves risk-taking and the builder must show skills in accurately judging the market trend in price, customer demands, and project funding costs. Over the past decade the demarcation between property developer and prime contractor has become blurred. Many of the leading players in this industry (e.g. Turner Corporation), act as both developer and prime contractor on large-scale multi-family housing developments, subcontracting discrete segments of construction to independent contractors. The sharp cyclical correction in housing investment over recent years has seen most of the leading contractor-developers sell-down land holdings and shy away from speculative property developments in order to consolidate in light of rising interest costs and falling demand conditions. The leading builders will be more cautious about equity involvement in projects during

Purchases

On larger-scale projects, the prime contractor maintains direct responsibility for most material purchases and negotiates directly with suppliers for discounted prices. On smaller-scale projects, the subcontractors typically are responsible for completing discrete segments of construction, including supplying materials. Overall, purchases account for about 26.8% of the industry’s revenue. The cost of purchases often fluctuates with commodity prices, with most costs related to ready-mixed concrete, glass, structural steel, concrete panels, structural timber, metal cladding, aluminum fittings, electrical installations, purchased electric power, fuels and lubricants. In addition to material purchases, industry participants also buy machinery and equipment.

Other

Depreciation in the industry is low due to operators’ reliance on leased vehicles and subcontractor help. The industry also has low rent and utilities costs. Other general expenses absorb about 10.0% of annual revenue and include communication charges (e.g. cell phones), machinery and building repairs, building and machinery rental, accounting and legal services, professional expenses, insurance premiums and administration outlays.

Cost Structure

Benchmarks continued

related to subcontractors, with this sector accounting for about 44.3% of total industry revenue. Subcontractors are used for the majority of development activity and are generally categorized into specialties, including concreting contractors, structural steel erectors, plumbers, electrical contractors and crane operators.

Level & Trend

Competition in this industry is High and the trend is Increasing

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Cost Structure

Benchmarks continued

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Competitive Landscape

Basis of Competition continued

New entrants into this industry face no substantial barriers to entry other than the need to obtain state-based licenses and registration. However competitive conditions are intensive across all segments of the industry and new entrants may find it difficult to quickly establish a foothold in the market due to their lack of experience and proven performance.

The existing contractors are advantaged relative to new entrants in several ways. Existing contractors have access to a pool of skilled subcontractors. Existing contractors have ongoing arrangements with material suppliers. Existing contractors typically have established relationships with financial institutions and property developers in each regional market. Existing contractors generally have a proven record of workmanship and some capacity to leverage off “word of mouth” referrals.

New entrants typically come into this industry with a background of subcontracting specialized construction trades (e.g., carpentry services), and have little problem obtaining state-based registration. New entrants can usually leverage on their past performance as a subcontractor to secure prime contracting projects in this market.

Scale economies are limited in this industry, although the larger existing contractors are in a more advantageous position than new entrants when purchasing of inputs materials. The larger builder/developers typically standardize material requirements across a wide range of designs in order to obtain substantial bulk purchasing discounts.

The ongoing crisis on the global reinsurance market has impacted on the availability and cost of professional indemnity (liability) insurance for contractors across the construction sector. New entrants are likely to be disadvantaged obtaining insurance coverage relative to existing players due to the lack of a proven track record (i.e., resulting in higher premium payments).

Barriers to Entry in this industry are Low and Steady.

### Barriers to Entry checklist

<table>
<thead>
<tr>
<th>Level</th>
<th>Trend</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competition</td>
<td>High</td>
</tr>
<tr>
<td>Concentration</td>
<td>Low</td>
</tr>
<tr>
<td>Life Cycle Stage</td>
<td>Mature</td>
</tr>
<tr>
<td>Capital Intensity</td>
<td>Medium</td>
</tr>
<tr>
<td>Technology Change</td>
<td>Medium</td>
</tr>
<tr>
<td>Regulation &amp; Policy</td>
<td>Medium</td>
</tr>
<tr>
<td>Industry Assistance</td>
<td>Medium</td>
</tr>
</tbody>
</table>

Source: WWW.IBISWORLD.COM

The next three or four years.

Several leading players (notably Lend Lease Corporation), establish strategic long-term arrangements with public sector clients to construct and maintain low cost rental accommodation (e.g. military housing or student apartments). There is a growing trend for the leading property development/construction firms to market residential communities of multi-family dwellings offering customers accommodation based on their life cycle (i.e. active older persons). Contractor/developers compete for market share using marketing techniques ranging from: mass-market advertising; financial packages arranged with financial institutions (or in-house); and inducements like mortgage access, free appliances and gym memberships.
Competitive Landscape

Barriers to Entry continued

markets (e.g., developing “Older Active” communities). The close relationships between the developers, financial institutions and major builders, tend to block new entrants from securing contracts in this market segment.

Industry Globalization

<table>
<thead>
<tr>
<th>Level &amp; Trend</th>
<th>Globalization in this industry is Low and the trend is Increasing</th>
</tr>
</thead>
</table>

The industry has a low level of globalization with less than 5.0% of annual industry revenue derived by foreign-owned firms (more than 50.0% stake). Several of the larger industry participants regularly undertake housing construction projects in neighboring markets (mainly Mexico), but this activity has fallen sharply in the past three years associated with the sale by KB Homes of its French home-building operations, and other US contractors refocusing attention away from export markets.

Two of the nation’s three largest multi-family housing contractors, Bovis Lend Lease and Turner Corporation, are wholly owned by foreign companies. However, these two firms collectively account for less than 5.0% of total industry revenue. Lend Lease claims to currently hold 25.0% share of the total housing construction outsourced by the military under the US Army’s Military Housing Privatization Initiative (MHPI). Lend Lease also has arrangements with the US Army, Air Force, Marines, Navy, and Coast Guard, to construct and maintain 27,000 homes on seven military bases. Turner focuses on the construction of large multi-unit developments.
As producers of some of America’s most recognizable residential buildings, Lend Lease is one of Australia’s largest publicly listed companies, with global activities in finance, insurance, building, construction, property development and asset management. Operations are in the Asia-Pacific region, Europe, the Middle East, Africa and the Americas. Company projects include luxury condominiums, mid-rise and high-rise structures, mixed-use facilities, multitower developments and residential conversions.

One of Lend Lease’s largest operations in the United States is its construction management company. Lend Lease retains leading market positions in healthcare, hospitality, commercial and multifamily construction. In 2011, the firm was ranked the number one residential multiunit construction contractor by Engineering News-Record and Building Design+Construction magazines. The company is also a leader in military housing construction and holds the largest portfolio of privatized housing with the US military.

**Financial performance**

Lend Lease’s success in the multifamily complex market is based on market positions in key states (New York, Florida, Georgia, North Carolina, California, Nevada, Texas, Illinois and Ohio and Washington, DC); a strong reputation gained from construction market diversification across the residential, healthcare, commercial, education and retail construction sectors; and the successful construction of several high-profile landmark buildings. The company is estimated to have generated about $9.0 billion in

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**Lend Lease Corporation (US multifamily construction) – financial performance**

<table>
<thead>
<tr>
<th>Year</th>
<th>Revenue ($ million)</th>
<th>(% change)</th>
<th>Operating Income ($ million)</th>
<th>(% change)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>2,685.1</td>
<td>-8.5</td>
<td>445.9</td>
<td>N/C</td>
</tr>
<tr>
<td>2008</td>
<td>2,342.4</td>
<td>-12.8</td>
<td>435.9</td>
<td>-2.2</td>
</tr>
<tr>
<td>2009</td>
<td>1,341.4</td>
<td>-42.7</td>
<td>307.5</td>
<td>-29.5</td>
</tr>
<tr>
<td>2010</td>
<td>1,222.0</td>
<td>-8.9</td>
<td>323.6</td>
<td>5.2</td>
</tr>
<tr>
<td>2011</td>
<td>1,246.4</td>
<td>2.0</td>
<td>331.2</td>
<td>2.3</td>
</tr>
<tr>
<td>2012*</td>
<td>1,308.5</td>
<td>4.9</td>
<td>355.8</td>
<td>7.4</td>
</tr>
</tbody>
</table>

*Estimate

Source: Annual Report and IBISWorld
The Apartment and Condominium Construction industry is characterized by its many small and medium-size players, which operate within relatively narrow regional boundaries. Few players in this industry operate across the entire US market, but several of the larger players operate in several states. Typically, such companies also participate in the single-family housing and commercial building markets. Other firms outside this industry with substantial interests in the multifamily housing market include real estate developers, real estate investment trusts, general contractors and leading single-family housing construction firms.

**Clark Enterprises Inc.**
*Estimated market share: 2.5%*

Founded in 1972 and based in Bethesda, MD, Clark Enterprises has interests in real estate, private equity, venture capital and construction. Clark Enterprises is the holding company for Clark Construction Group, one of the leading commercial construction firms in the United States, with eight regional offices across the country. Clark Construction’s portfolio includes a range of projects: sports arenas, hotels, office buildings, industrial buildings and multifamily residential housing. Subsidiary Clark Residential operates in the high-rise, residential apartment, condominium and hotel construction markets.

In 2011, the Clark Group was ranked number two on *Engineering News-Record* magazine’s list of top multiunit residential contractors; the company was also ranked number two on *Multifamily Executive* magazine’s list of top 50 multifamily builders. The firm is estimated to have generated about $5.0 billion in total revenue, including about $680.0 million in industry-related activities during 2012.

**The Turner Corporation**
*Estimated market share: Less than 1.0%*

The Turner Corporation, a subsidiary of German construction group Hochtief, is a leading general building and construction management firm. Operating primarily through subsidiary Turner Construction, Turner participates in a number of US markets, including institutional, health, education, commercial, office, industrial and multifamily construction.

Turner predominantly operates in the high-end multifamily residential market. Sales to this market vary as major projects start up and wind down. More recently, with the decline of US residential construction markets, Turner has undertaken military contracts, including a $109.0-million contract for the US Marine Corps base at Camp Pendleton, CA. Turner’s diversity of operations across multiple construction markets has ensured steady revenue growth. In 2012, the company is estimated to have generated about $10.0 billion in revenue, including about $130.7 million from industry-related activities.

**Webcor Builders Inc.**
*Estimated market share: Less than 1.0%*

California-based Webcor Builders was founded in 1971. Webcor builds commercial office buildings, high-density residential projects, luxury hotels and resorts, healthcare facilities and biotech
facilities. The company also provides interior construction and renovation services, seismic upgrades and concrete. The company’s projects are highly concentrated in the West, mainly California.

Initially operated as a private company, control of Webcor was sold to the Japanese construction company Obayashi for $100.0 million in 2007. Webcor management and staff continue managing operations. In 2012, the firm is estimated to have generated about $2.0 billion in revenue, including $100.0 million in industry-related activities.

JE Dunn Construction Group
Estimated market share: Less than 1.0%
JE Dunn Construction was founded in 1924 in Kansas City, MO. The company has grown both organically and through acquisitions and now spreads across the country. The group operates 20 offices grouped as six regional businesses: Midwest, North Central, Northwest, Rocky Mountain, South Central and Southeast.

JE Dunn Construction builds for the institutional, commercial, residential, industrial, healthcare and education markets. The company’s revenue has steadily increased over recent years. Building on its reputation, the company has established itself as a top multifamily builder, ranking number 12 in Engineering News-Record’s 2011 list of top 50 general building contractors. In 2012, the firm is estimated to generate about $69.2 million in revenue from industry-related activities.
Operating Conditions

Capital Intensity

The industry has a particularly low capital intensity of production and is highly labor intensive, with total labor costs (employee compensation and subcontractor payments) absorbing about two-thirds of annual revenue. The industry supplies project management and construction skills, neither of which have a high capital component although project management and design are increasingly utilizing computer aided facilities.

A key measure of an industry’s capital intensity is the ratio of depreciation charges to labor costs, as this shows the amount of industry revenue absorbed by labor inputs and capital inputs. However, due to the industry’s reliance on subcontractors for construction projects, direct labor costs or wages are only expected to account for about 7.6% of industry revenue in 2013. As a result,

Tools of the Trade: Growth Strategies for Success

New Age Economy
Recreation, Personal Services, Health and Education. Firms benefit from personal wealth so stable macroeconomic conditions are imperative. Brand awareness and niche labor skills are key to product differentiation.

Investment Economy
Information, Communications, Mining, Finance and Real Estate. To increase revenue firms need superior debt management, a stable macroeconomic environment and a sound investment plan.

Old Economy
Agriculture and Manufacturing. Traded goods can be produced using cheap labor abroad. To expand firms must merge or acquire others to exploit economies of scale, or specialize in niche, high-value products.

Traditional Service Economy
Wholesale and Retail. Reliant on labor rather than capital to sell goods. Functions cannot be outsourced therefore firms must use new technology or improve staff training to increase revenue growth.
The total housing construction market has seen ongoing advancements in equipment and materials for used in construction resulting in incremental improvements in housing quality and productivity. The general trend has been toward easier-to-handle materials (and in many cases prefabricated), which improve the flexibility of construction both in terms of design, cost-effectiveness and speed of construction. The most important advancements have centered on the use of concrete as the principal construction material (both poured on site and precast concrete products), which has been made possible through improved capital equipment such as pumping apparatus, and lifting equipment for tilt wall and panel placement. The external cladding of high-rise apartments using glass panels and curtain wall construction techniques has also greatly affected this industry.

Advancements in capital equipment have enabled contractors to both improve the quality of the work done and substantially reduce the physical labor input (i.e. elongated the working life of skilled tradespeople).

Medium-density housing developments have increasingly been promoted by all tiers of government as a low cost alternative to the standard housing block. The medium density residence is on a smaller block and is designed to minimize servicing costs by locating water, electricity and gas mains, sewerage outlets, access roads and footpaths closer together.

Emerging technological change is evident in the use of Internet-based product marketing. Home builders can display standard home designs on internet web pages or enable prospective buyers to view interactively customized designs. Firms are using internet platforms to actually transact sales and as a method for purchasing materials.

An area of significant impact on building technology in recent years, and continuing through the outlook period, has been the focus on the construction of more energy efficient housing. State-based regulations require new buildings to be constructed using designs and materials that meet the ever-tightening standards on thermal and lighting efficiency. Insulation levels have increased markedly in the past twenty years and the use of double-glazing or low-emission film has become standard practice on windows.
Operating Conditions

Revenue Volatility

The level of Volatility is High

This industry has a high degree of revenue volatility derived from its exposure to the wide cyclical fluctuations in housing investment. The value of construction in the multi-family housing market recorded a pattern of unusually stable growth during the late 1990s through to the mid-2000s supported by buoyant growth conditions across the total US economy. Typically investment into this market displays wide fluctuations between cyclical peaks and troughs and industry contractors can well find themselves in a boom-bust scenario from year to year. The industry has recently endured a slump in the value of multi-family housing construction by 50.0% over the four years to 2010. However this trend is reversed in 2011. This volatility is derived from the pattern of housing investment typically building to a cyclical peak, which coincides with a bubble in property values and construction costs, and this ultimately results in a sharp correction in investment when interest rates rise and the economy falters.

Residential property investors into rental apartments are partly insulated from the wider cyclical fluctuations in the regular homeowner single-family housing market because the demand for rental accommodation typically strengthens when the economy tightens. Demand for multi-family housing is stabilized relative to the single-family housing market by federal government assistance to investors into low-income housing and rent subsidization. However, investors are subject to financing difficulties associated with upward movements in interest rates, and investment decisions are also directly influenced by prospects for returns on share equity.

A higher level of revenue volatility implies greater industry risk. Volatility can negatively affect long-term strategic decisions, such as the time frame for capital investment.

When a firm makes poor investment decisions it may face underutilized capacity if demand suddenly falls, or capacity constraints if it rises quickly.

Volatility vs Growth

* Axis is in logarithmic scale

SOURCE: WWW.IBISWORLD.COM
Operating Conditions

Regulation & Policy

The industry is subject to a medium degree of regulatory control. Contractors are required to register or be licensed to undertake business within each state or district jurisdiction, and must comply with a wide range of standards of construction quality and management.

The industry’s regulatory burden is broadly consistent across most other building industries, although contractors and developers on projects associated with government subsidization may be subject to more stringent construction requirements. For example, the Federal Department of Housing and Urban Development (HUD) which oversees national multi-family housing programs, has Code Requirements for Housing Accessibility (CRHA-2001), which ensures that new apartments and condominiums are accessible to people with disabilities.

Much of the work done by this industry is within a highly regulated environment involving: mandatory building codes; pollution abatement (noise and effluent); competing land usage; disruption to existing businesses or residents; and safety issues.

Health and Safety regulations require that protective clothing and helmets be worn on site and that safe conditions are provided for the workers (e.g., safety harnesses, scaffolding, adequate ventilation etc.). The Federal Office of Safety & Health Administration (OSHA) enforces standards for the construction industry which are encompassed in Title 29 of the Code of Federal Regulations (CFR) Part 1926. State authorities assess and enforce this code.

Currently a wide range of building standards (codes) govern industry activity, including general building codes, residential codes, mechanical codes, plumbing codes, electric codes, fire codes, accessibility codes, zoning codes, state codes, local codes and ordinances. Building codes relating to housing construction activities are endorsed by the International Code Council (ICC). General building code topics include: building planning, fire protection, occupant needs, building envelope, structural system, structural materials, nonstructural materials, and building services. Building codes are based on standards developed by the various organizations to determine the quality of the material and the workmanship involved in construction. There are multiple levels of checking for a building's compliance with codes, before and during the construction.

Industry Assistance

This industry provides services that are not afforded any form of protection against import competition, however the industry does benefit significantly from government policies aimed ensuring an adequate supply of rental accommodation for low-income families.

The Federal Department of Housing and Urban Development (HUD) has a wide range of programs supporting multi-family housing, including the provision of mortgage insurance to approved lenders to assist the construction, renovation and purchase of multi-family housing projects (including aged care facilities). HUD promotes housing affordability and homeownership opportunities through the FHA Downpayment Simplification Act of 2002, which includes provisions to index FHA multi-family loan limits to inflation. HUD also directly administers multi-family housing programs, including Supportive Housing for the Elderly (Section 202) and Supportive Housing for Persons with Disabilities (Section 811); and Healthcare facility loan insurance.
HUD is responsible for the regulation of Fannie Mae and Freddie Mac (the names are abbreviations of acronyms), which are government sponsored enterprises (GSE) and the principal suppliers/guarantors of secondary mortgages in the United States. The secondary mortgage market boosts the supply of funds available for mortgage lending and therefore supports new home purchases. Neither Fannie Mae nor Freddy Mac are government owned or guaranteed, although their activities are implicitly underscored by the federal government.

HUD also operates the US Government-owned corporation Ginnie Mae (Government National Mortgage Association), which provides guarantees (mortgage-backed securities) backed by federally insured or guaranteed loans (e.g. loans issued by HUD, Department of Veterans Affairs, Rural Housing Service, and Office of Public and Indian Housing).

Programs to support the provision of low-cost multi-family housing have steadily increased since the early 1980s and this helps cushion the industry from the full impact of cyclical fluctuations in the total housing investment market.
# Key Statistics

## Industry Data

<table>
<thead>
<tr>
<th>Year</th>
<th>Revenue ($m)</th>
<th>Value Added ($m)</th>
<th>Establishments</th>
<th>Enterprises</th>
<th>Employment</th>
<th>Exports</th>
<th>Imports</th>
<th>Wages ($m)</th>
<th>Domestic Demand ($m)</th>
<th>Value of Residential Construction ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>32,027.1</td>
<td>5,747.6</td>
<td>4,955</td>
<td>4,923</td>
<td>47,285</td>
<td>--</td>
<td>--</td>
<td>2,512.9</td>
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<td>720.1</td>
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<tr>
<td>2005</td>
<td>37,619.9</td>
<td>7,304.0</td>
<td>4,621</td>
<td>4,589</td>
<td>46,357</td>
<td>--</td>
<td>--</td>
<td>2,563.9</td>
<td>N/A</td>
<td>765.2</td>
</tr>
<tr>
<td>2006</td>
<td>41,255.9</td>
<td>8,600.5</td>
<td>4,346</td>
<td>4,261</td>
<td>48,958</td>
<td>--</td>
<td>--</td>
<td>2,700.9</td>
<td>N/A</td>
<td>708.1</td>
</tr>
<tr>
<td>2007</td>
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## Annual Change

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<th>Revenue (%)</th>
<th>Industry Value Added (%)</th>
<th>Establishments (%)</th>
<th>Enterprises (%)</th>
<th>Employment (%)</th>
<th>Exports (%)</th>
<th>Imports (%)</th>
<th>Wages (%)</th>
<th>Domestic Demand (%)</th>
<th>Value of Residential Construction (%)</th>
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## Key Ratios

<table>
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<tr>
<th>Year</th>
<th>IVA/Revenue (%)</th>
<th>Imports/Demand (%)</th>
<th>Exports/Revenue (%)</th>
<th>Revenue per Employee ($'000)</th>
<th>Wages/Revenue (%)</th>
<th>Employees per Est.</th>
<th>Average Wage ($)</th>
<th>Share of the Economy (%)</th>
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<td>2016</td>
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Figures are inflation-adjusted 2013 dollars. Rank refers to 2013 data. SOURCE: WWW.IBISWORLD.COM
Jargon & Glossary

Industry Jargon

**DEVELOPER** An enterprise that prepares a real estate site for residential or commercial use and raises capital, gains zoning approvals and hires contractors to design, construct and develop property.

**GOVERNMENT NATIONAL MORTGAGE ASSN.** (GINNIE MAE) A US government-owned corporation that provides guarantees on mortgage-backed securities that meet certain criteria.

**GOVERNMENT-SPONSORED ENTERPRISE (GSE)** A financial services corporations created by the US Congress to enhance the flow of credit to targeted sectors of the economy.

**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.

**HOUSING STARTS** The number of new homes under construction during a specified period of time and a key economic indicator of the health of the housing market.

**REAL ESTATE INVESTMENT TRUST (REIT)** A legal entity that uses pooled investor capital to purchase and manage income property or mortgage loans. To qualify as an REIT, the entity must distribute at least 90.0% of taxable income.

IBISWorld Glossary

**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 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

**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 ±20%; high volatility is ±10% to ±20%; moderate volatility is ±3% to ±10%; and low volatility is less than ±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

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