An overly mechanical valuation may not consider the specific earnings, risks, growth rates, and values of the component businesses of assisted living facilities.

Alan B. Simons
There are over 31,000 assisted living facilities in the US. In the “continuum of care” for seniors and individuals with disabilities, assisted living facilities fall in between independent living facilities and skilled nursing facilities.

They provide more services for residents than are available in most independent living facilities, but generally less services than are available in skilled nursing facilities (also referred to as nursing homes).

**Background**

There are no universal definitions for assisted living facilities (also referred to as residential care facilities or personal care facilities). Each state has its own definition, license requirements, and regulations. Residents usually live in small apartments alone or with their spouse. Assisted living facilities provide support to residents who need assistance with activities of daily living (ADLs) such as taking medications, bathing, dressing, and transportation. The monthly fee or rent residents pay generally includes amenities such as three meals per day, housekeeping, laundry, transportation, 24-hour security, and social and recreational activities. In addition, residents can purchase additional personal care services to support their daily needs should they need assistance with eating, toileting, walking, medication management, bathing, dressing, or cognitive functions. Some facilities may have special locked memory care units for residents with Alzheimer’s or dementia. Physical therapy, physician services, and hospice services are also available either at the facility or made available to residents.

**Facility Costs.** Assisted living facilities are predominantly owned and operated by for-profit companies, many of whom are national chains. For 2015, the median annual cost to rent a one-bedroom apartment in an assisted living facility was estimated at $43,200. This cost is comparable to the median annual cost of $44,616 for homemaker services or $45,760 for a home health aide. Median assisted living costs compare favorably to median nursing home costs of $80,300 for a semi-private room and $91,250 for a private room.

Unlike skilled nursing facilities, room, board, and amenities are not covered, funded, or regulated by Medicare or Medicaid (except for the Medicaid waiver programs in some states). As a result, over 85% of assisted living residents pay for their basic care from their personal financial resources. Basic costs can also be financed through long-term care insurance, and 41 states offer “home and community-based waivers” that fund assisted living for low-income residents. Residents with Medicare, Medicaid, or other health insurance are still covered for traditional medical services (such as physicians, hospitals, skilled nursing, physical therapy, and testing).

Assisted living facilities are sometimes a component of a continuing care retirement community (CCRC). CCRCs generally include independent living facilities, assisted living facilities, and skilled nursing facilities and skilled nursing facilities on the same campus and residents move through these facilities as their need for care increases. CCRCs may also have different funding sources than standalone assisted living facilities. For example, residents of CCRCs may need to purchase their initial residence or pay a hefty entrance fee, and pay separately for amenities and higher levels of care as they move through the community. All or a portion of the purchase price may be refunded to the resident or their estate if they leave the CCRC or die. This discussion focuses on the economics and valuation of independent assisted living facilities that are not part of a CCRC.

**Growth in Demand**

As the chart in Exhibit 1 demonstrates, starting in 2011 publicly announced senior living transaction volume has grown beyond the previous high of 146 transactions in 2006 (prior to the 2008 recession). Low interest rates and
an aging population is fueling demand for these businesses.

**Organization**

Assisted living facilities can be managed and operated under various structures that include the management component, the operations component, and the real estate component. Each of these components can be a unique business with its own capital structure, risks, growth potential, and economic returns. Sometimes they are all part of the same assisted living facility business and sometimes they are operated separately; or two of the three are operated together. Some of the potential structures are illustrated in Exhibit 2.

Assisted living facility operators may set up a separate management company to manage multiple facilities similar to a property management company, as shown in Exhibit 3. Some manage facilities owned by other non-affiliated operators in addition to ones that they own. Real estate may also be owned by a separate real estate holding company.

Valuators need to evaluate whether management fees and rents paid by the assisted living facility operating entity are at fair market value or whether they are tax motivated to shift earnings, particularly when the owners of the management company, real estate company, and operating business are the same.

**Market Data.** The Senior Care Acquisition Report, published by Irving Levin Associates, Inc., is an important source of market transaction data for the senior care industry. All transactions and statistical data used in the report include both the operating and the real estate components, and earnings are calculated after a management fee, which is usually 6% of revenue for assisted and independent living facilities. As a result, the financial data for the subject assisted living facility may need to be adjusted in order to be comparable to the statistics and valuation metrics used in the Senior Care Acquisition Report.
Data from this report is used extensively in the discussion below.

**Real Estate or Business Valuation?**

Healthcare facilities in general and assisted living facilities in particular are on a continuum of investments that are more real estate-oriented at one end of the spectrum and more business-oriented at the other. The schedule in Exhibit 4 shows capitalization (cap) rates for various investments from the RealtyRates.com Investor Survey for the first quarter of 2015 sorted from lowest (least risky) to highest (most risky).

Realty.com defines its “Healthcare Senior Housing” category to include acute care (hospitals), outpatient care (medical office buildings, freestanding diagnostic facilities), congregant care, and assisted living. Their cap rates only include the real estate component of the investment (not the operating business). Healthcare Senior Housing has the second lowest cap rate indicating that it is perceived by investors as a relatively low-risk investment. Each type of healthcare real estate has its own risk-adjusted cap rate. The Janu-
ary – February 2014 online issue of CCIM’s CIRE Magazine pegged the assisted living average cap rate in the low 8% range (independent living was low 8%; skilled nursing was high 11% range; CCRC was north of 10%).

Understanding the risk-adjusted returns necessary for the real estate component can help business appraisers value and reconcile the component values (real estate, management company, operating company) that make up assisted living facilities. An example showing how an assisted living facility can be valued with and without real estate will be used below to demonstrate this point.

Facility-based businesses like hospitals, skilled nursing, and assisted living are frequently valued by either real estate or business appraisers. While each appraisal discipline follows similar standards, approaches, and methods, real estate and business appraisers may each look at the problem to be solved through a different filter. Generally, it may be best to use a real estate appraiser when valuing a piece of real estate by itself, or when real estate is included in the valuation of the operating company and the business is either marginally profitable or unprofitable. In those instances, it is generally the real estate that will make up all or most of the value. However, if the value is being driven by the operating business, which is generally indicated when risk-adjusted returns reasonably exceed those necessary to support the real estate investment, then a business appraisal may be applicable. Generally, only a licensed real estate appraiser can value real estate. As a result, business appraisers (and real estate appraisers) should carefully consider which discipline is most appropriate in each situation.

**Primary Value Drivers**

Earnings (free cash flow) generally provide the best indication of value because only earnings are available for reinvestment and distribution. However, earnings are the result of a facility’s number of assisted living units, overall square footage, and revenue. These drivers are illustrated in Exhibit 5.

If a facility’s operations are not optimized, non-earnings value drivers may
provide a valuater with insight as to what the facility might be worth if operations could be improved. Multiples and other value drivers are also frequently used under a market approach, and can provide a sanity check for methods under an income or asset approach. Assisted living facility operators, buyers, and sellers will frequently value facilities using rules of thumb applicable to one or more of these value drivers. Some buyers may ignore earnings if they have a proven business model that is more dependent on other value drivers.

**Pricing Data**

The average and median price per assisted living unit for 2014 based on publicly announced transactions were $188,700 and $173,200 respectively. This was 25% (average) and 15% (median) higher than 2013, when the average and median price per unit were $150,600 and $150,300.

The chart in Exhibit 6 shows a significant increase in prices per unit from 2010 to 2011 as the industry recovered from the recession of 2008. Prices remained relatively flat until 2014. Current unit prices may reflect increasing demand for these units but also reflect low interest rates. When interest rates increase, the price per unit may fall unless the demand continues to outstrip capacity. However, if the current low interest rate environment causes assisted living facilities to be overbuilt, higher future interest rates and excess capacity could significantly drive down prices.

While average and median price per unit benchmarks are useful, valuators, buyers, and sellers must be careful not to rely on them without further analysis and comparison to other valuation drivers, approaches and methods. The chart in Exhibit 7 shows how the price per unit can change depending on:

1. The transaction pricing quartile.
2. Property desirability (“A” versus “B” properties).
3. Single property transaction versus a portfolio of properties.
4. Availability of memory care.

The variation in price per unit (illustrated in Exhibit 7) demonstrates that valuators must understand the data and use caution when applying market medians and averages to determine value.

**Price to Revenue and per Square Foot**

Much of the published data for assisted living is combined with independent living. In the Senior Care Acquisition Report, price to revenue multiples and price per square foot data are published only for assisted living and independent living combined. One reason for this is that frequently there are assisted living and independent living units in the same facility. As a result, and as pointed out above, these multiples and data are informative but not always reliable for valuing standalone assisted living facilities.

The average and median gross income (revenue) multiples for 2014 were 3.9 times and 3.7 times gross income. This trend shows a fair increase from 2010 to 2011 and continues to increase slowly through 2014 as illustrated in Exhibit 8.

Exhibit 9 shows the price per square foot for the years 2010 to 2014. The average and median price per square foot for assisted living and independent living (combined) were $211 and $180 respectively. Prices per square foot appeared fairly flat from 2011 to 2013, but increased significantly in 2014.

**Capitalization Rates**

Earnings capitalization rates are separately broken out for assisted living transactions. The average and median assisted living cap rates for 2014 were 7.7% and 7.6% respectively. The chart in Exhibit 10 shows that cap rates have been declining since 2010, and declined significantly from 2013 when they were 8.5% (average) and 8.4% (median).
It is important that the capitalization rate used is matched to the correct level of earnings. The Senior Care Acquisition Report uses net operating income (NOI) which it says is “interchangeable” with earnings before interest, taxes, depreciation, and amortization (EBITDA) and cash flow. It assumes that the transaction includes both the real estate and business operations, and is after a 6% management fee. Therefore, cap rates, as defined here, would not be applicable to other earnings levels, or businesses that did not include the real estate or a management fee.

The cap rate is a debt-free weighted average cost of capital (WACC) that takes into consideration the combined cost to finance the real estate component and the cost to finance the operations component. If the real estate and business were separated, each one would have its own unique WACC based on its unique risk-adjusted rate of return.

Valuation Example

Pretax capitalization rates are frequently used in valuing income-producing real estate, and often published as benchmarks for facility-based healthcare companies. They are also used by lenders and other buyers. The Senior Care Acquisition Report uses pretax capitalization rates as its only aggregated benchmark for valuing earnings (NOI). Business appraisers generally use after-tax market derived capitalization rates or market derived discount rates based on a weighted average cost of capital representing the relative mix of debt and equity financing that could be used to capitalize business earnings.

The following example will explain:
1. How assisted living facilities, including the real estate, can be valued by business appraisers using market-derived capitalization rates.
2. How the pretax capitalization rates can be reconciled to after-tax discount and capitalization rates.
3. How assisted living facilities can be valued without the real estate (operating business only) using an after-tax weighted average cost of capital.
4. How the values with and without real estate can be reconciled.

Real Estate Included. The assisted living facility in this example has $5,760 million in revenue, 80 units, and a total of 95,000 square feet. The schedule in Exhibit 11 shows the adjustments necessary to go from reported pretax income (A) to pre-tax net operating income (NOI) (J or L in the NOI column), compared to the adjustments to determine after-tax cash flow to invested capital (L). The 9% pretax cap rate (M) was developed from published survey data and reflects the risk-adjusted rate of return for the specific facility. The 5.61% after-tax cap rate (M) was calculated to support the same indicated value of $19.0 million (N).

Adjustments B through E are those necessary to calculate debt-free adjusted pretax income (F). Since a 9% percent capitalization rate derived from The Senior Care Acquisition Report is being used, actual management fees were added back (C) and a standard 6% management fee was deducted (D) to make it comparable to the to the published metrics in the report. The increase in working capital (H) was

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**EXHIBIT 13**
Cost of Debt and Equity

<table>
<thead>
<tr>
<th>Cost of Debt</th>
<th>Pretax</th>
<th>40% Tax</th>
<th>Weight</th>
<th>WACC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5.05%</td>
<td>3.03%</td>
<td>66.37%</td>
<td>2.01%</td>
</tr>
<tr>
<td>Cost of Equity</td>
<td>19.00%</td>
<td>19.00%</td>
<td>33.63%</td>
<td>6.39%</td>
</tr>
<tr>
<td></td>
<td>100.0%</td>
<td></td>
<td>8.40%</td>
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**EXHIBIT 14**
After-Tax Cap Rate

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>WACC discount rate</td>
<td>8.40%</td>
</tr>
<tr>
<td>LT cash flow growth rate</td>
<td>-2.79%</td>
</tr>
<tr>
<td>WACC capitalization rate</td>
<td>5.61%</td>
</tr>
</tbody>
</table>

**EXHIBIT 15**
Calculation of Other Value Metrics

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Gross income</td>
<td>$5,760,000</td>
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<tr>
<td>Gross income multiple</td>
<td>x 3.30</td>
</tr>
<tr>
<td>Indicated value</td>
<td>$19,000,000</td>
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<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Price per unit</td>
<td>$237,500</td>
</tr>
<tr>
<td>Number of units</td>
<td>x 80</td>
</tr>
<tr>
<td>Indicated value</td>
<td>$19,000,000</td>
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<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Price per square foot</td>
<td>$200.00</td>
</tr>
<tr>
<td>Square footage</td>
<td>x 95,000</td>
</tr>
<tr>
<td>Indicated value</td>
<td>$19,000,000</td>
</tr>
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</table>

**EXHIBIT 16**
Required Return for Investors

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimated value of real estate</td>
<td>$17,560,000</td>
</tr>
<tr>
<td>RE capitalization rate</td>
<td>7.00%</td>
</tr>
<tr>
<td>Estimated rent</td>
<td>$1,229,200</td>
</tr>
</tbody>
</table>

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Estimated based on discussions with management. Since rents are collected on the first day of the month, there is little need for additional working capital. Capital expenditures ($I$) were estimated based on the age and condition of the facility and historical levels of expenditures. A 40% blended federal and state tax rate ($K$) was applied to adjusted net income to estimate the after-tax cost of capital.

A real estate appraisal indicates that the fair market value of the building is $17.56 million. Research shows that 70% is the optimal loan to value ratio for the real estate. If we assume that 70% of the property value ($12.29 million) plus 80% of furniture and equipment value ($400,000 x 0.8 = $320,000) or $12.61 million total is financed with debt, the value of equity would be $5.39 million based on the indicated value of $19.0 million.

The schedule in Exhibit 12 shows the market value of invested capital (MVIC), the breakdown of debt and capital expenditures, and the pretax cap rate. Using this data, the after-tax cash flow growth rate can be estimated and compared to the cost of capital.

The WACC discount rate is used to value a single earnings stream with a long-term stable cash flow growth rate of 2.79%. As a result, it cannot be used to value a future stream of cash flows, which is why the WACC discount rate is used to present value the future stream of cash flows. The actual cost of debt, cost of equity, and long-term stable cash flow growth rate used in Exhibit 13 were iterated within reasonable ranges determined to support and reconcile to the $19.0 million value calculated using the pretax N0I cap rate. This resulted in an 8.4% after-tax WACC.

Sanity Check. The valuator can use the market and asset approach to evaluate the value indicated by the capitalization of earnings methodology. In this case, as a sanity check, other valuation metrics were calculated using the indicated value excluding the real estate. The indicated value of $19.0 million, which was calculated using the market approach, was determined to be an appropriate value for the building.

National Statistics. Gross income multiple for assisted and independent living facilities (MVIC) is calculated by dividing the gross income by the appraised value. In the 2015 Senior Care Acquisition Report, the average price per unit was $188,700. Except for price per unit, all indicated values are calculated using the gross income multiple.
$173,200. Published price per square foot dollar amounts for assisted and independent living (combined) for 2014 showed an average of $211 and a median of $180. These are national statistics unadjusted for size, location, property class (A or B), and other factors that may affect the price. The valuator will need to consider all of the evidence available and revise assumptions or weight the indicated values, as necessary, to reach a well reasoned conclusion of value.

**Real Estate Not Included.** The same assisted living facility will now be valued using the same assumptions as before, except that the real estate is not included in the value. As a result, only the operating business is being valued. The real estate had an estimated value of $17.56 million. It was estimated that investors in the real estate would require a 7.0% return or $1.229 million per year in rent assuming a triple net lease, as presented in Exhibit 16.

All of the adjustments to calculate pretax NOI and after-tax cash flow to invested capital are the same except as follows. As illustrated in Exhibit 17, depreciation was separated into the amount applicable to the real estate (E) and the furniture and equipment (F&E) (H). Rent of $1,229,200 was deducted (F). Capital expenditures (J) were reduced to reflect only the furniture and equipment. The indicated value of $1.44 million (O) is the value of the business with the real estate of $19.0 million less the value of the real estate of $17.56 million. The pretax capitalization rate under the NOI column and after-tax capitalization rate under the Cash Flow to IC column (N) were calculated by dividing the NOI/Cash to IC row (M) by the Indicated value row (O).

Debt financing of $320,000 based on the $400,000 value of furniture and fixtures would result in $1.12 million of equity financing as shown in Exhibit 18.

This capital structure was used for the debt and equity weightings to calculate the WACC (shown in Exhibit 19). Similar to the last scenario, reasonable ranges for the cost of debt, the cost of equity, and the long-term sustainable cash flow growth rate were estimated and iterated to reconcile to the indicated value. After evaluating the prime interest rate and other costs to borrow, the same cost of debt used in the “real estate included” scenario was considered reasonable. The cost of equity, however, was increased over the “real estate included” scenario because this is a different business without the real estate. Equity in a service business not secured by real estate was considered more risky.

The long-term sustainable cash flow growth rate used in the “real estate included” scenario was also considered reasonable and deducted from the WACC discount rate. As seen in Exhibit 20, the after-tax WACC capitalization rate of 16.01% reconciles to the capitalization rate calculated under the “real estate not included” scenario.

**Conclusion**

The purpose of doing this type of analysis is to prevent an overly mechanical valuation that may not consider the specific earnings, risks, growth rates, and values of the component businesses, and to help the valuator think through variables and assumptions necessary to value these components separately. It can also help the valuator understand and use data from other valuation disciplines correctly (such as real estate or machinery and equipment) to ensure that values attributable to one component do not get counted towards another.

Reverse-engineering the results from a pretax to an after-tax cap rate can help valuators develop confidence in using market and other third-party data either as primary or supplemental support for their conclusion of value or force consideration of why the data may be inconsistent with a conclusion.

Developing an analysis around a single-period earnings stream works best when an assisted living facility has a stable earnings stream. A similar analysis, however, could be developed, using future after-tax cash flows when management does not expect stable cash flow growth.

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2 Ibid.
3 Ibid.
5 Ibid.
6 Myers and Pardoll, “Healthy Senior Housing: Investor Demand Revitalizes this Niche Sector,” CIRE Magazine (January/February 2014).