CHAPTER EIGHT
VALUATION BY THE INCOME APPROACH

Golf courses are typically considered to be income producing properties. Investors are attracted to particular, investment properties by the prospect of future financial benefits of owning that property. In order to determine the market value of an investment property, the appraiser must look to the income and expenses to determine how much it is worth to an investor. This is particularly true for daily fee operations.

The income approach to value is based on the economic principle that the value of an income-producing property is the present worth of anticipated future benefits. The annual cash flow, or net income projection, is converted into a present value indication using discounting and capitalization. Methods of capitalization are based on inherent assumptions concerning risk and the quality, durability, and pattern of the projected income stream.

Direct capitalization is performed by applying an overall capitalization rate to a single year’s net operating income. This technique is appropriate for valuing an existing property when its current revenue and income equals or approximates the stabilized income level at market rates. Due to the difficult times the golf business is facing, this technique has much less applicability than it did in the past.

Most of the time, the pattern of past income has been irregular as it is during a recession period. A newer facility that has not reached stabilization or has become unstabilized due to internal or external causes may also have an irregular income pattern. In these cases a discounted cash flow (DCF) analysis, or yield capitalization, is most appropriate. When this method is applied, the present worth of future cash flow expectations is calculated by individually discounting each anticipated, periodic future NOI\(^1\) at an appropriate discount rate. The market value derived is the accumulation of the present worth of each year’s projected net income plus the present worth of the reversion, or terminal value. The estimated reversion value, which is the estimated forecasted property value at the end of the projected ramp-up period, is usually based on direct capitalization of the projected net income in the reversion year.

In appraisals or feasibility studies, golf course income and expense categories should not be solely estimated based on industry averages or medians, but on data from a variety of sources, especially comparable golf courses. Published performance data is minimal, but what is mostly available is described in Chapter Three. Other performance data is provided in the case studies.

The challenge to the appraiser lies in applying income approach principles to this unique type of enterprise. The most difficult task typically is acquiring the data required to make sound income and expense projections and determine appropriate discount and capitalization rates. To obtain current, specific information that corresponds to the unique characteristic of the subject facility, the appraiser must select and verify primary data. Club managers, for both private and publicly

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\(^1\) NOI (Net Operating Income) is typically defined as cash receipts or cash flow less capital charges such as depreciation. In some markets, the standard is to use cash receipts or cash flow (also referred to as EBITDA, or Earnings Before Interest, Taxes, Depreciation and Amortization).
owned courses, may be willing to share their data in exchange for other non-proprietary market
data. Although gathering primary data may seem difficult at first, with experience an appraiser
who intends to develop golf course appraisal skills can develop contacts, a database, and the
interview skills needed to yield the necessary results.

There are several sources for data, including NGF, PGA and PWC. Data from all three sources is
presented in Chapter Three. PWC is an accounting firm that publishes operating statistics for
country clubs. Unfortunately, no one publication or source provides sufficiently comprehensive
data to meet all the requirements of the income approach. Appraisers must consult several
sources to accumulate data. The data available may be general in nature, lack timeliness, and be
unsuitable as the sole basis for valuation, but it can be valuable in specific instances and as a
general indicator.

The income approach is the most commonly used, and typically the most accurate measure of
value for golf facilities. It reduces the differences between courses to the least common
denominator, net income or cash flow, which is quantified in the market and converted into value
through the application of a market and/or investor survey-derived capitalization rate. A golf
facility is typically acquired for its income-producing capacity, and the income approach directly
measures this important attribute.

Some appraisers maintain that the income approach is not wholly appropriate for facilities that
are not profit- or income-oriented. Such facilities include proprietary and non-profit private
clubs that provide golf as an amenity to the surrounding real estate development or are publicly
owned facilities. The nonprofit orientation of a golf course is, however, only the structure
elected by the current owner. The facility’s future income potential may still be measured with
a profit-oriented analysis to produce an accurate and appropriate value indication, and is
appropriate in appraisals for tax appeal or loans.

**STRUCTURE OF THE APPROACH**

The income approach consists of five basic steps:

1. Select an appropriate projection period.
2. Forecast annual gross and net revenues.
3. Forecast annual operating expenses.
4. Select appropriate discount and/or capitalization rates.
5. Apply proper discounting and capitalization procedures.

**Projection Period**

Projection periods may range up to 10 years (a requirement of certain lenders) although a period
of four to five years should be adequate. The period should extend until the property’s net
income stream is expected to stabilize, which occurs when demand, or rounds played, prices, and
expenses become relatively constant, or reflective of a stabilized level of performance. In
projecting future revenues and expenses, past results should be carefully considered as well as
the status of the business cycle.
One-year projection periods are appropriate for existing facilities which have achieved stabilized income. Direct capitalization is applied to the stabilized net income to arrive at an estimate of value, as follows: net income divided by capitalization rate = indicated market value. Figure 8.1 illustrates a well operated (upper decile) daily fee course with typical amenities in a middle income, sunbelt location.

Projection periods for proposed facilities (and existing facilities with unstable income patterns) typically range from three to ten years from the completion of construction. This period may reflect the typical holding period for golf facilities, an investor’s requirements or a business cycle. A project with an absorption period of more than five years is likely to be infeasible unless it represents a phased development, in which a longer absorption and projection period is warranted. The projection period should extend no more than one year beyond stabilization.

If, for example, a project has underperformed due to a dispute or mismanagement, and has substantial upside potential within three years, stabilization is projected for Year 4. The premise is that Year 4 will serve as the basis for determining the reversion value of the facility in the direct capitalization of its income. The reversion value is presumed to be realized at the end of Year 3 represented by the proceeds of a hypothetical sale of the facility. The current value of the project is measured by the present value of the cash flow benefits (and deficits) realized over the three-year ramp-up period and the proceeds of reversion (less costs of sale). The case study example of an underperforming course that has been acquired by experienced golf course investors is shown in Figure 8.2.

Projection periods of more than 10 years are rarely used in the valuation of golf facilities. However, they may be necessary if a facility is subject to a ground lease that is due to expire or influenced by other factors that will change the expected income within the foreseeable future. The ultimate use of the appraisal, particularly when the payment of debt service is critical, may make it necessary to employ a longer projection period.

Projecting absorption periods for golf facilities is a difficult and imprecise process. Although the absorption period extends until stabilized income is achieved, this point in time almost always coincides with stabilized demand. Thus market analysis, which was discussed in Chapter 4, forms the principal basis for determining the absorption and projection period. (When the time of stabilization is affected by factors other than demand, such as changes in price or operating expenses, the duration and effect of these factors are usually well known.) In estimating the absorption period for a facility, the appraiser should consider:

- The absorption periods of comparable projects
- The results of the market analysis
- The subject’s competitive position
- Specific primary data on absorption such as market or investor surveys
- Extent of the marketing campaign
- The golf-related experience of the developer and facility management

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AGI VALUATIONS
Market experience shows that absorption is not constant. Demand tends to increase fastest in the project’s early years and tapers off as the facility nears stabilization.
### FIGURE 8.2
OPERATING GOLF COURSE DCF SUMMARY

<table>
<thead>
<tr>
<th></th>
<th>YEAR 1</th>
<th>YEAR 2</th>
<th>YEAR 3</th>
<th>YEAR 4</th>
<th>YEAR 5</th>
</tr>
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<tr>
<td>Total Projected Rounds</td>
<td>28,000</td>
<td>34,000</td>
<td>37,500</td>
<td>39,000</td>
<td>40,000</td>
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<tr>
<td><strong>REVENUE</strong></td>
<td></td>
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<tr>
<td>Greens Fees</td>
<td>$868,000</td>
<td>$1,122,000</td>
<td>$1,312,500</td>
<td>$1,482,000</td>
<td>$1,640,000</td>
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<td>Golf Car Rental</td>
<td>140,000</td>
<td>225,000</td>
<td>264,000</td>
<td>312,000</td>
<td>360,000</td>
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<tr>
<td>Driving Range</td>
<td>56,000</td>
<td>75,000</td>
<td>87,500</td>
<td>94,000</td>
<td>100,000</td>
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<tr>
<td>Food &amp; Beverage</td>
<td>390,000</td>
<td>398,000</td>
<td>406,000</td>
<td>414,000</td>
<td>422,000</td>
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<tr>
<td>Golf Shop</td>
<td>126,000</td>
<td>156,000</td>
<td>182,000</td>
<td>220,000</td>
<td>280,000</td>
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<td>Other</td>
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<td>10,000</td>
<td>10,000</td>
<td>10,000</td>
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<tr>
<td>Sub-Total</td>
<td>$1,590,000</td>
<td>$1,986,000</td>
<td>$2,262,000</td>
<td>$2,532,000</td>
<td>$2,812,000</td>
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<td><strong>COST OF SALES</strong></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food &amp; Beverage</td>
<td>(362,500)</td>
<td>(370,000)</td>
<td>(377,500)</td>
<td>(385,000)</td>
<td>(390,000)</td>
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<tr>
<td>Golf Shop</td>
<td>(81,000)</td>
<td>(100,000)</td>
<td>(117,000)</td>
<td>(141,000)</td>
<td>(179,000)</td>
</tr>
<tr>
<td>Net Revenue</td>
<td>$1,146,500</td>
<td>$1,516,000</td>
<td>$1,767,500</td>
<td>$2,006,000</td>
<td>$2,243,000</td>
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<td><strong>EXPENSES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maintenance</td>
<td>391,400</td>
<td>499,200</td>
<td>565,000</td>
<td>596,400</td>
<td>611,200</td>
</tr>
<tr>
<td>Golf Operations</td>
<td>146,000</td>
<td>185,000</td>
<td>209,000</td>
<td>217,400</td>
<td>226,000</td>
</tr>
<tr>
<td>Golf Car Maint.</td>
<td>28,000</td>
<td>35,400</td>
<td>40,000</td>
<td>41,600</td>
<td>43,200</td>
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<tr>
<td>General &amp; Admin.</td>
<td>182,000</td>
<td>230,000</td>
<td>260,000</td>
<td>270,400</td>
<td>280,900</td>
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<tr>
<td>Driving Range</td>
<td>14,000</td>
<td>14,500</td>
<td>15,000</td>
<td>15,600</td>
<td>16,200</td>
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<tr>
<td>Total Fixed</td>
<td>761,400</td>
<td>964,100</td>
<td>1,089,000</td>
<td>1,141,400</td>
<td>1,177,500</td>
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<tr>
<td>Other Expenses</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management</td>
<td>88,000</td>
<td>116,400</td>
<td>135,700</td>
<td>154,000</td>
<td>172,200</td>
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<tr>
<td>Reserves</td>
<td>58,600</td>
<td>77,500</td>
<td>90,400</td>
<td>102,600</td>
<td>114,700</td>
</tr>
<tr>
<td>Sub-Total</td>
<td>146,600</td>
<td>193,900</td>
<td>226,100</td>
<td>256,600</td>
<td>286,900</td>
</tr>
<tr>
<td>Total Expenses</td>
<td>$908,000</td>
<td>$1,158,000</td>
<td>$1,315,100</td>
<td>$1,389,900</td>
<td>$1,464,400</td>
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<td>Net Operating Income</td>
<td>$238,500</td>
<td>$358,000</td>
<td>$452,400</td>
<td>$608,000</td>
<td>$778,600</td>
</tr>
<tr>
<td>Reversion CAP Rate</td>
<td>12%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stabilized Value</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$6,488,333</td>
</tr>
<tr>
<td>Less Sales Cost (3%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$194,650</td>
</tr>
<tr>
<td>Reversion Value</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$6,293,683</td>
</tr>
<tr>
<td>Net Cash Flow</td>
<td>$238,500</td>
<td>$358,000</td>
<td>$452,400</td>
<td>$608,000</td>
<td></td>
</tr>
<tr>
<td>Discount Factor (16.5%)</td>
<td>0.85837</td>
<td>0.73680</td>
<td>0.63244</td>
<td>0.54287</td>
<td></td>
</tr>
<tr>
<td>Present Value</td>
<td>$204,721</td>
<td>$263,774</td>
<td>$286,118</td>
<td>$330,065</td>
<td></td>
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<tr>
<td>Present Cash Flow</td>
<td>$1,084,678</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Present Value Reversion</td>
<td>$3,416,650</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Net Present Value</td>
<td>$4,501,330</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rounded</td>
<td>$4,500,000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: In this model, the reversion or terminal cap rate is higher than the rate in Figure 8.1 due to the greater uncertainty or risk factor involved in this particular market environment. The discount rate or factor provides an allowance for inflation and market or projection risk.
THE FINANCIAL STATEMENT

There is little consistency in revenue and expense categories set forth in most golf course facility income and expense statements due to a lack of accepted standardization, such as that for the lodging business. Since the income approach requires an analysis of financial statements, the analyst must have sufficient accounting or related experience to determine which income and expense categories are to be included and excluded. For example, excessive travel expenses or a non-recurring capital expenditure would either be adjusted or not be a proper expense item.

NGF used to publish operating and financial profiles in a standardized format, with typical revenue and expense categories as follows:

Revenue
- Green Fees/Guest Fees
- Annual Dues from Members
- Golf Car Rentals
- Golf Range Charges
- Total Merchandise Sales
- All Food & Beverage Sales
- Other Revenue
- Total Revenue

Expenses
- General/Administrative
- Irrigation Water
- Fertilizers/Chemicals
- Lease Expense/Golf Cars
- Lease Expense/Equipment
- Cost of Merchandise Sold
- Cost of Food and Beverages
- Advertising/Marketing/Promo
- Facility Insurance
- Property Taxes
- Utilities
- Other Non-Payroll Expenses
- Full Time Payroll
- Part Time Payroll
- Total Expenses
- Net Operating Expenses

These categories are very helpful in assignments involving proposed golf courses and can be useful when multiple accounting categories of an existing club can be grouped in a similar manner.
GROSS REVENUE

Gross revenue can be derived from a number of sources depending on the services and products offered by the specific facility. These sources may be grouped into two general categories for discussion purposes: course utilization income and ancillary income.

Course Utilization Revenue

Course utilization income represents revenues received from the use of the golf course itself. This income may be generated through daily fees or course memberships. These two fee structures may operate separately or simultaneously.

The term *daily fee* typically refers to the payment of a prescribed fee for use of the course at a single time. Within this general structure there are usually several fee categories, which may include general use, weekend and weekday play, twilight hours play, seniors, juniors, shoulder seasons, local residents, or others. These fees may be set at differing rates and are commonly called *greens fees*.

A course membership purchased by a golfer entitles the member to certain use privileges of the golf course. These privileges typically include unlimited use with no greens fee or a reduced greens fee for all rounds played over a prescribed time period. This time period varies and may cover a year, a summer, the member’s lifetime, the period of residence in the neighborhood or at the on-site hotel, or until the grantor of the membership (the course owner) sells the course.

In exchange for membership, the member will typically pay both a membership fee and dues. The membership fee is a one-time entry charge; member dues are periodic payments, usually monthly or quarterly. Occasionally other payments are required. One common type of fee is a minimum period food and beverage charge. If the member spends less than a set amount on food and beverages at the facility during a prescribed period, he or she is billed for the difference.

There are typically two types of memberships: proprietary and nonproprietary. A proprietary membership grants the member a partial ownership interest in the facility. Although this is usually permanent, it may be some other interest such as a lifetime estate. A proprietary membership may be revocable. With exceptions, the membership fees generated through the sale of proprietary memberships should not be considered a source of revenue in the income approach to value because it does not constitute income to the owner, but rather a sale of a portion of the ownership interest in the property. Note, however, that in the determination of highest and best use, the analyst may find that maximum productivity would be realized by selling individual or other interests in the facility under a proprietary membership structure, and revenue from the sales program may assist in establishing financial feasibility (e.g., the lender could require that the fees be solely use for debt reduction).

A nonproprietary membership grants the member certain use privileges of the facility, but no ownership interest. The fee owner may be giving up some degree of control, but the title is held by the entity (typically an LLC in today’s legal environment) that acquired or developed the golf club.
Treatment of Course Utilization Income

The gross income forecast typically begins with a forecast of course utilization revenue. First, the income structure to be used by the course must be determined. This determination is typically based on the highest and best use and represents the structure that demonstrates maximum productivity. For example, the highest and best use of an existing facility operated on a daily fee basis may be conversion to a nonproprietary private club. In this case, the course utilization income structure analyzed must be that of the subject as a private club.

Alternatively, to apply the income approach to a proprietary facility that does not have a profit objective, one must first assume that the proprietary members sell their interests in the facility (this type of assumption may be required in order to obtain a loan). Then highest and best use analysis is performed to determine the course utilization income structure which yields maximum productivity, and the facility is valued under that structure to find the income it will generate for a buyer.

In the appraisal of an existing golf course with an operating history, income data for previous years will be available for analysis. Even if a course is showing consistent annual profits, the appraiser must gather as much information as possible from an investigation of similar competitive facilities in the subject market area. For instance, subject green fees may average $35 per round but are comparable courses averaging more? Is the golf shop well stocked with merchandise and is the staff effective in their marketing efforts? Are food and beverage sales compatible with those at other courses and is there room for improvement? Remember, a sale assumes an investor will be knowledgeable and competent in the golf business, thereby able to identify and remedy needed changes in operation.

Utilization income from all sources must be recognized. Frequently various utilization income categories must be considered. For example, a private club may generate utilization income not only from membership fees and dues, but also from guests or reciprocal privileges which generate daily greens fees.

To demonstrate the preparation of a gross income forecast a simple daily fee course utilization structure will be assumed in the following discussion. If, however, a membership structure is indicated, three special factors should be considered.

1) Nonrecurring income. Do not capitalize nonrecurring income unless the membership is nonproprietary. Specifically, initiation fees are a one-time revenue item which must be excluded from direct capitalization. (For exceptions, see turnover fees below.)

2) Turnover fees. Turnover initiation fees are generated when memberships are resold. They are commonly recurring and may be capitalized. A membership club usually sets a limit on the number of memberships it will sell. Once this capacity is reached, no new membership sales will occur. However, when an existing membership is discontinued, it may be resold. This may or may not generate revenue to the facility. If the membership is fully transferable with no transfer fee, the member may sell the membership personally and retain the proceeds. However, if the membership is nontransferable, or if there is a
transfer fee, revenue will be realized by the facility upon transfer. There is usually some turnover of memberships, and this generates recurring annual revenues which must be included in the projection. Often a regular turnover rate of a certain percentage of the membership base may be determined based on the subject’s history, the experience of comparable facilities, and demographic and market trends.

3) Services included. The services included in a membership must be considered. For example, members may be entitled to free lockers and shoe service, while daily fee golfers pay full price. This must be factored into ancillary income projections.

Course Utilization Revenue Projection

The course utilization revenue projection is the product of the forecasted demand or annual rounds times the price. Briefly stated, one estimates a green fee, and measures the number of rounds at this price. The result (see Figure 8.2) is the forecasted revenue.

It is estimated that stable operations will be achieved in the fifth year of operation after a management change four years of ramping up the business. Demand is measured in annual rounds played and greens fees, as well as all subsequent dollar forecasts, which are expressed as estimated inflated dollars.

Ancillary Revenue

The second major category of revenues is ancillary revenue, which include all revenues from sources other than course utilization. Some analysts may group all categories related to golf play (e.g., revenue from greens fees, golf cars and driving range) since this is a commonly accepted measure of the recreational function of a facility. Ancillary revenues, which are derived from a number of sources, may exceed course utilization revenues. Ancillary revenues may come from all or some of the following sources: golf car rental, driving range, food and beverage sales, golf shop, and other sources – e.g., tournament fees, instruction, locker and equipment rental, miscellaneous. These categories represent common sources of ancillary revenue, and are addressed below.

Golf Car Rental

Golf cars are rented by the seat (i.e., one or two riders to a car) or by the car. The appraiser must be aware of the rental basis when surveying comparables and forecasting revenues. The simplest and frequently most appropriate unit of measure and comparison is to express car rental revenue as a function of rounds played. It is sometimes more appropriate to estimate the actual percentage or number of rounds to be played with a rental car and multiply that estimate by the rental price.

Golf car utilization can vary substantially and has been increasing with the aging of the player population. Less than 25% of golfers may use cars on short, inexpensive courses in moderate climates but more than 75% may use them on long, expensive courses in hot climates, or where
there are significant changes in elevation on the fairways. A large and growing number of facilities require the use of cars at all times.

In the example in Figure 8.2 all golfers must use a golf car; the beginning rate is $5 per round, increased to $9 per round in year 5.

**Driving Range Revenue**

Driving range revenues are affected not only by the number of rounds played on a course, but also by factors such as range quality (e.g., mat or grass surface, distance and level or sloped topography), price, and proximity to population centers. For most assignments where data is available from competitive courses, the estimate is based on revenue per round.

In the example in Figure 8.2, driving range revenue begins at $2.00 per round in year one and reaches $2.50 per round in year 5.

**Food and Beverage Revenue**

Virtually all golf courses offer some food and beverage service, ranging from vending machines or a snack bar to top-quality restaurants, cocktail lounges and catering service. Food and beverage sales may constitute a major portion of total revenues, more than 50% in some cases. The unit of comparison for daily fee facilities is usually dollars per round, while for private country clubs it is usually dollars per member. According to the national data available, food and beverage revenue averages about $8 per round for daily fee courses with total revenues between $1,000,000 and $2,000,000 and many times higher ($35) for private facilities. A consumer price index factor should be used to inflate these figures in a projection.

In the example in Figure 8.2, food and beverage revenue is performing well (at a beginning estimate of about $10,80 per round) since the restaurant and bar can capture a significant amount of business from non-golfers.

**Golf Shop**

Merchandise sales are generated through the sale of goods such as golf clubs, balls, and accessories. With rare exceptions, merchandise customers have come to play a round of golf and the purchase of merchandise, especially golf balls, is incidental to this purpose. Therefore, revenue in this category is usually directly related to the number of rounds played and is projected based on merchandise sales per round. This unit of measure is used for comparison with other facilities.

As a retail business, sales per round is influenced by the quality and quantity of the merchandise, its pricing and factors such as the disposable income of the patrons, competition, management skill, and the character of the golf facility. Although the national mean is between $5 to $7 per round, this figure can be misleading due to the wide variance among facilities. Certain high-profile courses with strong name recognition can generate substantial revenue, sometimes more
than $12 per round, though the sale of products carrying their name or logo. The recession and
discounting of balls by big box stores has hurt pro-shop sales.

In the example in Figure 8.2, golf shop sales are estimated at $4.50 per round and escalated to
$7.00 over a five year period, by which time the general economy is expected to have reached
full recovery.

**Other Revenue**

Other revenue is often generated through vending machines, lessons, club rental and repair, pro
shop services, tournament fees, and miscellaneous sources such as telephone and locker rentals.
Although each of these categories is relatively minor, collectively they may be substantial. Each
of these categories, with the exception of tournament fees, is closely related to the volume of
play, and therefore revenues are projected per round.

**OPERATING EXPENSES**

Most operating expenses are routine expenditures necessary to produce the facility’s gross
income. Operating expenses are estimated on a cash basis and do not include expenses unique to
a particular type of management, cost of debt service, depreciation deduction, amortization, or
income taxes. When the direct capitalization technique is used, future capital expenditures are
excluded; these are reflected in the reserves for replacement account. When the discounted cash
flow technique is used, capital and one-time expenditures may be shown in the period in which
they are budgeted, or an estimate for annual replacement reserves can be applied.

Operating expenses have three components: fixed expenses, variable expenses, and reserves for
replacements; including capital and one-time expenses.

**Fixed Expenses**

Fixed expenses are those that vary little, if at all, with the volume of demand for, or use of, the
revenue department they support. Major categories of fixed expenses include course
maintenance, personnel, general and administrative, golf car, and driving range expenses.

**Course Maintenance**

Course maintenance costs are nearly always one of the largest expense categories of any golf
facility. NGFs 2010 report for the below $2,000,000 revenue category of public facilities
indicated a range of $443,000 to $695,000 to maintain an 18-hole facility. However,
maintenance costs vary widely, so generalizations are unreliable. Maintenance costs depend on
factors such as the course location, climate, length of season, intensity of play, age of
installation, type of facility, size, and quality of maintenance. Very private clubs may spend
three times as much. Effectiveness is especially significant because any amount of money can be
spent to keep a course immaculately groomed and maintained. Skilled management must
determine an appropriate level of maintenance – i.e., the level at which an additional dollar spent
will not generate an equivalent return. An experienced appraiser with good judgment should be
able to forecast a reasonable expenditure for course maintenance. The best source of information is the golf course superintendent.

**Golf Operations**

Personnel expense is usually the next largest fixed expense. This category typically includes the cost of all personnel required for facility operations except maintenance and food and beverage personnel costs which are shown in separate departmental accounts. The personnel account covers payroll, payroll taxes, and employee benefits.

Personnel costs are affected by factors such as local labor rates, level of service, facility size, length of season, and management skill.

Driving range expenses are part of golf course operations and are generally fixed. The most variable components of this expense are labor and replacement of golf balls.

**Golf Car**

Expenses related directly to golf car rental operations include energy, maintenance, and cleaning. These expenses vary somewhat with utilization, but experience demonstrates that variance is low due to routine maintenance requirements.

**General and Administrative**

This account typically includes administrative expenses for office operation, insurance, utilities (except course maintenance utilities such as irrigation), phone, postage, travel, accounting, legal consultation, dues, subscriptions, automobile use, and miscellaneous other costs.

**Variable Expenses**

Variable expenses are those that vary significantly with the volume of demand. There are two major categories for a typical facility: merchandise and food and beverage expenses.

**Golf Shop**

Merchandise expense consists of the actual cost of the goods sold. This category usually excludes personnel who perform other services in addition to selling the merchandise. Although the typical daily fee facility merchandise expense is about 70% of sales, this percentage may vary widely, especially for high-profile courses that sell products with course identification or logos at a substantial profit.

**Food and Beverage**

Food and beverage expense may be divided into two components: the cost of goods (food consumed) and personnel. Combined, these components usually total 85% to 100% of sales or
more. Although food and beverage profit margins are low, the service is usually necessary. Management may not be skilled in this aspect of business and sales volume is low by restaurant standards, but prices cannot be set too high or they will create feelings of gouging and ill will.

Often, especially during the absorption period of a proposed facility, it may be necessary to forecast the cost of goods sold and personnel expenses separately; a certain personnel level is required to provide the basic level of service desired, regardless of volume. This personnel expense is often estimated based on the actual number of employees required for each projection period and their wage rates. The cost of goods sold is directly variable and can be forecast as a percent of sales. The two categories come to about 93% in Figure 8.1.

Replacement Reserves and Capital Expenditures

In addition to normal operating expenses, a golf facility will frequently incur capital expenses and other one-time expenses. Capital expenses usually relate to the repair or replacement of capital improvements with economic lives shorter than that of the facility. These include items such as irrigation systems, golf cars, and the clubhouse carpet, paint and roof. One-time expenses may be incurred for unusual legal fees or promotional programs. The size of the account for replacement reserves and capital expenditures depends on the size, quality, and condition of the facility. In a discounted cash flow analysis, these expenses may be itemized and projected individually for each future period in which they will be incurred if sufficient data is available. In direct capitalization (and sometimes in the reversion year of a DCF analysis), they are shown as a single payment as in a reserves account.

Expense Forecasting

Itemized expense forecasts should be prepared for each major category of fixed and variable expenses. These expenses are then forecast to estimate a reasonable level of expense necessary for the subject to operate at its highest and best use under competent management. When the actual expense history of the subject is available, it usually serves as the basis of this forecast. It may be adjusted for indicated changes in management, highest and best use, and market conditions.

These estimates can be based on data gathered from actual cost estimates for labor, materials, and outside services, the expenses incurred by comparable facilities, the opinions of knowledgeable professionals such as club management personnel or golf course consultants, and NGF reports and serve as the basis for expense projections when an expense history of the subject is unavailable, as in the case of a proposed facility or one that is under construction.

The appraiser must exercise care when comparing the subject’s expenses to expense data from other sources to ensure that consistent accounting practices be followed. Accounting practices vary considerably. For example, the food and beverage expense reported for one facility may include related personnel expense, while another facility may include this expense in the personnel expense for the total facility. The appraiser must carefully analyze each item to prevent double counting or the omission of any expense items.
Net Operating Income

Net operating income or cash flow represents annual gross revenue minus all expenses and capital improvements (replacement reserves) and excluding debt service.

Discount and Capitalization Rates

Discount and capitalization rates are factors that reflect the relationship between annual cash flows and present value.

Capitalization Rate

A capitalization rate represents the relationship between one year’s net income and the property’s present value. The capitalization rate, expressed as a decimal factor, is divided into the net income and results in an estimate of value by direct income capitalization.

Capitalization rates can be derived from studying comparable sales, analyzing the nature of golf facilities in relation to other property types, or using a band-of-investment technique. They can also be obtained through investment surveys and interviews with principals, developers, brokers, and lenders familiar with golf facilities. In the past recession climate the yield rates from specific transactions were variable.²

Ideally, the capitalization rate used in the appraisal of a golf facility is derived from sales of comparable projects. Although capitalization rates generally range from 10% to 15%, rates are substantially affected by the financial condition of the facility, time, location, borrowing rates and the type and condition of the facility.

The band-of-investment technique is based on the assumption that most properties are purchased with debt and equity capital and that each investment position requires a market-determined return of and on its investment. This return includes a competitive interest rate for the debt holder or lender and a competitive equity yield for the equity investor or developer. A typical loan-to-value ratio of 50-60% makes capitalization rates sensitive to mortgage conditions. When the mortgage market is active and information is available, the difficulty is in estimating an equity dividend rate that reflects the risks and intensive management associated with golf investments. Use of the band-of-investment is typically limited to a support or secondary position. Again, capitalization rates ideally should come from comparable sales, golf investment experts and yield surveys.

With various yield data in hand, the appraiser must assess the advantages and disadvantages of the subject property and the duration and risks of its income stream relative to market-indicated rates to determine the appropriate capitalization rate for the subject property. In this text the rates employed are 12% (in the quantifying of economic obsolescence in Chapter 6), and 11.5% (direct capitalization) and 12% (DCF valuation).

² Out of the total 192 transactions summarized in Chapter 7, about five had cap rate information. They are No. 23 at 8.0%, No. 30 at 10.2%, No. 48 at 10.5%, No. 74 at 10.97%, and No. 102 at 5.1%. Three were REO sales.

AGI VALUATIONS
Discount Rate

A discount rate (some prefer IRR) is a rate of return on capital used to convert future payments or receipts into present value. It is usually derived from investor surveys. When golf course survey data is not available, consider a proxy such as rates from hospitality property surveys. Another method of derivation is to add the inflation rate or annual compounded growth rate to the capitalization rate, and possible consider an allowance for future risk or unknowns. This technique assumes that cash flow and the reversionary value will have increased at, or more than, the projected inflation rate.

It is not appropriate to estimate a discount rate until all inflationary assumptions have been determined and the cash flow model has been completed. If no adjustments for inflation are included in the projection, then the discount rate may be the same as the capitalization rate. In a typical DCF analysis in today’s market, discount rates will range from 13% to 18%. Because of their greater uncertainties, proposed facilities will have higher discount rates than existing courses. In this text the rate employed is 14.5%.

Business Value Component

The income approach as applied to the operations of a golf facility includes an allowance for the contribution of the business value component, if any. In applying the income capitalization process, the appraiser should consider the unique risk, liquidity, and yield requirements for the intangibles that comprise the entire entity. In Chapter 6, the methodology for deriving the business value of a golf course was presented. The income approach methodology can be used to appraise the assets of the entire facility as well as individual components such as intangibles (see Figure 6.9).
**FIGURE 8.1**

**STABILIZED GOLF COURSE: DIRECT CAPITALIZATION**

<table>
<thead>
<tr>
<th>Gross revenue:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Greens fee rounds</td>
<td>34,000</td>
</tr>
<tr>
<td>Fee/round % Per Round x $35</td>
<td></td>
</tr>
<tr>
<td>Total greens fee</td>
<td>56.9 $35.00 $1,190,000</td>
</tr>
<tr>
<td>Golf car rental</td>
<td>12.2 $7.50 $255,000</td>
</tr>
<tr>
<td>Driving range</td>
<td>4.1 $2.50 $85,000</td>
</tr>
<tr>
<td>Food and beverage</td>
<td>17.9 $11.00 $374,000</td>
</tr>
<tr>
<td>Merchandise sales</td>
<td>8.1 $5.00 $170,000</td>
</tr>
<tr>
<td>Other revenue</td>
<td>0.8 $0.50 $17,000</td>
</tr>
<tr>
<td>Total gross revenue</td>
<td>100.00 $61.50 $2,091,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Expenses</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed operating:</td>
<td></td>
</tr>
<tr>
<td>Maintenance</td>
<td>30.1 $18.50 $629,000</td>
</tr>
<tr>
<td>Golf Operation</td>
<td>8.1 $5.00 $170,000</td>
</tr>
<tr>
<td>General &amp; Administrative*</td>
<td>9.8 $6.00 $204,000</td>
</tr>
<tr>
<td>Golf car</td>
<td>1.6 $1.00 $34,000</td>
</tr>
<tr>
<td>Driving range</td>
<td>0.8 $0.50 $17,000</td>
</tr>
<tr>
<td>Total fixed</td>
<td>50.4 $31.00 $1,054,000</td>
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<tr>
<td>Variable operating/Costs of Goods Sold</td>
<td></td>
</tr>
<tr>
<td>Merchandise</td>
<td>4.1 $2.50 $85,000</td>
</tr>
<tr>
<td>Food &amp; beverage – cost of goods</td>
<td>7.3 $4.50 $153,000</td>
</tr>
<tr>
<td>F&amp;B personnel</td>
<td>5.7 $3.50 $119,000</td>
</tr>
<tr>
<td>Total variable</td>
<td>17.1 $10.50 $357,000</td>
</tr>
</tbody>
</table>

| Total operating expenses               | 67.5 $41.50 $1,411,000 |
| Capital expenses (reserves)            | 3.1 $1.91 $64,800 |
| Management                             | 5.1 $3.10 $106,600 |

| Total expenses                         | 75.7 $46.54 $1,582,400 |
| Net operating income                   | 24.3 $14.96 $508,600  |
| Capitalization rate                    | 11.5%       |

| Value indication                       | $4,422,609 |
| Called                                 | $4,425,000 |

* In this model, certain expenses such as taxes and insurance are embedded in the general and administrative category. The capitalization rate was based on reference to recent sales of established clubs in the region and to survey data such as that of RealtyRates.com.

Test of Reasonableness:

Total Revenue Multiplier ($4,425,000 ÷ $2,091,000) = 2.12
Golf Revenue Multiplier ($4,425,000 ÷ $1,530,000) = 2.89
Value per Round ($4,425,000 ÷ 34,000) = $130.15
Greens Fee & Rounds Multiplier ($4,425,000 ÷ $35 per round = $126.43 ÷ 34,000 rounds = 3.72