THE VALUATION OF ASSET MANAGEMENT COMPANIES

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Abstract

Asset management firms are characterized by having quite high margins, although working in a highly competitive industry. However, the nature of their businesses makes it difficult to define both debt and reinvestment, making the estimation of cash flows much more difficult.
It is reasonable to assume that Free Cash Flows to Equity-holders (FCFE) are proxied by net earnings because of a negligible level of investments, depreciation, and net working capital.
For Asset Management firms, dividends are often the only tangible cash flow that we can observe or estimate.
The common methods used to value asset management firms are the discounted cash flow, the multiples, and the Dividend Discount Model, with some adaptions.
Despite their simplicity, rules of thumbs are often characterized by the inaccuracy of the final value.

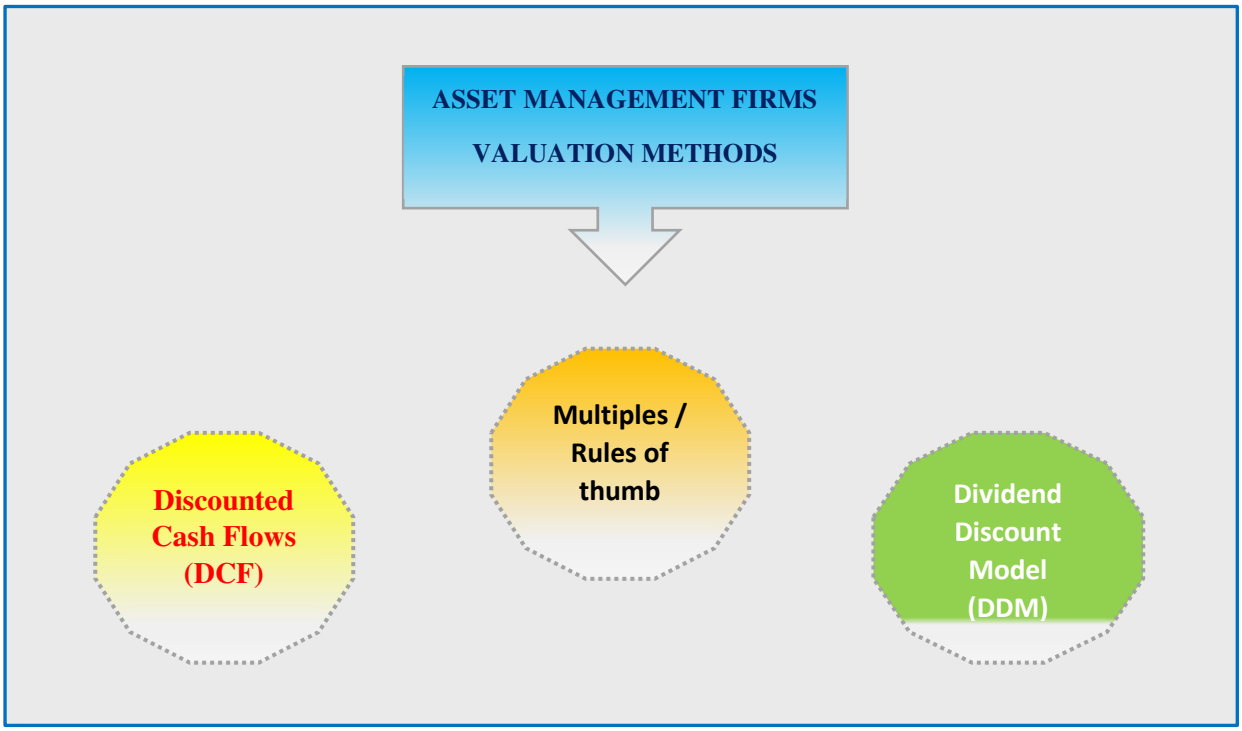
Keywords: Assets under Management, Discounted Cash Flows, Dividend Discount Model, multiples, rules of thumb, fees.

1. Framework

Asset Management companies can be independent investment companies or a part of a bank; they usually do not invest in their own account but on behalf of their clients. This is one distinguished difference between asset management companies with other financial institutions such as commercial banks, investment banks, or insurers (Elliott, 2014).
MorningStar defines investment management firms as "firms offering diversified services such as asset administration, investment advice, portfolio or mutual fund management, money management, venture capital, and investment research".
According to the recent academic literature, the three methods commonly used for the valuation of the asset management firms are:

1. the discounted cash flows - DCF (Damodaran, 2013);
2. the multiples / rule of thumb (Bigelli & Manuzzi, 2019)
3. the dividend discount model – DDM (Damodaran, 2018; Joenväärä & Scherer, 2017), as illustrated in the following figure 1.:

Figure 1. – *Valuation methods of asset management firms*



Those approaches are landed from the standard valuation approaches (Moro Visconti, 2020, chapter 2), with some specific adaptions (Borroni & Rossi, 2019; Huberman, 2006; Malkiel, 2013).
Table 1. shows the principal factors that directly impact the valuation of those firms, including company-specific risk as well as relative valuation multiples (Elliott, 2014; Iannotta, 2010):

Table 1. – *Value drivers for Asset Management firms*

Driver	Description
Size	Reaching scale is important
Revenue Growth	Organic growth or market growth
Revenue Source	Commission-based or fee-based
Client Demographics	Client concentration, client tenure, new client ratio, client age
Relationships	Relationship of revenue to the owner of the asset management firm
Management	Compensation and expense management
Employee Demographics	Number of employees, tenure, relationships with clients

Once the most suitable evaluation approach has been defined, it might be appropriate to use another evaluation approach, to double-check the evaluation carried out with the main approach (Fazzini, 2018).
The use of a control approach is applied in all cases where it is possible to estimate the market value of the company from complementary angles to arrive at a range of values within which the market value must be positioned (Koller & Goedhart, 2015).

2. The uneasy estimate of cash flows for financial companies

The financial approach is based on the principle that the market value of the company is equal to the discounted value of the cash flows that the company can generate ("cash is king"). The determination of the cash flows is of primary importance in the application of the approach, as is the consistency of the discount rates adopted (Singh, 2013).
Damodaran (2013) highlights that it is not easy to estimate cash flows made by financial firms (not only asset management firms, but also banks, insurance firms, etc.). Even if financial firms work in a regulated framework, their cash flows cannot be easily estimated, since items like capital expenditures, working capital, and debt are not clearly defined.
He, therefore, concludes that financial service firms are best valued using equity valuation models, rather than enterprise valuation models. When we evaluate an asset management firm, it is also reasonable to assume that Free Cash Flows to Equity-holders (FCFE) are proxied by net earnings because of a negligible level of investments, depreciation, and net working capital. Asset management firms are characterized by having quite high margins, although working in a highly competitive industry (Berk & Green, 2004).
Joenväärä and Scherer (2017), and the consistently Bigelli & Manuzzi, 2019, state that the net earnings by an asset management firm can be determined as the product of three components - the assets under management (*AUM*), the ratio of fees on AUM (*f*), and the earnings margin, given by the ratio of the net earnings:

$$Net\ earnings = AUM * fees/AUM * Net\ earnings/fees = AUM * f * q \quad (1)$$

3. Applying DCF to Asset Management firms

Huberman (2006) adapts the Discounted Cash Flow model (DCF) to asset management firms and concludes that the 2-4% P/AUM ratio at which asset management firms are usually traded is relatively low, as their value on AUM should be closer to the earnings margin (q), which is usually around a 20% value. His model is based on the following hypothesis:

- net earnings equal the Free Cash Flow to Equity-holders;
- assets under management have already reached a steady state. No money flows into or out from managed assets, with the exception of the management fees that are debited on a yearly basis. All dividends and capital gains are reinvested in the managed mutual funds or the managed clients' portfolios;
- the level of fees on AUM is equal to "*f*" as in Equation (1);
- the assets under management, net of transaction costs, but gross of (management) fees, yield a yearly return equal to "*r*"; the discount rate of the cash flows, "*R*", is equal to the return on the assets under management, "*r*".

Given the above hypothesis, using the more intuitive notation from Joenväärä and Scherer (2017), the Huberman model can be explained in the following way. Net earnings at the end of the first year can be defined as:

$$Net\ earnings_1 = AUM * (1 + r) * f * q \quad (2)$$

While earnings at the end of a generic year "*i*" can be defined as:

$$Net\ earning_{si} = AUM * (1 + r)^i * (1 - f)^{i-1} * f * q \quad (3)$$

As a result of the above hypothesis, assuming that net earnings are equal to the FCFE, by discounting FCFEs at the Equity cost of capital (R), the following discounted cash flow model follows:

$$PV_0 = \frac{AUM(1+r)\,fq}{(1+R)} + \frac{AUM(1+r)^2(1-f)\,fq}{(1+R)^2} + \ldots + \frac{AUM(1+r)^n(1-f)^{n-1}\,fq}{(1+R)^n} + \ldots \quad (4)$$

If the returns on the assets under management (r) are equal to the equity cost of capital of the firm (R), after some mathematical simplifications, Equation (4) can be reduced to the following:

$$P = PV_0 = AUM * q * [1 - (1 - f)^{n-1}] \quad (5)$$

In addition, by considering an infinite valuation horizon (n = ∞), and rearranging the equation to have the P/AUM ratio on the left-hand side, the model can finally be reduced to the following result:

$$P/AUM = q \quad (6)$$

Since the earning margin (q) is, on average, around 20%, while asset management firms are usually priced about 2-4% of AUM, Huberman (2006) concludes that they somehow quote at a discount.

According to this model, the value seems to be insensitive to the level of fees because an increase in fees will increase the earnings in the short run at the expense of earnings in the long run. The two effects offset each other when the asset growth rate (gross of fees), "r", is equal to the discount rate "R" (Bigelli & Manuzzi, 2019).

However, this hypothesis seems persuasive and unrealistic, as the average return of assets under management should be lower than the equity cost of capital because assets under management are also composed of bonds and money market portfolios. Besides, the risk of equity of an asset management firm is anyway amplified by operational and regulatory risk.

The equivalence between the perpetual return of the assets under management and the equity cost of capital of the firm is also identified as the main limitation of Huberman's model by Joenväärä and Scherer (2017). They also argue that it cannot be assumed that the level of assets under management increases ad infinitum, as the investment industry suffers from diseconomy of scales, as shown by Berk and Green (2004).

Latzko (2014) also empirically reports that economies of scales in mutual fund administration vanish when about $3.5 billion in fund assets is reached. Joenväärä and Scherer (2017) therefore amend Huberman's model. By assuming that the asset management firm has already reached its optimal size, they introduce the hypothesis that assets under management are constant over time, eliminating the previous assumption of a yearly gross revaluation at a yearly rate equal to "r".

In this way, by assuming that the level of fees and the net margin is also constant over time, the net earnings also become constant over time. The net earnings made in year i can, therefore, be expressed in the following way:

$$Net\ earning_{si} = AUM * f * q \quad (7)$$

Assuming net earnings equal to the FCFE again, the present value of the discounted stream of future perpetual cash flows becomes as follows:

$$P = AUM * f * q * 1/R \ (8)$$

If we express the final equation indicating the P/AUM on the left-hand side, the results become more easily comparable with those of the previous model, as in the following equation:

$$P/AUM = f * q * 1/R \ (9)$$

The Price/AUM ratio is, therefore, simply given by the present value of perpetuity whose perpetual cash flow is the product of the level of fees on AUM (f) and the net margin (q).
The model developed by Joenväärä and Scherer (2017) results in valuations of asset management firms in line with the empirical ones observed on the market. In fact, if we take some hypothetical values not far from real ones and we set a level of fees equal to 1% of assets under management (f), a net margin equal to 20% (q) and a discount rate equal to 6% (R), the resulting multiple P/AUM would be equal to 3%. This value is very similar to the average one observed on the market and in the acquisitions of asset management firms (Zask, 2005; Constant, 2004).

4. Multiples and rule of thumbs

As Bigelli & Manuzzi (2019) point out, "academic literature has addressed how multiples can be used in firm valuation (Lie & Lie, 2002; Liu et al., 2002), how the selection of comparable firms can be relevant (Alford, 1992; Bhojraj & Lee 2002), how the comparable company method should be adjusted for the value of corporate control (Finnerty & Emery, 2004), how emerging markets may have specifics factors affecting multiples (Farah Freihat, 2019), how some multiples can be combined to obtain a better estimate (Yoo, 2006), how firm's value in different industries is better proxied by different multiples (Fidanza, 2010), and which multiples work better for banks' valuation (Forte et al., 2018)".
In the case of comparable companies, the approach estimates multiples by observing similar companies (Alford, 1992; Fidanza, 2010). The problem is to determine what is meant by similar companies. In theory, the analyst should check all the variables that influence the multiple.
In practice, companies should estimate the most likely price for a non-listed company, taking as a benchmark some listed companies, operating in the same sector, and considered homogeneous. Two companies can be defined as homogeneous when they present, for the same risk, similar characteristics, and expectations (Lie & Lie, 2002).
According to widespread estimates (Fernandez, 2001; Yoo, 2006), the main factors in establishing whether a company is comparable are:

- Size;
- Belonging to the same sector;
- Financial risks (leverage);
- Historical trends and prospects for the development of results and markets;
- Geographical diversification;
- Degree of reputation and credibility;
- Management skills;
- Ability to pay dividends.

The multiple can be reduced by a proper percentage to consider the non-perfect comparability of the sample in terms of activity, location and turnover (size discount[1]) and the non-listing of a company (illiquidity discount), (Damodaran, 2005). For empirical evidences regarding the size discount, see http://www.menzies.co.uk/wp-content/uploads/2016/01/27The-Compounding-Effect-of-Size-on-Business-Value27-Rebranded.pdf.

The calculation is:

- A company whose price is known (P_1);
- A variable closely related to its value (X_1).

The ratio $(P_1)/(X_1)$ is assumed to apply to the company to be valued, for which the size of the reference variable (X_2) is known.
Therefore:

$$(P_1)/(X_1) = (P_2)/(X_2) \qquad (10)$$

so that the desired value P_2 will be:

$$P_2 = X_2 [(P_1)/(X_1)] \qquad (11)$$

For the valuation of the Asset Management firms, the multiples commonly used are the ratios EV/AuM and EV/Revenues, considering that the most diffuse ratio EV/EBITDA would be supposedly dependent on the different accounting policies used.
Besides those multiples, there is another empirical method, the rules of thumb, which are a short-cut way to arrive at a value, i.e., the "average" firm in the industry is valued at two times revenues or 5 times cash flow.
Rules-of-Thumb usually fail to consider (among other items):

1. Differences in effective management fees;
2. Profitability;
3. Differences in growth rates;
4. Quality of AUM, clients.

As a result, firms of above-average quality can be undervalued, while firms of below-average quality can be overvalued.

5. The Dividend Discount Model

The dividend discount model (DDM) is a method of valuing a company's stock price based on the theory that its stock is worth the sum of all its future dividend payments, discounted back to their present value (Farrell, 1985). In other words, it is used to value stocks based on the net present value of future dividends.
The model simply discounts cash flows at a given rate, just like any other DCF model. The difference lies in the fact that dividend discount models consider only "dividends" as being legitimate cash flows.

[1] For empirical evidences regarding the size discount, see http://www.menzies.co.uk/wp-content/uploads/2016/01/27The-Compounding-Effect-of-Size-on-Business-Value27-Rebranded.pdf.

Therefore, if a firm pays no dividends at all, this model cannot be applied to the firm regardless of how profitable or cash flow efficient its operations are.
According to Damodaran (2013), many analysts accept the reality that estimating cash flows for financial service firms is not feasible and fall back on the only observable cash flow – dividends. While this makes sense, these analysts are implicitly assuming that the dividends that are paid out by a bank or insurance company are sustainable and reasonable. The focus on current dividends can also create problems when valuing financial service firms that have growth potential.
If we start with the assumption that equity in a publicly traded firm has an infinite life, we arrive at the most general version of the dividend discount model:

$$\text{Value per share of equity} = \sum_{t=1}^{t=\infty} \frac{DPS_t}{(1+k_e)^t} \quad (12)$$

where
DPS_t = Expected dividend per share in period t
k_e = Cost of equity

In the particular case where the expected growth rate in dividends is constant forever, this model collapses into the Gordon Growth model.

$$\text{Value per share of equity in stable growth} = \frac{DPS_1}{(k_e - g)} \quad (13)$$

In this equation, g is the expected growth rate in perpetuity, and DPS_1 is the expected dividends per share next year. In the more general case, where dividends are growing at a rate that is not expected to be sustainable or constant forever during a period (called the extraordinary growth period), we can still assume that the growth rate will be constant forever at some point in the future.
The cost of equity for a financial service firm must reflect the portion of the risk in the equity that cannot be diversified away by the marginal investor in the stock.
There is an inherent trade-off between dividends and growth. When a company pays a larger part of its earnings as dividends, it is reinvesting less and should thus grow more slowly. With financial service firms, this link is reinforced by the fact that the activities of these firms are subject to regulatory capital constraints (Damodaran, 2013).

6. Pros and cons of the valuation methods

The three valuation methods previously illustrated (DCF, multiples, and DDM) need proper adaptions for their applications to the Asset Management firms, and each of them has its strengths as well its weakness.
Table 2. synthetically shows the principal pros and cons of the above-indicated valuation methods of Asset Management firms:

Table 2. – *Strengths and weakness of valuation methods of Asset Management firms*

Method	Strengths	Weaknesses
DCF	The value of a firm ultimately derives from the inherent value of its future cash flows ("Cash is king")	Reliability of the future cash flows estimation
	Not influenced by depreciations / capitalisations policies	Subjectivity of the discount rates determinations
Multiples	Easy to use ("quick and dirt")	Fairness of the selected multiples / comparables
	Few parameters	Accuracy of the results (rule of thumbs)
DDM	DCF strengths	Current dividends ignore growth potential
	Dividends appear as the more objective cash flows for Asset Management firms	Implicitly assumes that the dividends paid out are sustainable and reasonable

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