Application of Franchise Value (FV) Approach To Equity Valuation

Franchise Value model

The model effectively separates the overall value of the company into two components. First components is the value that comes from just operating the business. The second part is the value of the abnormal performance that company has recorded, however this value is also dependent on the ability to grow this abnormal performance in the future. The overall value looks like:

(1)

$$V_t = Tangible\ Value_t + Franchise\ Value_t$$

In most common terms, Franchise value is the premium/discount that company should have for having abnormal financial performance and its ability to sustain it. If the company earns less than the risk-adjusted market return (cost of equity) then the franchise will be negative and the overall value will be lower than the tangible value. Alternatively, in the extreme case where the current earnings are negative, then the tangible value will also be negative, but if these earnings are higher than the market rate then there will be value added with the franchise factor. This extreme case is not that impossible, think about in time of severe economic crisis, where everyone reports loses, but if the company is recording less losses than the market the stock should be rewarded. Of course this is only possible when the cost of equity is estimated by some market equilibrium model that virtually relates it with the rest of market participants. This is significant feature of the approach that cannot be find in other valuation methods and it is major advancement in the field, especially when evaluating stocks in times of crisis. Next we shall discuss in deep each of the model's components.

Tangible value

When comparing Franchise value model with the Residual Income, the tangible value is one of the major advancements. The idea of TV relaxes the assumption that the base value of the stock is the book value of equity, Here the earnings-oriented approach is applied that links the base value with the recorded earning power of the company. In this way, base value can be penalized if the company has negative earnings. On the other hand if book value of equity is used as base value then analysts inadvertently make the strong assumption that managers cannot destroy book value of the company. This is major problem when the valuations are done in times of market-wide financial distress, where managers not only do not add value, but also destroy the existing book value. The TV is estimated by simple Gordon-growth model (GGM) in the form of:

(2)

$$TV_t = \frac{EPS_t}{k_e}$$

The hardest part is correctly finding the EPS. The formula assumes that these are the earnings that will be earned constantly. Also applying this type of GGM suggest that this EPS will be earned in the future with the same value. It is really tricky job dealing with these assumptions. Best suggestion is to average the EPS from the last three accounting periods. However, this is one of the potential problematic assumptions in the entire franchise value approach. In any case, this is major development in the methods that estimate the base value of the company.

Franchise factor

The heart of the model is the franchise factor. It can be directly linked to the residual income approach and the economic profit school of thinking. It compares the earning rate of the company (ROE) with the rate that is expected by the shareholders. The process follows the intuitive logic that if the management is able to beat the market expectation then it has created additional value, inversely if the company wasn't able to meet the expectations then there is value destruction. Another feature is that this process is formed by partial GGM in the form of:

(3)

$$FF_t = \frac{ROE_t - k_e}{k_e}$$

This implies that the outperformance/underperformance of the market is expected in the future. It is not easy assumption, but it is important to notice that the growth rate is separated, which sends the problem in the growth factor. Also when estimating Return on equity (ROE) it should be used the same EPS that was implemented in the Tangible value, because these are the long term sustainable earnings of the company. The franchise factor is very important, because it gives information about the relative performance of company against the market expectations. It is needless to say that crucial influence has the cost of equity, that must correctly reflect the market expectations toward the stock. Also franchise factor is very suitable to be used as an investment signal in active portfolio management, because this is the component that separate "winners" from "losers". It is robust performance metric that gives valuable information to both asset managers and shareholders.

Growth factor

Perhaps the hardest part of franchise value approach is building the correct growth model. It should be noted that this is the only model that separates the growth from the performance. This additional term in the franchise value equation is aimed at refining the franchise factor. Separating the growth expectations from the performance factor (Franchise factor) implies that even if the

company is able to earn in the past above market expectation, in order to add value this abnormal performance at least must be matched. For estimation of the growth factor pure GGM is used:

(4)

$$GF_t = \frac{g}{k_e - g}$$

It is very tricky to guess the right growth rate of abnormal earnings. The methodologies for estimation of the illusive g vary a lot. Some of them propose deep mathematical analysis, other rely on assumption such as accepting the economy's growth rate as absolute truth. Ultimately, no true growth model exist. In this case good approach is to measure the historical growth of earnings in recent years.

Franchise value

The final Franchise value is calculated by multiplying the growth and franchise factor with the book value in order to estimate the additional value over the tangible value. The final equation is as follows:

(5)

$$FV = FF * GF * Book\ value$$

It is interesting to follow the inside mechanics of the model. First of all FFxGF gives the coefficient by which the book value is multiplied. If this coefficient is above zero, then the managers have created additional value to their shareholders. This is achieved by either having competitive advantages over the competitors or exploiting market inefficiencies (example for such inefficiencies is monopoly or powers of the seller). Inversely if the company is not operating

up to the industry standards, then FF will be negative and this will destroy overall value. Main advantage of this model is that both tangible value and franchise factor are function of historical observation, the only component that have to be predicted is the future growth g. Growth factor is included, because the historical nature of EPS and ROE is not forward looking and in order to ascertain the value of the company we need an idea what will happen with these current results in the future. If the idea for simulating g is adopted then analysts will have not only the final valuation, but from the simulation can be extracted the risk associated with this valuation. This is also a major development, because most traditional valuation method do not offer such and robust measurement of valuation risk. Knowing this risk is priceless to active portfolio managers, because it gives them the certainty of the forecast that must be included in their risk model.

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