

DEMYSTIFYING VALUE OF SYNERGY

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Abstract

Synergy is defined by a mutually beneficial existence of business elements or participants. In a merger and acquisition sense, it's the notion that two companies are worth more combined than they are when independently valued. The goal of every M&A is to create synergies by broadening a business's customer base. Thus, the entity can increase its market share and enhance its corporate financial strength. Therefore, synergies are the purpose of every M&A from the beginning of the deal. Put simply, synergies are the potential economic benefits achieved when two companies merge.

The Perspective

Synergistic Value of a business or asset is the value that a particular investor or group of investors place on that business entity or asset based on individual investment requirements, situation, potential synergies from complementary assets, and expectations. It reflects the individual investor's expectation of the benefits to be derived from ownership, perception of risk and mix of debt and equity to be used when investing. The term synergistic value arises from the fact that the business or asset is expected to complement existing businesses, expertise, or assets of the buyer to achieve incremental value through positive synergies. The synergistic value is also referred to as the investment value which is normally higher than the fair market value estimate, prompting an incentive to sell.

Synergy is the concept that allows two or more companies to combine together and either generate more profits or reduce costs together. These companies believe that combining with each other gives them more benefits than being single and doing the same. A corporate merger is a

combination of assets and liabilities of two firms which form a single business entity. When the senior management decides to buy another company, it is mostly focused on increasing the value of a new company. The synergy effect is expected to be the core driver to improve sales, profit margins and the market positioning of the company. Excluding any synergies resulting from the merger, the total post-merger value of the two firms is equal to the pre-merger value.

As a rule of thumb, synergy is a business combination where $2+2 = 5$. Or here is another way we can calculate synergies in M&A: **Synergy = NPV (Net Present Value) + P (premium)**, where: NPV – net present value of a newly created company. Synergistic Value means an additional element of value created by the combination of two or more assets or interests where the combined value is more than the sum of the separate values

Synergies and Consolidation

Synergies play a substantial role in driving valuation. The ability of a management team to identify and extract the expected synergies plays a major role in the success or failure

of an acquisition. Consolidation in the industry will continue, even in the face of increasing rates, because the financial opportunities far outweigh increased borrowing costs in the short term. A very richly-valued acquisition can appear moderately priced after taking into account the impact of revenue and cost synergies post close.

Whether you are considering an acquisition or have been approached by a consolidator to sell your business, it is important to have a comprehensive understanding of the opportunities to build and recognize synergies in a transaction. Building a pro forma is an important way to tell your story and set a road map. If you want to know more about the potential synergies present in your company

Operating Synergy

Operating synergies are those synergies that allow firms to increase their operating income from existing assets, increase growth or both. We would categorize operating synergies into four types.

1. Economies of scale that may arise from the merger, allowing the combined firm to become more cost-efficient

and profitable. In general, we would expect to see economies of scales in mergers of firms in the same business (horizontal mergers) – two banks coming together to create a larger bank or two steel companies combining to create a bigger steel company.

2. Greater pricing power from reduced competition and higher market share, which should result in higher margins and operating income. This synergy is also more likely to show up in mergers of firms in the same business and should be more likely to yield benefits when there are relatively few firms in the business to begin with. Thus, combining two firms is far more likely to create an oligopoly with pricing power.
3. Combination of different functional strengths, as would be the case when a firm with strong marketing skills acquires a firm with a good product line. This can apply to wide variety of mergers since functional strengths can be transferable across businesses.
4. Higher growth in new or existing markets, arising from the combination of the two firms. This would be case, for instance, when a US consumer products firm acquires an emerging market firm, with an established distribution network and brand name recognition, and uses these strengths to increase sales of its products.

Operating synergies can affect margins, returns and growth, and through these the value of the firms involved in the merger or acquisition.

Financial Synergy

With financial synergies, the payoff can take the form of either higher cash flows or a lower cost of capital

(discount rate) or both. Included in financial synergies are the following:

- ⊙ A combination of a firm with excess cash, or cash slack, (and limited project opportunities) and a firm with high-return projects (and limited cash) can yield a payoff in terms of higher value for the combined firm. The increase in value comes from the projects that can be taken with the excess cash that otherwise would not have been taken. This synergy is likely to show up most often when large firms acquire smaller firms, or when publicly traded firms acquire private businesses.
- ⊙ Debt capacity can increase, because when two firms combine, their earnings and cash flows may become more stable and predictable. This, in turn, allows them to borrow more than they could have as individual entities, which creates a tax benefit for the combined firm. This tax benefit usually manifests itself as a lower cost of capital for the combined firm.
- ⊙ Tax benefits can arise either from the acquisition taking advantage of tax laws to write up the target company's assets or from the use of net operating losses to shelter income. Thus, a profitable firm that acquires a money-losing firm may be able to use the net operating losses of the latter to reduce its tax burden. Alternatively, a firm that is able to increase its depreciation charges after an acquisition will save in taxes and increase its value.
- ⊙ Diversification is the most controversial source of financial synergy. In most publicly traded firms, investors can diversify at far lower cost and with more ease than the firm itself. For private

businesses or closely held firms, there can be potential benefits from diversification.

Clearly, there is potential for synergy in many mergers. The more important issues relate to valuing this synergy and determining how much to pay for the synergy.

Synergy benefits can come from four potential sources:

1. **Revenue increase.** This can be done by selling more different goods and services using a broadened product distribution. This will help the new company to compete for customers which originally were not the clients.
2. **Expenses reduction.** Because of a merger or acquisition, many companies optimize internal positions and introduce more responsibilities to the existing roles.
3. **Process optimization.** It is done by introducing enhanced marketing tactics and strategies, branding, better technologies, and more effective distribution.
4. **Financial economy.** United enterprise from the legal prospective can get better tax benefits, state support etc. But the buyers should remember: financial economy alone can't optimize the strategic position of a company. So it should not be the only value driver in the deal.

To calculate synergies the evaluation should be focused on three parameters:

- ⊙ **Benefit impact from synergy effect.** This basically means that each forecast component should be critically reviewed. However, consultants tend to make overly-optimistic cash flows and costs.
- ⊙ **The probability of**

achieving. Here we can consider three scenarios: optimistic, pessimistic and the realistic for achieving. The Monte-Carlo simulation method helps with finding the range of possible results.

- ⊙ **Time of benefit generation.** History of M&A deals has a lot of cases when speeding up with a purpose of increasing acquisition attractiveness lead to overestimated synergy value. Doing this M&A team cheat on themselves.

These parameters can have a huge impact on the accuracy of the synergy evaluation

Examples of Ways to Estimate M&A Synergies:

- ⊙ Analyze headcount and identify any redundant staff members that can be eliminated (i.e. the new company doesn't need two CFOs).
- ⊙ Look at ways to consolidate vendors and negotiate better terms with them (i.e. purchase goods/services at lower prices).
- ⊙ Evaluate any head office or rent savings by combining offices.
- ⊙ Estimate the value saved by sharing resources that aren't at 100% utilization (i.e. trucks, planes, transportation, factories, etc.).
- ⊙ Look for opportunities to increase revenue by upselling complementary products or increase prices by eliminating a competitor.
- ⊙ Reduce professional services fees.
- ⊙ Operating efficiency improvements from sharing "best practices."
- ⊙ Human capital improvements from "top grading" exercises and potential ability to attract superior talent at New

Company.

- ⊙ Improve distribution strategy by serving customers with closer locations
- ⊙ Geo-arbitrage – Reduce labor costs by hiring in other countries if the target is in another country.

How are Synergies Valued?

Typically, synergies will be valued separately, and the resulting amount will be added to the DCF value without synergies. The process of valuing synergies is similar to the standard DCF valuation process:

- ⊙ Estimate the expected annual synergies. Synergies are assumed to be cash.
- ⊙ Apply the marginal tax rate (the MTR) of the company to find after-tax synergies.
- ⊙ Establish the discount rate to be applied. Usually, this discount rate will be the target WACC plus a risk premium. In other words, synergies are deemed riskier than standard cash flows.
- ⊙ Estimate the terminal value (TV) of synergies using a perpetuity formula. This can be done with or without an expected perpetual growth rate.
- ⊙ Discount the annual post-tax synergies and the terminal value of synergies back to today and add them together.

The resulting value of synergies is an unlevered number and adds to the estimated Enterprise Value of the valued company.

Common errors in valuing Synergy

- ⊙ Acquiring firms often subsidize target firm stockholders by misidentifying sources of synergy or using the wrong discount rate on savings from synergy

- ⊙ It is also common to see a mixing up and double counting of synergy and control values.
- ⊙ Finally, over optimism about when synergy gains will show up often lead to too high a value being attached to synergy.

Best Practices

- ⊙ We look at four best practices in valuing synergies to avoid leaving millions of dollars on the table. The approach is to value synergies as inputs to the Discounted Cash Flow model and use the following rules.
- ⊙ **Use the right discount rate:** From time to time, analysts use the discount rate of either the target company or the acquiring company in valuing synergies. Either one is incorrect. Synergies should be valued by using the discount rate of the combined entities. The **combined discount rate** reflects the true nature of the project, which requires the merged entities to produce the synergies.
- ⊙ **Isolate the value of control from the value of synergies:** The control premium reflects the incremental value that the acquiring company can create by managing the target company better or more efficiently. The value of control reflects better management. The value of synergies reflects the combinatorial effects of two merged entities. Mixing the value of control and the value of synergies is inaccurate. They are separate concepts with separate effects, which must be treated separately: **discount the control premium at the acquirer's discount rate;** and discount the value of the synergies at the combined discount rate of the two firms.

Anything different can inject errors of double counting.

- ⊙ **Subtract the value of dis-synergies:** There are inherent 'dis-synergies' to any M&A deal. These items are **losses** expected to materialize as a result of the merger. Typical dis-synergies include the following: loss of customers; defection of quality employees to the competition; re-adjustment of employee benefits if the acquirer has better ones than the seller; cost of re-aligning reporting structures; re-branding; disposition of some assets based on antitrust considerations, and more. The value of dis-synergies must be subtracted from the value of synergies.

- ⊙ **Subtract the cost of integration:** Synergies don't happen by chance. It takes integrating the two companies to deliver the value of synergies. There are many types of integration depending on the scope of the M&A deal. In a functional integration, companies merge key operating functions (e.g. human resources, legal, accounting) leaving the rest of the business intact. In a full operational integration, merging takes a change of control, senior management changes, primary activities, support functions, and occasionally restructuring. Whichever type of integration is required, **merging comes at a cost** and the timing of the benefits is not immediate. The cost of integration must be subtracted from the gross synergy target value, and expectations of the realization of benefits must be timed realistically

Conclusion

Often promised and seldom delivered is perhaps the most apt way of describing synergy in most acquisitions. There is potential for synergy in many mergers, be it operating or financial. In this paper, we began by looking at the sources of synergy and how best to value each one. In general, operating synergies manifest themselves as higher cash flows, while financial synergies can affect both cash flows and discount rates. To value synergy, both the acquiring and target firms have to be valued independently first and the sum of these values can be compared to the value of the combined firm (with the synergy benefits built in) to estimate the value gain from synergy.

While there is some evidence of synergy in the aggregate across all acquisitions, most mergers fail in delivering any synergy. Even if we accept the fact that there is value to synergy, acquiring firm stockholders get almost none of the benefits of the increased value; in fact, they overpay for synergy in most acquisitions. We attribute this overpayment to a number of factors including managerial hubris, bias in the estimation process and a failure to plan for synergy. We close the paper by considering how best to improve the odds on delivering synergy and some common errors in the valuation of synergy.

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