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A shifting landscape for synergies

How financial considerations are affecting value creation in mergers and acquisitions

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1. Financial synergies in a changing acquisition landscape

Almost two years into one of the most devastating financial crises, most strategic decision-makers are well versed in the importance of having sufficient liquidity and a fortress balance sheet. Facing a higher cost of capital, uncertain access to capital markets, a contracting bank market, and a fragile economy, large firms in particular have been able to take advantage of recent favorable capital market conditions to raise liquidity. They have also raised liquidity by cutting shareholder distributions, reducing capital expenditures, cutting costs, and selling assets. In general, less attention has been paid to the way the current crisis has profoundly affected the potential value of merger synergies. In this report we focus on the growing and less well understood role of financial synergies in creating value in mergers and acquisitions.

When prospective acquirors evaluate an acquisition, their **foremost focus is on the strategic logic** of proposed combinations and on the potential social and regulatory impediments. These considerations are paramount to successful acquisitions. Beyond the strategic logic, acquirors also delve deeply into the valuation gains from a combination. How much can an acquiror pay for an asset while still creating value for its shareholders? What offer price is likely to sway the acquisition partner to agree to a transaction? The amount acquirors are willing to pay in a transaction depends in large part on the synergies created from the combination. As the primary source of value creation, cost and revenue synergies receive the bulk of the attention in traditional merger valuations.

In today's environment, however, **financial synergies have become relatively more important** as a source of value creation. This is not because cost and revenue synergies have become less important, but primarily because the experience of a severe credit crisis has highlighted the magnitude of financial synergies in today's environment. **Financial synergies** are primarily derived from increased size, scale, and diversity and an improved credit profile and market access. They include (1) the lower cost of debt and overall capital achieved with a better credit profile/rating (relative to pre-crisis levels), (2) enhanced access to bank capital, (3) increased certainty of access to capital markets, (4) superior downside protection and financial flexibility, (5) potential covenant relief, and (6) improved tax efficiency.

The financial synergy benefits related to cost of capital have declined recently, relative to their magnitude at the peak of the crisis in the fall of 2008. They do remain high, however, relative to pre-crisis levels. Other financial synergy aspects, such as the benefits of financial flexibility, are likely to remain significant for years to come. We believe that strategic decision-makers should assess and capture these benefits when estimating the value and merits of strategic transactions.

While we focus on the increased materiality of financial synergies as a merger benefit, many other factors continue to negatively affect merger decisions in the current environment. Even acquirors facing once-in-a-lifetime buying opportunities that may produce beneficial financial synergies are hesitant to embark on large transactions. Some of the factors slowing down M&A activity include credit market challenges, valuation differences, concerns about the economy, friction costs, and execution risk.

EXECUTIVE TAKEAWAY

Less certain capital market access and a higher cost of capital have increased the proportion of overall merger value creation coming from financial synergies. Financial synergies are sufficiently material that strategic decision-makers should develop a process to fully understand their contribution to value creation in mergers and acquisitions.

2. The pros and cons of (de)consolidation

Having a larger scale and market share is associated with a number of benefits. When firms operate in a similar sector, they have the opportunity via a combination to increase profitability through cost synergies. Increased scale also may lead to revenue synergies, afford companies greater pricing and buying power, and better position them to attract and retain talent. These benefits may further reduce costs and improve productivity. From an equity capital markets standpoint, a larger firm is more likely to be included in an equity index and attract more attention from equity research, which could improve trading liquidity and consequently valuation. Also, enhanced scale and greater product and geographic diversity could potentially lead to a better credit profile. We will show evidence to support this premise in later sections.

Being larger is not uniformly advantageous, though. There are some powerful forces, regardless of the economic environment, that lead firms to consider deconsolidation in the form of spin-offs or other types of divestitures. It may be more difficult to manage a more diverse business as management focus is spread across various business lines and priorities. This may be particularly detrimental in industries exposed to rapid changes in technology and customer preferences, where being nimble is a competitive advantage. Also, some investors may prefer a smaller, more transparent firm to a large and complex firm. With distinct business units, investors can invest in the units whose risk profile is tailored to their preferences. In the same vein, with business units that trade separately, boards of directors can use market-based compensation that is directly tied to the unit's stock performance to provide appropriately aligned performance-based incentives to executives.

Figure 1

Size considerations in the current environment	
Bigger (consolidation)	Smaller (spin-off)
<ul style="list-style-type: none">• Revenue and cost synergies• Credit markets have become sensitive to size and ratings<ul style="list-style-type: none">> Access has become a key consideration> Both public and bank debt> Credit ratings are highly correlated with size• Diversification of revenues can lower possibility of credit event<ul style="list-style-type: none">> Diversifying acquisitions are more valuable (from a credit quality perspective)> Public equity markets are focused on liquidity• Increased investor awareness<ul style="list-style-type: none">> More equity research coverage/investor focus because of scale> Inclusion in major indices	<ul style="list-style-type: none">• Increase transparency of lines of business<ul style="list-style-type: none">> Particularly valued by investors in volatile markets• Optimize business and financial strategy• Increase management focus• Tailored risk profile<ul style="list-style-type: none">> Allows investors to optimize their portfolio by choosing which part of the combined business they would like to have exposure to• Regulated vs. unregulated entity<ul style="list-style-type: none">> More flexible leverage structure• More attractive acquisition currency• Use performance-based compensation to enhance managers' incentives
<p>Source: J.P. Morgan Note: A spin-off should be benchmarked against a potential cash divestiture (assuming buyers exist) when analyzing deconsolidation transactions.</p>	
Less certain capital market access and a higher cost of capital have increased the value of consolidation in today's environment. Yet, in some cases where the value of synergies is limited, firms may consider spin-offs	

The credit crisis has accentuated some of the challenges associated with mergers. Limited capital market access, uncertain economic outlook, valuation differences, friction costs, and execution risk have limited the number of executed deals since the beginning of the crisis (figure 2). Yet, we will show later in the report that the credit benefits associated with larger size have, on average, become more compelling relative to the benefits of deconsolidation as a result of the credit crisis.

Figure 2

M&A considerations in today’s environment	
Credit market challenges	> While credit markets have been challenging, recent activity shows that debt-financed acquisitions can be executed, especially for higher-credit-quality companies
Concerns about the economy	> While debt financing may be available, acquirors are reluctant to lever up for acquisitions, preferring more downside protection
Valuation differences	> Target firms have not yet fully digested the new (lower) valuation environment, while acquirors believe that valuation may continue to decline
Friction costs	> Some transactions trigger change in control clauses, thereby forcing firms to renegotiate their bank deals or acquirors to take out target firm bondholders at par (a value that is much higher than the heavily discounted values the debt is trading at prior to the acquisition)
Execution risk	> The increased uncertainty and risks around an M&A transaction, in an already uncertain capital markets environment, may prevent firms from accessing the capital markets while deal closing is pending
Source: J.P. Morgan	

EXECUTIVE TAKEAWAY

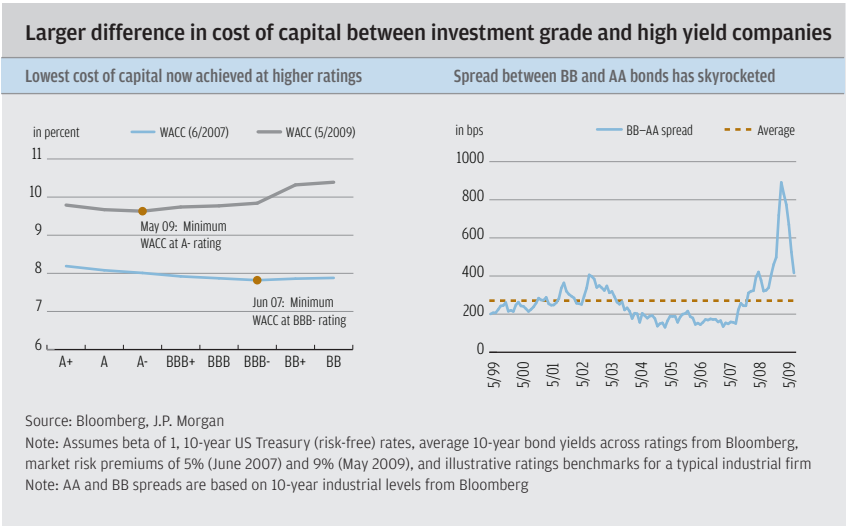
At any point in time, every firm faces powerful opposing forces either toward larger size and consolidation or toward smaller size and deconsolidation. The relative strength of these forces depends on the firm’s organization, its industry, and the broader currents in the economy, including capital market access and the regulatory and political environment. In today’s credit-challenged environment, a force driving firms to consolidation, namely the impact of financial synergies, has become relatively more important.

3. Identifying and quantifying financial synergies

How do we measure financial synergies? What are the different components of financial synergies? How has the relative value of these advantages evolved as a result of the current financial crisis? Does an improved credit profile uniformly lead to financial synergies? In this section, we discuss the various components of financial synergies and how they have become more important.

Cost of capital: The overall cost of capital is the weighted average of the cost of debt (on an after-tax basis, taking into account the corporate tax shield on debt) and the cost of equity. To evaluate where the cost of capital is minimized, we estimate the cost of capital of a firm at different capital structures, corresponding to different ratings levels. This estimation is called the cost of capital curve (in the left panel in the figure below). This curve captures the increasing cost of debt and equity as a firm levers up (and as its ratings decline) and the impact of the favorable tax treatment of debt. For many years, the cost of capital curve has been minimized toward the low end of the BBB rating and the high end of the BB rating. This was the case in June 2007, as evidenced in the figure below.

Figure 3



Since the crisis started, and in particular since the fall of 2008, the difference in the cost of debt for high grade (e.g., AA) and non-investment grade (e.g., BB) firms ballooned to about three times the historical average (see the right panel of the above figure). Even though this differential has declined subsequent to its peak in the fall of 2008, it is still wider than the historical average, implying that the cost of capital is now minimized around an A rating. The steepness of the curve around the BB level suggests that firms can achieve a substantial cost of capital benefit if they can be upgraded from non-investment grade ratings. In the context of two firms that merge and achieve a better credit quality as a result, we call this benefit the **“cost of capital financial synergy.”** There is also some evidence that a lower cost of equity is associated with larger firms. However, to be conservative, we do not incorporate this cost of capital benefit into our cost of capital financial synergy estimates.

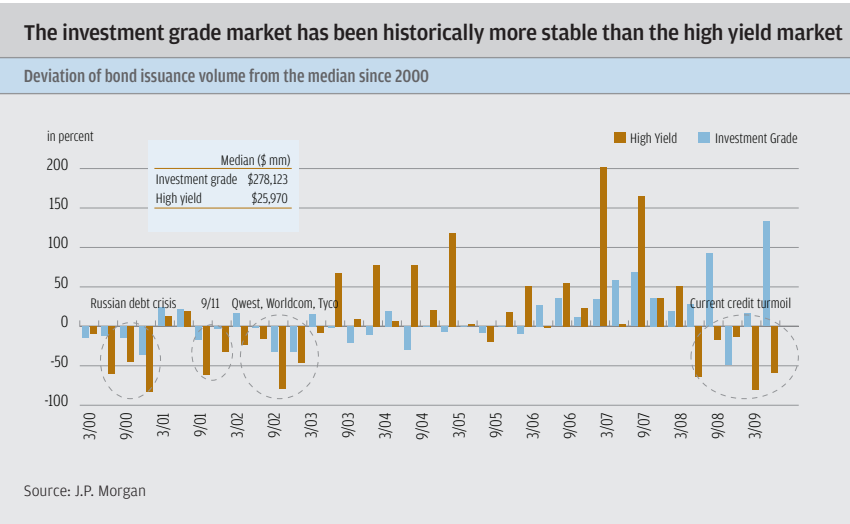
How long will the differential in debt spreads across various rating categories persist? The difference in BB-AA spreads has declined significantly over the last three months, in turn diminishing the benefit of the cost of capital financial synergy. This is a consideration for M&A transactions, where the time between signing and closing can extend for many months. Despite the recent tightening, it is unlikely that non-investment grade credit spreads will return to their pre-crisis levels in the near to medium term. More importantly, the current business cycle has highlighted how the cost of capital financial synergies can be extremely large during credit crises.

The rating where the cost of capital is minimized is not necessarily the optimal capital structure. In many cases, a less levered capital structure produces benefits beyond the cost of capital. These benefits include improved access to capital markets, improved use of the tax shields, financial flexibility, and downside protection.

Tax shields: Most tax jurisdictions allow corporations to receive a tax deduction for payments to debt holders and not on payments to shareholders, thereby creating a tax shield on debt for the corporation. The weighted average cost of capital (WACC) calculation includes debt payments on an after-tax basis to incorporate this tax benefit. In practice, however, many firms do not capture the full tax benefit immediately. For example, if firms incur significant operating losses over time, they may have NOLs (net operating losses) and hence no current taxable income to shelter with the interest payments on debt. This is relatively common for highly levered firms with volatile income.

If two firms merge, they will likely be less volatile and hence be more likely able to capture the full value of the tax shield on debt. To estimate this synergy we (1) assume that firms lose their tax shield when they default; (2) rely on the historical default probabilities associated with the various ratings categories; and (3) calculate how a merger may improve the credit profile and reduce the likelihood of default. These factors together allow us to gauge how a combination increases the likelihood of benefiting from debt tax shields. We are not quantifying the benefit a combination may have on a firm’s ability to use NOLs more efficiently. This benefit may be limited, however, in a combination because of certain tax rules. We call this increase in the value of the tax shield the **“tax shield financial synergy.”**

Figure 4



Certainty of capital market access: As we have painfully experienced during the last 12 months, capital markets are not always open. To gauge the differences in capital market access between the investment grade and non-investment grade market, we compare the deviations from the median issuance volume for both markets in figure 4. Strikingly, the non-investment grade market experienced several quarters where issuance volume was down about 80% from the median issuance volume (for example, around the Russian debt crisis, around the governance crises of 2002, and more recently in the fall of 2008). The investment grade market on the other hand did not experience such dramatic contractions.

While figure 4 focuses on the investment grade vs. non-investment grade distinction, last fall we experienced a similar phenomenon between A and BBB firms. In general, higher-rated issuers are more likely to be able to access debt markets than lower-rated issuers. The ability to access capital markets with greater certainty has value. From a defensive perspective, issuers in the higher ratings categories are exposed to less refinancing risk, as they are more likely able to replace their maturing debt. From an offensive perspective, issuers in the higher ratings categories are able to tap the debt markets with greater predictability to capitalize on investment or M&A opportunities as they arise. We call this benefit the **“financial flexibility synergy.”**

We quantify the financial flexibility synergy by valuing the benefit of excess debt capacity (maximum debt less current debt) and the probability that the investment grade or high yield market would be open when this capacity is needed. To value excess debt capacity, we assume firms earn 5% excess returns on this capital by virtue of having the ability to issue debt under their ratings category to respond to defensive or offensive situations. We then evaluate the likelihood the market for a particular rating category would be open at the time the capital is needed. To estimate this probability, we analyze issuance volumes in the investment grade market and high yield market since 2000 in light of the business cycles during that time. This allows us to estimate probabilities that the market would be open for

Figure 5

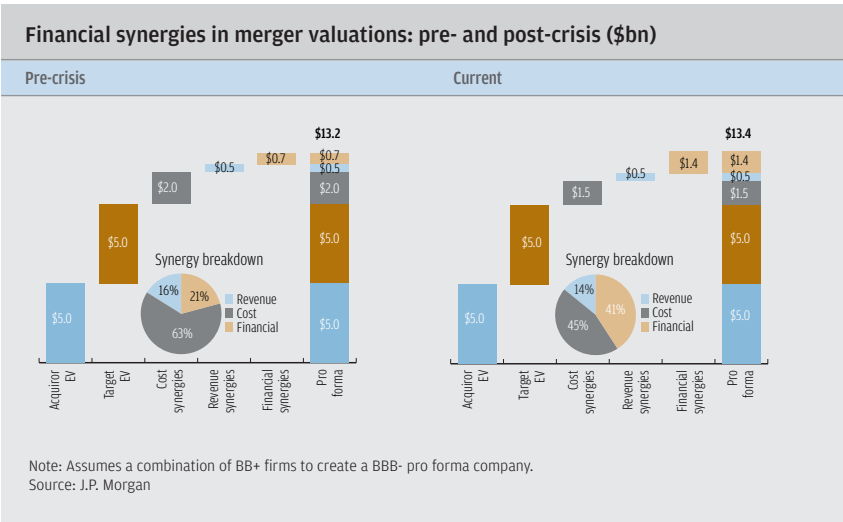
Financial synergies are not limited to reductions in the cost of capital	
Sources of financial synergies	
Cost of capital	<ul style="list-style-type: none">> Tighter debt spreads and lower cost of capital correlated with greater size and stronger credit rating> Most valuable for a BB to BBB- rating change where the WACC curve is steep
Tax shield	<ul style="list-style-type: none">> Tax shield more likely to be realized from larger taxable income base of combined company> Combined company's reduced risk of default further increases value of tax shield
Certainty of access	<ul style="list-style-type: none">> Ability to source capital from multiple markets reduces risk of liquidity crunch> Investment grade market more resilient in challenging business cycles> Spreads less volatile for more highly rated companies
Commercial paper access	<ul style="list-style-type: none">> Commercial paper market only accessible to investment grade firms, with access increasing as credit rating strengthens> Provides relatively less expensive short-term financing for working capital needs> Spread between Tier I and Tier II CP still remains elevated above historical averages
Bank market access	<ul style="list-style-type: none">> Banks in this environment more willing to lend to large, diversified, highly rated companies> Source of less expensive term financing> Bank market access often a prerequisite for commercial paper access due to need for backstop credit facilities
Source: J.P. Morgan	

issuers of various ratings categories in normal and constrained market environments. A combination that enhances scale and size and reduces business risk will likely afford a firm increased debt capacity, while ratings improvements may help the combined company access more stable debt markets, thereby creating financial flexibility synergies.

Other financial synergies: Financial synergies also include the benefits of improved bank market access for large firms and/or the benefits of more certain access to less expensive commercial paper (CP) for firms that are Tier I CP issuers (vs. Tier II CP issuers). These synergies are very material for firms close to these thresholds, but we do not quantify them.

An example: When corporate development experts estimate the value creation from a merger, they typically first value the target firm without taking into account synergies. Next, they estimate the value of cost and revenue synergies that can be achieved as a result of the merger (the merger gains). Cost synergies are typically larger (and less risky) than revenue synergies. For example, in the figure below we estimate the cost synergies of two \$5bn firms that are considering a merger of equals at \$2bn, or about 20% of the pre-merger value of the combined firm. In contrast, we estimate revenue synergies at about a quarter of the cost synergies, or about \$0.5bn. There is of course significant variation in these estimates, depending on the industry and firm-specific circumstances. Pre-crisis, we also estimate that the combination of these two firms would add about \$0.7bn of financial synergies. This is a relatively small and often forgotten component of merger gains, at about 21% of total synergies and about 7% of the pre-merger firm value.

Figure 6



The importance of financial synergies has, however, increased materially since the summer of 2007. For the same combination, financial synergies are now worth about \$1.4bn, or about 41% of total synergies. Note that we also assume in our example that, based on recent experience, cost synergies have declined from 20% to 15% of the pre-merger value (reflecting the aggressive cost-cutting many firms have already undertaken to preserve liquidity during this recession).

At which point do financial synergies matter more? Financial synergies are particularly relevant when a combination allows the combined firm or one of the two firms to move to a better rating category without affecting the rating of the other firm (or, alternatively, when it allows one of the two firms to avoid a ratings downgrade).

For illustrative purposes, we compare the magnitude of these synergies across various ratings categories. For firms migrating (or avoiding downgrade) from an A to an AA rating, the financial synergies we quantify are about 5% to 6% of the combined pre-merger value (though the non-quantifiable bank and CP market benefit may still be significant). Most of this benefit comes from the excess debt capacity an AA firm has, since it may lever itself to the point of becoming a single A firm while still maintaining an optimal capital structure based on the current shape of the cost of capital curve. This benefit is somewhat offset by negative financial synergies that moving from an A to AA capital structure generates. For firms migrating (or avoiding downgrade) from a BB to a BBB rating, the financial synergies we quantify are very material at 13% to 14% of the combined pre-merger value (with the non-quantifiable synergies conceivably further increasing the synergy value). The steepness of the cost of capital curve in the BB to BBB range and the wider disparity in certainty of access between the investment and non-investment grade markets helps explain the significant financial synergies associated with a company moving from BB to BBB. These benefits are less pronounced for firms that are already investment grade and are then upgraded to a stronger rating.

Our analysis does not explicitly reflect the probability of a ratings outcome being achieved. For instance, it is likely more difficult for a firm to achieve an upgrade from BBB to A or from A to AA based solely on its larger size and scale. Other industry- and business-specific variables likely have a greater influence as one migrates further up the ratings spectrum.

Figure 7

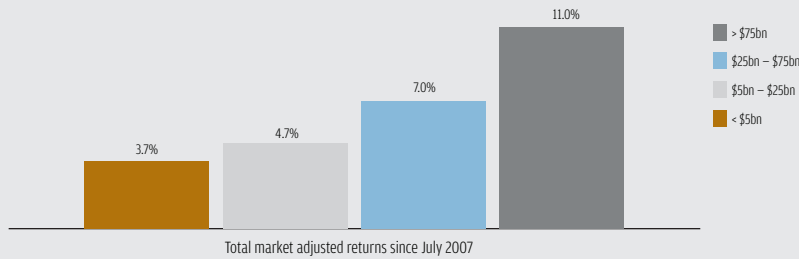
Financial synergy benefits are largest for companies becoming investment grade			
Decomposition of financial synergies (as % of total combined enterprise value)			
	A to AA	BBB to A	BB to BBB
+ Cost of capital benefit	(2%)	1%-2%	7%-8%
+ Tax shield increase	0%	0%-1%	1%
+ Financial flexibility	7%-8%	4%	5%
Total	5%-6%	5%-7%	13%-14%
Source: J.P. Morgan			
Note: Cost of capital benefit does not reflect only value benefit associated with a lower cost of equity as a result of a combination.			

The evidence: In less challenged credit markets, which we experienced in 2005 to mid-2007, the differential in the cost of debt between high and low credit ratings was not very large. As a result, small firms (with weaker ratings) were not at a cost of capital disadvantage relative to large firms (with better ratings). Furthermore, the benefits of financial flexibility were perceived to be quite small. With the onset of the credit crisis, non-investment grade (often smaller) firms suffered materially more from the deteriorating credit conditions relative to investment grade (larger) firms. This phenomenon is demonstrated in figure 8, where we show how smaller firms meaningfully underperformed larger firms since the beginning of the crisis.

Figure 8

Big firms outperformed smaller firms since the beginning of the crisis

Market capitalization (July 2007)



Source: Bloomberg, J.P. Morgan; data as of 5/22/09
Note: Excludes financial firms

The cost of capital and other financial flexibility differences between large and small firms became very pronounced since the start of the current credit crisis, leading to material performance differences between large and small firms

EXECUTIVE TAKEAWAY

The benefits of a stronger rating from a merger include financial flexibility, potentially lower cost of capital, more efficient use of tax shields, downside protection, and better access to the CP and bank markets. We estimate the value of the cost of capital, tax shields, and financial flexibility synergies, and find (1) that financial synergies are more important now than they were pre-crisis, and (2) that financial synergies are particularly material for firms that achieve a ratings improvement (or avoid a ratings downgrade) from investment grade to non-investment grade.

4. How do rising financial synergies affect M&A decision-making?

Financial synergies have gained in importance. How will this affect day-to-day M&A decision-making? Which type of M&A trends should become stronger as a result of rising financial synergies?

Figure 9

The future M&A landscape		
Prediction	Rationale	Considerations
Mergers of equals	<ul style="list-style-type: none">> Enhance scale and scope> Little to no premium required	<ul style="list-style-type: none">> Friction on debt breakage costs, if any> Governance
Big buying small	<ul style="list-style-type: none">> Enhance scale and scope> Availability of distressed assets	<ul style="list-style-type: none">> Friction on debt breakage costs, if any> Premium required> Impact on overall capital structure
Cost of capital advantage for Strategics	<ul style="list-style-type: none">> Cost of capital more expensive for Sponsors> Strategics better able to compete for assets	<ul style="list-style-type: none">> Significant amount of committed equity still held by Sponsors
PE portfolio firms delever via M&A	<ul style="list-style-type: none">> Merger with less levered peers	<ul style="list-style-type: none">> Valuation of sponsor portfolio companies> Covenants may inhibit transactions
Minority buy-ins	<ul style="list-style-type: none">> Gain unfettered access to cash flows> Eliminate credit subsidy from parent to minority shareholders	<ul style="list-style-type: none">> Market reaction to reversal of strategy> Difficult special committee process (premium required)> Potential need for incremental capital raise
Foreign acquirors may reap tax synergies	<ul style="list-style-type: none">> Foreign acquirors may be able to realize tax synergies	<ul style="list-style-type: none">> Legislative outlook
Standalone spin-offs decrease	<ul style="list-style-type: none">> Standalone spin-offs only for compelling business purpose	<ul style="list-style-type: none">> Feasibility and sustainability of SpinCo capital structure
Source: J.P. Morgan		

Mergers of equals: Firms of about equal size may decide to merge to form a larger entity that is now more diversified and has better scale characteristics, a larger market share, and enhanced return and profitability characteristics. Taken together, these factors may lead to better average rating and hence improved capital market characteristics. As a result, mergers of equals have the ability to create significant value through financial synergies, particularly in cases that could lead to rating improvements from the single B to the BB range, or from non-investment grade to investment grade.

Big firms buying small ones: Large firms in a given industry have a cost of capital and capital access advantage. In the current market, this advantage is associated with sizable valuation differences, or, in M&A terminology, advantageous exchange ratios. Large firms can use this valuation advantage to absorb and integrate smaller firms with less dilution via stock acquisitions.

Cost of capital advantage for strategic firms: Prior to the beginning of the crisis in the summer of 2007, strategic buyers were able to achieve synergies where private equity firms could not. Yet, they could not compete with private equity firms from a cost of capital perspective. Private equity firms applied a lot of leverage on the target firm, targeting the same return on equity regardless of leverage, which resulted in a lower cost of capital (estimated; it is debatable whether the cost of capital was truly lower). As a result, strategic buyers tended to be outbid by financial sponsors in many auctions. The dramatic deterioration in non-investment grade markets, and a market cost of equity that is now clearly increasing at higher leverage levels, means that strategic buyers have regained the valuation advantage.

Private equity portfolio firms delever via M&A: Private equity portfolio companies are in many cases over-levered to effectively grow and compete in today's environment. Merging with other private equity portfolio firms or public firms may allow them to achieve more competitive capital structures. These improved capital structures may then, in turn, enhance the likelihood that these firms can access the public markets in the future, thereby offering a more attractive exit mechanism to the private equity owners.

Minority buy-ins: Firms that have carved out units, but retained significant share-ownership in the carved entity, may have had plans to ultimately spin off the entity entirely, or to maintain some type of long-term relationship while allowing the spun-off entity to maintain its own independent capital structure. As a result of the current crisis, the balance between financial synergies and operational dis-synergies has evolved. Consequently, parent companies have determined that the capital structure of the spun-off entity may not be competitive without parent support. As a result, buying out minority shareholders and re-consolidating the entity may maximize shareholder value.

Financial synergies may make non-U.S. acquirors more competitive relative to U.S. acquirors: In an acquisition of a U.S. corporation with significant offshore operations, the tax position of the target can often be a source of synergies or costs depending on the domicile of the non-U.S. acquiror. Foreign acquirors have certain advantages over U.S. acquirors that allow them to (1) optimize the taxation of a U.S. target's future foreign earnings, (2) access the unrepatriated earnings of a target with less tax leakage, and (3) use intercompany debt to increase the value of the U.S. tax shield without impacting the overall cost of capital of the pro forma company. Under recent proposed changes to the tax code, U.S. acquirors may become further disadvantaged vis-à-vis foreign acquirors, further limiting their ability to compete for U.S. assets.

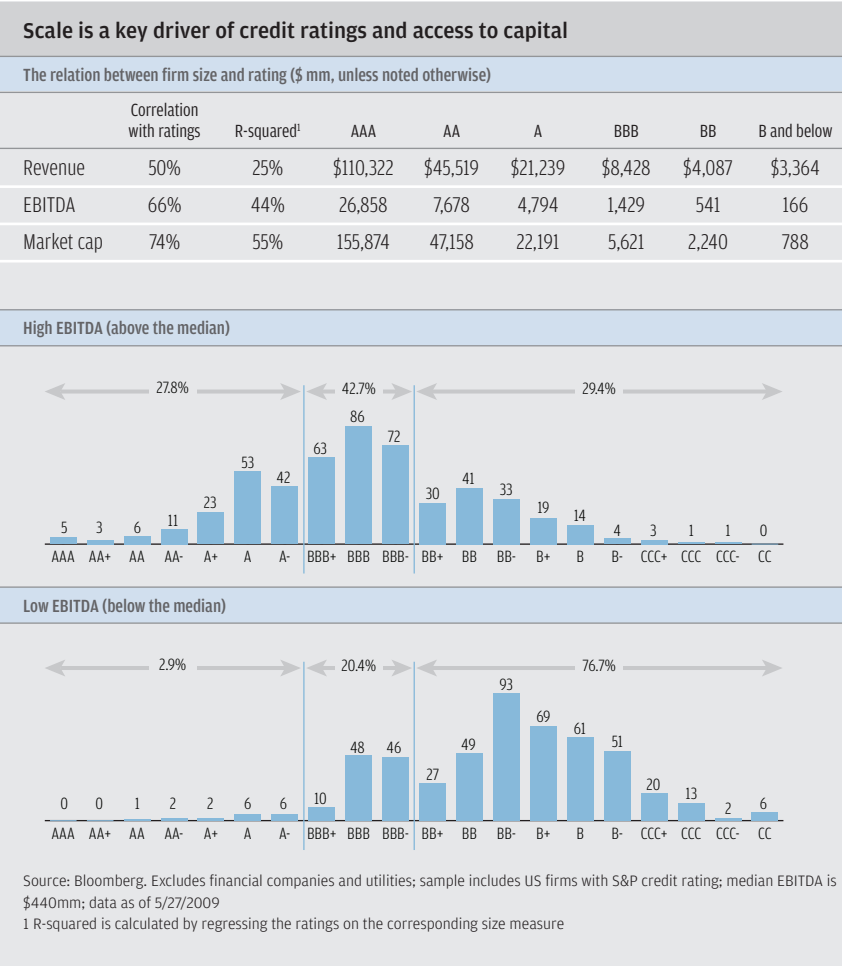
Fewer spin-offs: Firms may decide that while a spin-off may make sense from an operational perspective, the resulting entities, and in particular the smaller spun-off company, may not have a competitive cost of capital. In addition, it may not be able to access capital markets in a sustainable manner and may not be able to obtain a bank deal in sufficient size to achieve its liquidity objectives. As the tradeoff between the benefits of spinning off and the benefits of consolidation has shifted, fewer firms may announce spin-offs, especially of smaller units. We have dedicated the last section to the specific issue of spin-offs, and why, despite the above, they are still well received when announced in today's market.

5. Scale, size, diversity, and market share as drivers of credit quality

Firms evaluating the impact of corporate decisions on their credit rating are rightfully focused on leverage, measured, for example, by Debt to EBITDA (earnings before interest, taxes, depreciation, and amortization), as a driver of credit ratings they have immediate control over. Firms can, for example, issue equity and retire debt to reduce leverage; or, alternatively, issue debt to buy back equity to increase leverage. It is not as easy, on the other hand, to alter some of the other variables rating agencies consider. These other variables include profitability, barriers to entry, market share, business risk, cyclical, geographic and product diversity, and scale. Many of these variables are a function of the business the company is in. Hence, in these cases, only a merger or spin-off can materially and quickly affect these non-leverage ratings criteria.

The size of a firm tends to be highly correlated with such non-leverage metrics as diversity, barriers to entry, market share, etc. We demonstrate the strength of the relationship between size and ratings in figure 10. For example, EBITDA has a correlation of 66% with ratings (significantly higher than the correlation with leverage). If we sort

Figure 10



firms with an S&P rating into ratings categories from AAA to B and below, we see that the average EBITDA declines as one moves down the ratings spectrum, from about \$27bn in the AAA category to \$166mm in the B and below category. There is also a similar strong relationship with such other proxies for size as revenue and equity market capitalization.

Further, by separating the firms by high and low EBITDA (above and below the median), we see that firms with an EBITDA above the median tend to be rated in the BBB ratings range, whereas firms with an EBITDA below the median tend to be in the BB to single B ratings range. This relation between size and ratings is, however, partly a function of the industry one operates within. A less volatile industry (e.g., regulated utilities) may have investment grade companies that are comparatively smaller than investment grade companies in more volatile industries (e.g., energy, technology, biotechnology, mining, etc). As a result, additional scale may have a greater effect on risk reduction and credit quality in a volatile or cyclical industry.

EXECUTIVE TAKEAWAY

Aside from leverage, rating agencies also consider size and scale, diversity, market share, barriers to entry, and profitability as determinants of ratings. These metrics tend to be highly correlated to a firm's size. Generally, firms cannot rapidly change these ratings characteristics except through mergers, acquisitions, spin-offs, or divestitures.

6. Spin-offs: getting smaller in a smart way can still create value

The growing importance of financial synergies suggests, at the broadest level, that firms benefit more from size and scale in today’s environment than they did before. Consistent with this intuition, the number of spin-off announcements has declined significantly since the start of the crisis. For example, the number of announced spin-offs declined by 57% from the pre-crisis environment (June 2005 to June 2007) to the current environment (June 2007 to date). Moreover, 24 of the spin-offs announced in the pre-crisis environment had an announced deal value greater than \$1 billion, as compared with only eight deals in the current environment. In addition, a number of firms that have announced spin-offs have subsequently canceled or delayed the spin-off plans because of ratings pressures, financial friction costs, or the inability to access bank and/or capital markets. In the past, some spin-offs involved leveraging the spun-off entity significantly such that the parent would be less levered and more financially flexible. This type of spin-off is particularly difficult to execute in the current environment, where credit and bank markets are less receptive to high leverage levels at the spun-off entity.

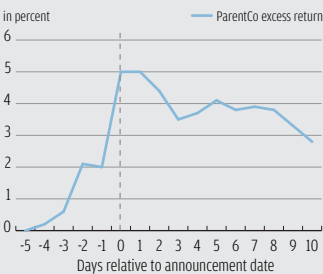
In some instances, however, firms continue to create more value by pruning to grow. When two entities do not fit together (anymore), when there are little to no cost and revenue synergies, and/or when the combined firm cannot achieve financial synergies, then spin-offs can create substantial value. Given that the bulk of the financial synergies are created in combinations that lead to an investment grade profile, the amount of financial synergies lost is small when the two entities that result from a spin-off still maintain a solid investment grade profile. The evidence (see figure below) shows that firms announcing a spin-off after July 1, 2007 earned about 5% excess returns when a spin-off was announced. The excess returns decline a bit but persist 10 days following the announcement.

Figure 11

Investors have responded positively to spin-off announcements since the beginning of the crisis

Market reaction to spin-off announcements since July 2007

- When should companies consider spin-offs?
 - > Business and growth profiles require separate strategic plans to maximize overall value
 - > Both entities can maintain access to capital at a reasonable cost
 - > Transparency issues
 - > Performance measurement and managerial incentives are key



Source: Bloomberg, J.P. Morgan; data as of 5/27/09
Note: Includes 21 completed spin-offs with deal value of at least \$50mm that were announced after 7/1/07

EXECUTIVE TAKEAWAY

Financial synergies have become more important on a relative basis. As a result, fewer firms are considering spin-offs. In some cases, however, the benefits of financial synergies are still smaller than the benefits of a spin-off. Spin-offs announced since the beginning of the crisis have been well received by equity investors.

NOTES:

J.P. Morgan

J.P.Morgan