

## Todd Zenger, STRAT 6070, 7.1 - Growth, Unique Synergies, and Value Creation Through Acquisitions

One of the most important topics in corporate strategy is mergers and acquisitions. This is an important pathway through which firms seek to create value, seek to sustain their growth over time and we want to focus a little bit in this lecture on how firms can effectively participate in markets for other corporations, that is an acquisition markets and create value for the enterprise that they are running or operating. We've talked about theories clearly, theory is this tool that one should be using to guide this process of acquisitions. That this theory is, as we've talked about, being used to assemble the firm, make decisions about which of these assets, opportunities here, the assets our entire businesses a firm should assemble. The firm may already exist in some particular form and it's a question of what other assets should a firm add to that mix, and how does one create value in the process? The most simple logic in terms of how one creates value in markets, that is, in markets for other firms, is to buy them when they're cheap and sell them when they're expensive, buy low, sell high strategy. In some sense then the question becomes, how is it that a firm can consistently discover bargains in acquisition markets? How is it that one can look out at a bunch of firms that might be available and accessible to you in this acquisition market and come away with purchasing firms that are worth more to you than the price that you're having to pay in the marketplace. Note that while we are focused here primarily, really exclusively on acquisitions, that the same logic really applies to the acquisition of all kinds of other resources, that is, the firm is being composed by making purchasing decisions about activities and assets available in markets. And how is it that one can come away with creating value? We're going to focus particularly on the market for other firms, a pathway through which you're trying to create value. Again, the key question is, how does a firm predictably acquire assets, resources of any types? Here we're going to focus on entire firms to pursue their strategic theories and really get those assets and resources at prices below their value in use, that is, below the value that they are going to create for you once you bring them inside your firm and deploy them in whatever way you strategically envision. This theory, if well crafted, is the tool that should help you see and identify these bargains. If we step back and ask for a minute, what is it that causes some acquisitions to be successful and others to be outright failures? We did this in an interactive way based on your own experience with acquisitions, I think we come up with a list that looks like this. The obvious answer is, we've failed to create value from acquisitions when we simply overpay for them. That is, anything looks good if we can get it on the cheap. Doesn't matter about fit, if it's cheap enough, we can presumably create value with it. At a very basic level, this concept of overpayment comes into play. Now, why might you overpay? Very often it's because you incorrectly evaluate the synergies that you think you can effectuate in acquiring this target. So it's overestimating those synergies that causes failure of acquisitions. Then the third common response would be, well, we underestimated the costs would be incurred as we tried to integrate this acquisition target, which is also very commonplace. You may correctly estimate the synergies, but you underestimate the true costs associated with bringing this thing into your firm dealing with the cultural issues or incentive issues or whatever it might be, you underestimate those costs associated with integration. What causes acquisitions to be successful? Well, sometimes it's just sheer luck you buy something, don't anticipate the value that actually ends up emerging and this ends up being the primary source of your success, or it is some unique foresight or vision that you have about the value of the asset, this target acquisition that others don't see. In other words, you got to find it and buy it on the cheap relative to what others see in the way of value there and so somehow you have to have a capacity to see value that others don't see, or maybe there's nothing unique about this vision or theory that you have, but you happen to possess assets that are complementary with this target that no one else has access to and as a consequence of

this, you can pay a premium price for this target above what others are willing to pay. and still come away with value because you have synergistic value with that target that others simply don't have access to. It's either luck, it's some unique view and vision about value that others don't see, even though they may have access to pursuing that as well but they don't see what you see or it's, they see what you see, but they don't have access to the resources that you have access to, that are complimentary to this target. Again, just to reiterate this last point, either you see value that others could obtain, but don't see, better theory, or people see the value of your theory. They recognize what it is, but you possess these complimentary assets. While it's outset, for instance, the Disney theory was probably novel at this point, everybody understands the Disney theory, but they still can't execute on it as well as Disney because they don't have access to the same character set. They don't have access to the same reputation and branding of family friendly entertainment and as a consequence, Disney can make acquisitions for acts assets, acquire them, pay a fair market price, they will outbid their competitors and still walk away with value because they have access to resources that their competitors don't have access to. To understand this logic a little more clearly, let's talk for a minute about the way auctions work. Many of you have been participants in auctions. Most of you have presumably won an auction. It may have been a charity auction or may have been that you succeeded in purchasing a home and it essentially was an auction in which you are the highest bidder. There is this issue, which is that whenever you win an auction, there's this sick feeling that comes over you and that sick feeling is often, there was literally no one else out there in the world that this auction circumscribed, that felt that this asset that I just won in this auction was worth what I just paid for it. That's a winner's curse, "Oh my gosh, I overpaid it for this object. No one else thought it was worth what I just paid." This plays out in acquisition markets as well. These are auctions. We think about an auction in which there is some true value, some clairvoyant actor can see the future prospects for this acquisition target that you're going to go pursue. We say that's the true value and there's going to be a distribution of valuations that different bidders will place on this target, reflective of these blue lines, the firm to the far right that sees this thing as most valuable is going to bid the highest, and win this auction, but be stuck with this winner's curse, potentially. In this case, overbidding relative to the true value by the very most, relative to competitors. If you think about this more numerically, if there's an auction for a company that's playing out and we know that this target is worth 14 million dollars. Bidders have all kinds of distinct valuations of this thing. There's uncertainty about what its true value is. Bidder 1 doesn't think it's nearly worth 14, it thinks it's worth 12, bidder 2 thinks it's actually above 14, thinks it's worth 15 in error. Bidder 3 gets it exactly right. Bidder 4 errantly thinks it's worth two million more than it is, at 16 million bidder 5 thinks it's worth three more million than it really is, at 17 million bidder 5 is going to win the auction and overpay somewhere between two and three million dollars. At 16 million dollars bidder 4 is sort of indifferent, just above that, it's going to drop out. So at some point between two and three million over its true value of 14, bidder 5 wins this auction and of course overpays and destroys value. Now, the problem with that simplistic scenario I just articulated is that, these bidders are going to have different valuations that aren't just a reflection of uncertainty and guessing as to what the value is. Those differences in valuation are partly going to reflect the unique synergies that they believe they have with this target or they actually have. So let's set aside uncertainty here for a minute and just talk about synergies and let's assume that these bidders are correctly estimating the true value of the target, as well as the synergies that they have with this target. Let's see how this auction plays out. So the value of the target we know is independently worth 14 million and everybody sees that and knows that, there is no uncertainty here. These bidders had different assessments of the synergies that they have with this target and the value

of those synergies we could think about as being the value of my company combined with this target relative to the independent values of these companies. That is, if they stay independent, what's the additive value of those two separate entities? The synergies are that difference. So A plus B versus AB combined is how much more is AB worth? Let's assume there are five bidders with varying levels of synergies and bidder A looks at this target and says, "You know what, we can create two additional million dollars worth of value with this target because we have some distribution that we can share and we can economize on distribution. That's going to add another two million dollars to the target." Bidder B says, "Not only do we have that shared distribution, but we have some R and D that we think we can exploit through this new target and that's going to add an additional two million dollars for a total of four million dollars." Bidder C says, "We've got both of those things. Plus we think we are superior in our management skills and that's going to add an additional one million for a total of five million." Bidder D says, "We've got all three of those things, plus we have a brand name that we think will be enormously valuable to this new target that they can leverage and that's going to infuse another million dollars for a total of six million dollars." Finally, bidder E has the most synergies with this target that at least it's perception is and they have all those things, including the brand name, but also some idle production capacity that they think they can use to enhance the output of target and the cumulative amount of synergies they have with the target of seven million dollars. So for bidder E, this target is worth its standalone price of 14 million plus the synergies of seven million dollars or a total of 21 million dollars. Bidder D is 20, C is 19, and so forth moving downward. So the auction occurs and at just above 20 million dollars, six million dollars in synergies plus the 14 million dollars or 20 at just above that, say 20.1, everybody drops out. Bidder E is going to win this auction because to bidder E, the target's worth 21 million dollars. What's going to happen? Well, the acquirer here, Bidder E, is going to enjoy something just less than one million dollars in synergy value that it's able to retain and acquire. The other more than 6 million dollars in synergies that it has with the target is going to flow where? That's going to flow to the shareholders of the target. The acquirer only gets something less than the one million dollars. Conceptually we can think about that as acquirer is only able to retain its unique synergies with this target asset that it's pursuing. Let's just rehearse this visually for a minute. We've got five bidders. Bidder 1 with this target has a certain element of synergies here reflected in that chunk. Bidder 2 has not only what bidder 1 has, but an increment here. Bidder 3 has everything that Bidder 2 has plus its own unique increment but Bidder 4 has though everything that Bidder 3 has plus an addition here. Bidder 5 though, has everything that all of these other bidders has, and therefore, it's the only firm and only bidder that has unique synergies with this target. What happens then is the auction plays out. All of these synergies that are shared by one other bidder are captured by the target and the only synergies that are captured by the acquirer are these unique synergies that the highest bidder has with the target. So one of the things we've done here in this graphic is model this in which the synergies are additive across these different bidders. It doesn't need to be that way. In other words, these different actors can have very different synergies with this target but ultimately, what matters for the amount of value that the winning acquirer is able to keep is the difference in the dollar magnitude of synergies that the acquirer has relative to the synergies of the next closest bidder in terms of their synergies. So they don't need to be nicely additive as I've shown in this diagram. They can be all over the map. So what values the acquirer keep in a certain world, a world of correct valuations. Only the value of those synergies with a target that are unique and not shared by other bidders or in some cases it's potential bidders. In other words, sometimes you see in these auctions for firms, there's really only one bidder and that's because the bidder that has the most synergies with the target is playing in the auction,

everybody else would join, but they already see that this bidder that is bidding has the most synergies with it. So they're silent. If for instance, that potential acquirer bids a price that is well below the synergies that somebody else has with that target, then maybe they jump in and participate. So in that sense, they're potential bidders, they're silent bidders, that don't play because the auction price is already well above what they can successfully compete in the auction and come away with the value. Unique synergies again, are the value synergies in excess of synergies of the next highest valuing bidder. Now, what if the world is uncertain? That is, what if we're making mistakes in our assessment of the synergies? Which is certainly the case, right? I mean, this is not an exact science as to what the synergies are, as you have or will talk about in case discussion is relative to this. If this is the case, then only the value of unique synergies beyond the perceived synergies of the next highest value in bidder are the synergies that you're able to walk away with. So what does that mean? It means that if you're bidding against a crazy other bidder who dramatically overestimates the synergies that they have with the target. Then even though you have more synergies with the target than they do, they think they have just simply overestimated the synergies that they have with the target and therefore, you got to walk away because there's no way, even though your synergies in actuality are the greatest, there's no way you could play in that auction given their distorted perception to the synergies that they have and actually come away with value creation. One of the important implications of the logic that we've just stepped through is that it often can make a whole lot of sense to be a seller rather than a buyer because as we saw, the buyer is only able to capture unique synergies. The seller is able to capture all of the common synergies, one might call them, that is synergies that anybody has that's matched by some other player in the auction. The target is able to capture all of that synergy. So let me tell you a story where this played out and we see this play all the time, this is a nice illustration of that. So in the 1990s, as the Berlin Wall came down, as that decade turned from the 80s to the 90s, it became very clear that military spending was going to go down. The fall of the Soviet empire occurs as the wall collapses in 1989, and indeed we see that forecast was accurate, that as you move from '88 to '91, '94, '97, military spending declines. It eventually rebounds, but there's this period of rather precipitous decline in military spending that was predictable. In the 1989-1990 time period. This created a strategic dilemma to the actors, the military, contractors of the time. How do we play this corporate strategy game? What do we do? The choice was do we become a buyer and help consolidate this industry or do we become a seller that is, allow our assets to be acquired by others that are consolidating this industry. One of the key players in that industry at the time, and actually they still are, a player in the industry was General Dynamics. They made a strategic decision that they would be a seller for the most products, as opposed to a buyer consolidating this industry, that would be a seller. They basically took their business, and these don't necessarily line up with exactly the businesses that they were in, but just imagine that they have a helicopters business and they have an aircraft business. There are all these competitors out there that have similar businesses. General Dynamics systematically is able to capture nearly all the synergies that these acquires possessed with this bidder, why? Because these synergies are relatively common, the fit with almost any of these bidders was about the same. Indeed we see the performance of General Dynamics despite an industry in consolidation, we see General Dynamics enjoying absolutely spectacular performance during this time period as it auctions off its businesses and capture these, these synergies these acquires had with these assets. This is a picture of the General Dynamics share price. You see these precipitous drops at particular points and that's because they paid out massive dividends, \$20 dividend and \$18 special distribution, a \$12 special distribution... if you adjusted for those things, that top line is a reflection of how their stock price performs. Really a two and half fold increase over a

couple of year period as they manage this auctioning process of their assets, their shareholders receiving about a 553 percent sale return. Actually, it's more than two and half times over that time period. What did we take away from this in settings where there's substantial synergies that are present from recombinations, or re-sorting, or orchestrating assets, managers really have to decide, are you going to be a buyer or a seller? Is the value optimizing path for you to play the buying game? Or is it to play the selling game? Selling can have some clear advantages, especially when the synergies that others have with you, your target assets are immense and they're widely shared by multiple actors in the industry. If that's the case, then you're able to sell those through auctions and capture almost all of the synergies that those acquirers have with your targets. Buying, of course, has advantages, but the advantage is an artifact of the unique synergy that you have with that target. If you have substantial unique synergies with a particular target built around a corporate theory that's identified those unique synergies or enabled you to build those unique synergies then acquisitions can be enormously value creating. But it's restricted to that particular incidents and case. What does the empirical evidence suggest about this game of acquisition? Well, the empirical evidence is very consistent with the logic that I just articulated for you. What you're looking at here is a graphic that shows how the stock market reacts to an announcement of an acquisition. For two categories: one is categories in which there is only a single bidder for the target, the other is when there are multiple bidders for the target. What you see is that if you're in acquiring firm, that is your firm participating in the auction, making the bids, and you actually win the bid and win the auction. If you're the only actor in that auction, that you're a single bidder, then what you see is that the market's response here on the x-axis, you're seeing the number of days around the announcement of that event... what you see is that immediately there's a positive reaction of about two percent, that 0.02 is a reflection of two percent positive. It goes up to about three percent and then drops down out about 20-25 days on average about 2 percent positive. There is, on average a positive market response. The market says, "Hey, you've done something attractive here for the shareholders, reflective of your capacity to capture presumably unique synergies." However, if there are multiple bidders, then the market's initial reaction is essentially flat, there is no reaction. Then over time it appears to be a slightly negative. That is, if you're having to participate against multiple bidders, it's correlated presumably with a lower chance that you're actually enjoying any unique synergies. Or able to access any unique energies as you go out and make those bids in these auction markets. If you look at this from the flip side, and we look at publicly traded targets and look at what happens to their stock prices on the dates of these acquisition announcements and then 25 days after you see the flip side of this, which is that if there is only a single bidder, you get about a 30 percent premium. If there are multiple bidders, the premiums even higher. This doesn't prove the concept that we just talked about, but it's consistent with this notion that you're going to have to pay a bigger premium for these targets if you're competing in auctions with multiple bidders having to give more and more away of the common synergies that you might have at the target. If you're the only one that's a good fit with this and therefore, you know, reflective. There might be more consistent with a single bidder, you are going to get away with paying a somewhat lower price. One of the questions you might have is are we saying that acquisitions on an average or just a bad thing and firms should not pursue them? The answer to that question is a little bit messy. One might ask how do you reconcile the following statement, which is acquisitions on average actually create value. But the acquisition on average fail, they fail for the firms making those acquisitions. Well, the answer is that the combined value of bringing these two entities together is typically greater than the sum of the parts of them being separate. However, more than the value that's being created by bringing these two assets together is being paid out often on average to

target shareholders. Therefore, while the combination makes economic sense, that is bringing these two things together, it does indeed create value. Firms, on average, are slightly overpaying for the value that's being assembled and created through this combination. How do we think about that? Acquisitions in general are creating value. It's just that the actors involved are overestimating that value that's being created and suffering in some sense from the winner's curse phenomenon that's playing out in these auctions. This is reflecting why that might happen. It's reflecting the absence, perhaps a unique synergies, or the absence of some unique theory, some strategic theory that's allowing you to consistently see value that no one else sees or allowing me to pursue value that no one else has access to. The only way that a firm consistently creates value through acquisitions is if they have access to unique synergies and if they don't, if those are absent, it's going to consistently lead to you overpaying in markets. Or if you have some unique theory, some unique strategic theory that no one else sees. This allows you to identify targets. While the synergies that you have with that target aren't unique to you, it's just that no one else sees them and this is allowing you to participate in those auctions and walk away with value. As you can see to this point, what's critical to value creation through acquisitions is really having a very illuminating corporate theory that allows you to identify unique value. One of the challenges that arises is that very often firms are very lax in precisely identifying these synergies. Sometimes they confuse similarity for synergy. That looks like something really similar to what we already have. We're going to create value by just buying this because that must be synergistic if it's similar. You need to dig a whole lot deeper to really precisely identify what synergies are present. Then I think more commonly firms just overstate the uniqueness of their synergies. That is, they recognize that they have synergies with these targets, but they are not very good at recognizing that, "Yeah, those are synergies that you have, but everybody else that's bidding in this auction has those exact same synergies and therefore it's not going to be a pathway to value creation." Let me give you a quick illustration of a company that I think fell into these traps. If you looked at a picture of the businesses, the General Mills, this cereal maker and food products company was in, by the early 1980s... this is just a snapshot of some of the brands and assets that they had purchased over the prior 15 years. Particularly, some of them were quite valuable brands that they had acquired and they pursued all this with some semblance of a corporate theory, I suppose. Some of their choices about what to purchase end up being quite clairvoyant. They move into the toy industry and buy up a brand that eventually is marketing the Star Wars characters. This does quite well. They also purchase Lacoste. This is a period of time in which the world moves out of the 70s, ugly era and moves into the preppy era and arguably that Lacoste brand was a centerpiece in that effort. But arguably, they completely mismanaged that effort. At the same time, they owned Kimberly Knits, which was a big manufacturer of double knit fabric that was central to leisure suits at the time in the 70s and they heavily invested in that Kimberly Knits leisure suit fabric. At the same time, they're completely mismanaging this move into cotton and the preppy look. Part of the challenge is, how likely is it, this is not meant to denigrate Minneapolis or Minnesota, but how likely is it that they are going to be able to manage effectively fashion brands out of that location? I'm sure I've insulted the entire Midwest in this, but this ended up being a big piece of their problem while these were indeed synergies that they had with these targets and there was some element of foresight. The key issue here is whether they have unique synergies or unique foresight about value. I think the answer was completely no. As a consequence, even though some of these assets were valuable, they overpay for these assets and in the process destroyed value from 1974-84. They dramatically underperformed the market in terms of their stock price performance. In fact, in 1984, the value of their consumer foods business on its own was worth essentially its total market capitalization of General Mills. That is, the

capital markets basically said, "Everything that you bought is worthless other than the core assets that you were already in and consumer foods." As they then in the mid-80s spin off their non-core assets or sell off those non-core assets and begin refocusing on consumer foods, they see a dramatic increase in their valuation, really a fourfold increase over six years. Now, this does not entirely solve their corporate theory, their corporate strategy problem because subsequent to this, they really struggle. But pursuing a bad corporate theory, one that doesn't reveal unique synergies in these markets for acquisitions is worse than doing nothing. That is, you're better off to sit back, just invest in your core business, and manage that as best you can rather than pursue a corporate theory that's got to be value-destroying. What are the key takeaways here? First, identifying synergies in an acquisition does not guarantee value creation. You are going to read in news articles all the time about companies justifying acquisitions by listing off the synergies that they have with the target. That should immediately prompt in your mind, "Okay, it's not about synergies, it's about unique energies." It's not enough for you to tell me why you have synergies and therefore this is going to create value. You need to tell me why you have synergies that are greater than other bidders. Why you have unique synergies with this target. That's the hang-up that most corporations get into. Is thinking just about synergies rather than unique ones. Value creation through acquisitions requires identifying those unique synergies or it involves identifying synergies that others just don't see. They actually do have access to them, but they don't see them. They don't see them because they don't possess the kind of corporate theory that you possess that identifies these valuable targets. Value creation through divestitures is also often a pathway to value, and this creates value by exploiting the common synergy, the fact that there are lots and lots of bidders that have synergies with the assets that you possess. By selling them, you are able to access and capture those common synergies that others have with the assets that you possess. It's also possible you can capture some of the unique synergies that those bidders have with you, but you're just bargaining over. Whereas the common synergies, you're almost guaranteed through this auction process of being able to capture. Thank you.