

Financial Flexibility and Opportunity Capture: Bridging the Gap Between Finance and Strategy

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1. Introduction

Although both businessmen and scholars agree that the practice of corporate finance and corporate strategy should be closely coordinated and logically consistent, a large gap exists between the two functions. Although MBA programs routinely cover both subjects, they employ very different analytical and decision tools and the interaction between the two bodies of knowledge rarely receives the attention it deserves. The resulting Finance-Strategy gap can lead strategically oriented firms to de-emphasize or even discard classic finance techniques such as Net Present Value (NPV).

Conceptual limitations exist on both sides of the Finance-Strategy gap. For example, textbook theory usually emphasizes investment decisions based on the NPV framework with its longstanding grounding in marginal economic analysis and implicit assumption that firms can raise capital in frictionless financial markets. It is well known that the NPV framework does not address the information and incentive problems that often bedevil capital allocation within firms; and it is not applicable in its usual form in the presence of growth, market disruptions, or real options. Moreover, the NPV framework is typically implemented through cash flow forecasting that emphasizes short to medium time horizons ill-suited for strategy formulation. Perhaps most important, advanced corporate finance courses that consider capital structure policy typically focus on minimizing the firm's weighted average cost of capital through tax optimization. This ignores the crucial role of financial flexibility in developing and sustaining competitive advantage. Meanwhile, on the other side of the gap strategy textbooks and cases barely mention finance, consigning it to a utility-like enabler role. In doing so, they neglect its potential as a competitive advantage weapon.

Thus, when newly minted MBAs embark on managerial careers, they often find financial concepts such as the Cost of Capital and Capital Structure surprisingly difficult to deploy in the service of strategy. Upon reaching senior decision-making levels, they find that strategy formulation often proceeds without the discipline financial theory brings to project selection. While some may realize that husbanded financial flexibility can be value creating in its own right, very few know how to incorporate that value in formal analysis. Consequently, in most firms both the practice of finance and of strategy suffers as those functions operate in silos and enterprises underperform. When good managers do learn how to develop closer connections between Finance and Strategy it is by trial and error.

The following case study based on Exxon-Mobil's experience illustrates these serious management problems. This case will help develop a conceptual framework that integrates finance and strategy to provide better guidance than trial and error.

Bridging Financial Theory & Strategy: Financial Flexibility and Opportunity Capture

Two additional concepts will help us integrate Finance and Strategy: Financial Flexibility and Opportunity Capture. These dynamic concepts fit well with the realities and uncertainties

managers face as they pursue competitive advantage. Moreover, these two concepts help resolve a long-standing issue in corporate finance, the “underleverage puzzle.” Given the tax advantages of debt, why don’t firms use more it?

The “underleverage puzzle” has challenged capital structure theory for some time. Nobel Laureate Merton Miller was among the first to articulate this puzzle in his 1976 presidential speech to the American Finance Association.¹ He observed that, given the apparent tax savings benefits that firms could accrue from using more debt, firms were generally much less levered than finance theory would suggest they should be. Although firms do trade off the tax benefits of additional debt against attendant higher default risk, Miller argued that empirical estimates of bankruptcy costs are not sufficiently large to plausibly explain the observed low average leverage ratios.

Since Miller’s 1997 address, capital structure theory has advanced to include dynamic effects, in particular by valuing financial flexibility for embedded options.² Still, the literature’s real options models are unable to explain this underleverage puzzle. At best, only a portion of the observed “underleverage” can be accounted for by options preservation. Indeed, practitioners would be hard pressed to recall a CFO saying “let’s retain a more conservative capital structure so that we can trigger our embedded options at our discretion.” When firms do this in practice, it usually occurs as a side-product of their strategic approach.

Clearly, we need to recognize more benefits of financial flexibility to explain the underleverage puzzle. We offer two suggestions in this regard: 1) opportunity capture and 2) the value of financial flexibility as a competitive weapon.

Opportunity capture focuses on firms’ efforts to create or acquire advantaged investment opportunities, and highlights connections between firms’ capital budgeting and capital structure policies and their dynamic competitive strategy. Financial flexibility is both a competitive weapon and an often undervalued asset in the pursuit of opportunity capture. These two concepts interact with strategy to a much greater extent than the real option models in the academic literature. The extra value the existing literature misses involves the conscious preservation and targeted use of financial flexibility to identify and capture advantaged projects not already in the firm’s control. By explicitly recognizing the firm’s competitive landscape, where its future will be won or lost, we can understand why firms appear to be “under-levered.” Firms rationally forego the apparently-easy-to-calculate tax benefits of debt to prevail in competitive situations by “keeping some powder dry” for unpredictable, high value opportunities.

In order to integrate these two concepts with existing theory, we provide suggestions for how to measure financial flexibility and integrate it into investment decisions.

An Illustrative Case Study

The evolution of capital budgeting at ExxonMobil during 1972-2006 is instructive. This case has two distinct sub-periods: that from 1972-1986 before Lee Raymond had ascended to top management and from 1987-2006 when then CEO Lee Raymond refashioned Exxon’s strategic direction. During the first period, Exxon faithfully adhered to the canons of corporate finance,

¹ Merton Miller, “Debt and Taxes,” *Journal of Finance*, 32, 261-275, 1977

² See I.A. Strebulaev, and T. Whited; “Dynamic Models and Structural Estimation in Corporate Finance,” *Foundations and Trends in Finance* 6, 1–163, 2011

which had recently emerged from top business schools. During the second, these canons were conspicuously downgraded in favor of a strategy-based perspective that enlisted financial strength as a competitive weapon.

During the 1972-86 period, Exxon annually developed 4 year Corporate Plans intended to maintain its AAA credit rating with an annual cost of capital study. For much of the period, Exxon's used investment banks for advice on the optimal capital structure to produce the lowest weighted average cost of capital (WACC) while maintaining the AAA rating. This WACC then became the basis for establishing different hurdle rates by business and by geographic location. Capital allocations were based on NPV economics employing these different hurdle rates. Strategy, defined as the purposeful direction of capital spending towards a goal of achieving either cost leadership or premium product differentiation, did not appear as a Plan discussion topic. Rather, strategy was the preserve of quiet discussions at the Management Committee. Corporate Plans were crafted with little analysis of industry structure, competitive rivalry or pricing power, and few recommendations were devoted to improve Exxon's industry position. Meanwhile, individual projects were rigorously considered on a stand-alone basis and NPV and IRR (internal rate of return) were serious decision criteria.

By 1998, the eve of Exxon's merger with Mobil, much had changed. Exxon's new chairman, Lee Raymond, proudly told Wall Street analysts that the company "didn't have an investment hurdle rate." By this, he meant that NPV/IRR had been seriously downgraded as decision criteria. Raymond and his predecessor as CEO, Larry Rawl, had found the mechanistic application of these rules inadequate for efficient capital allocation. Instead, the Exxon CEOs sought to fuse strategy and financial theory. Part of this involved adopting a cost leadership strategy that required sponsors of new projects or acquisitions to show where their opportunity would reside on industry 'cost of supply' curves. This discussion occurred along with conventional project NPV economics, but received increasing attention. Meanwhile, annual cost of capital and capital structure studies were largely discontinued, and multiple hurdle rates ceased to be used.

Why had Exxon downgraded such long established canons of capital budgeting? First, Rawl and Raymond concluded that the NPV framework encouraged operating units to 'game the system' by presenting arbitrary forecasts that achieved the return targets they thought represented the threshold needed for approval. Second, cost-focused strategy was a more reliable way to choose between projects in a commodity business. Absent strategic content, project proposals often turned on commodity price forecasts, which Exxon found to be very unreliable, as Raymond ruefully admitted in public forums. By contrast, they were confident that projects with very low unit cost positions would prove resilient even at price cycle bottoms and generate cash flow windfalls when markets recovered.

In a world where the best resource opportunities lay in the hands of governments, Exxon found that companies with relative financial strength and flexibility had an edge in getting the most attractive plays. Exxon could represent itself to governments as best qualified to execute projects on time and on budget and then reliably deliver taxes/royalties to host regimes; financial flexibility also allowed Exxon to pursue uniquely attractive opportunities under conditions that constrained other firms. Appreciating these financial advantages, Raymond became the most ardent proponent of preserving Exxon's AAA rating, the only such rating in the oil and gas industry. He also grew uninterested in questions of optimal capital structure and increasingly tolerant of carrying a surplus cash "war chest."

Through this decades' long process of trial and error, Exxon had arrived at its own synthesis of finance and strategy: the preservation of a super-strong and flexible capital structure to be deployed at the service of strategy. Raymond gave eloquent expression to this synthesis during the 1998-99 oil price cycle bottom when, with crude prices dipping below \$10/bbl. and Asian economies in the dumps, he approved major new chemicals projects for Thailand and Singapore on the strength of their long-term cost positions. He then turned his attention to acquiring Mobil, a firm rich in opportunities but not all of which it could afford to finance. Raymond then used ExxonMobil's financial strength to develop Mobil's hugely capital intensive opportunities: Qatar LNG, Saudi petrochemicals, and Caspian/Nigerian/Equatorial Guinean upstream opportunities. The results catapulted ExxonMobil into a decade of industry leading financial performance.

The Exxon case is especially interesting because the firm was routinely criticized in the late 1980s and 1990s for being opportunity constrained. Few analysts foresaw how its preservation of financial flexibility would allow Exxon to pursue value-creating projects that other companies such as Mobil had spent two decades building but could not completely exploit. The obvious question arising from this case is whether it is unique to Exxon or generally applicable.

Financial Flexibility and Opportunity Capture in the Context of Strategic/Financial Theory

We argue that financial flexibility is relevant to strategy at almost all firms, and that it is especially important in certain types of industries, e.g. capital intensive businesses where firms win or lose big competitive advantage based upon their ability to capture superior investments. Our analysis of the roles of financial strength and flexibility leads us to conclude that low debt capital structures are critical to exploiting such high NPV opportunities. To illustrate the point, we offer some concrete examples below. Nevertheless, the reality of the link between opportunity capture and financial flexibility has received little or no recognition in financial or strategy theory. Accordingly, we also examine the erroneous assumptions embedded in standard theories that have brought about this result.

We offer two industries where financial strength/flexibility is being used for competitive advantage: Liquefied Natural Gas (LNG) and the petrochemical industry. The LNG industry requires large amounts of upfront capital and project development effort. At the same time, a host government often controls the underlying resource base, namely, the gas field. This host government often is weak financially; yet it typically insists on participating as an equity owner, usually through a state-owned enterprise (SOE). Understandably, host governments insist on private oil company partners with financial strength. Exceptionally strong financing capability, project finance and capital market know-how, and the ability to execute projects on schedule then become important competitive weapons for being selected the "partner of choice." Such private sector players win by helping the host government's SOE raise capital and by credibly promising to deliver royalties and taxes to the host government on schedule. Given the role that exceptionally strong financing capacity plays in "delivering the goods to host governments," it is no wonder that the LNG business is today confined to a handful of well-recognized major oil firms, e.g. Shell, ExxonMobil and Chevron.

In the petrochemical industry, demand and prices tend to follow a cyclical but volatile pattern. Balance sheets are most under strain after prices sharply decline. A firm retaining financing capacity at cycle bottoms, is often rewarded with both low production cost projects and

acquisition opportunities. These advantages arise when rival firms cannot exploit the same opportunities because they are over-levered after the slump. Meanwhile, the “under-levered” firm enjoys acquisition capture advantage allowing it to buy rivals whose valuations are triple depressed by the industry’s slump, their own financing constraints, and the absence of other bidders for their assets. For an illustration, consider the emergence of the Saudi Arabia Basic Industries Corporation (SABIC), a firm that progressed from start-up to global giant in three short decades building giant scale plants in Saudi Arabia and carefully preserving financial flexibility to enable timely acquisition of firms like DSM and GE Plastics during industry down cycles.

The standard Net Present Value framework taught to business student simply assumes away the connection between financial flexibility and strategy. Implicitly, the framework assumes that capital markets will spontaneously provide positive NPV projects with external financing. Financing frictions are either ignored completely or assumed to be so modest that rational capital markets would eventually provide firms with the capital to finance future opportunities. In reality, there are many circumstances where firms have value-creating investment opportunities but cannot raise the capital to exploit them externally. For example, the academic literature shows that firms’ private information on projects can effectively restrict the debt financing channel – as in the ‘capital rationing’ banking equilibrium of Joseph Stiglitz and Andrew Weiss³– and shut the equity financing channel completely.⁴

But even this literature does not emphasize enough how severe the external financing frictions are for large up-front investment projects when execution risks could put the firm into bankruptcy. But these types of projects are actually quite common in industries where scale economies, technological breakthroughs or access to advantaged raw materials are crucial to long-term cost advantage. Examples of such ‘big bets’ abound in the refining and petrochemical industries, in the pharmaceutical and bio-engineering industries or in extraction industries, such as in mining or deep-water oil and gas. In a related vein, external financing may evaporate even for transparently attractive projects because of system-wide financial shocks, as for example, in the financial crisis of 2008-2009.

Beyond the dubious assumption of ‘self-financing projects’, the standard NPV paradigm also treats attractive capital projects as exogenous. The prevailing image is one of a company conveyer belt in which candidate projects come forward for evaluation with some projecting positive NPV and others not. In reality, positive NPV projects are developed dynamically, the conveyer belt does not provide good projects automatically. Finance courses often abstract away the fundamental challenges of creating or capturing attractive opportunities and are, therefore, insensitive to whether financial strength and flexibility play a role in opportunity creation.

In reality, advantaged opportunities often go to those with more financial strength than their competitors, particularly when sellers are desperate and buyers are few. Note that the advantages of financial strength appear precisely when financial markets suffer various frictions. Corporate

³ See Joseph Stiglitz and Andrew Weiss, “Credit Rationing in Markets with Imperfect Information,” *American Economic Review*, 71, 393–410, 1981.

⁴ See Stewart Myers, and Nicholas Majluf, “Corporate Financing and Investment Decisions when Firms Have Information That Investors do not Have,” *Journal of Financial Economics*, 13, 187-221, 1984.

Treasurers know from experience to count on and plan for these frictions. They know that debt ratings, even when constant, do not deliver the same issue size or financing costs throughout the cycle. They also know that large projects and acquisitions become difficult to finance when capital market and/or industry conditions are challenging. Accordingly, capital budgeting and capital structure policies must anticipate market frictions over a multi-year time horizon, and still allow enough financial flexibility for special opportunities that materialize precisely when such frictions are most severe.

This exercise is quite different from the textbook process that allocates capital on a project-by-project basis “down to the hurdle rate.” So, rather than focusing on minimizing the firm’s WACC (often the major lesson imparted in MBA corporate finance courses), sound strategy calls for the conscious preservation of a more equity-weighted capital structure than that indicated by an “optimum” WACC marginal analysis.

Classic Competitive Strategy theory assumes that advantage comes from operational superiority - that is practices, processes, technologies and positioning that result in lower unit costs and/or superior product qualities. Attractive investment opportunities arise from these operating advantages. Cost or product quality advantages are the means to achieve competitive advantage. That implies, though, the strategic horizon around such prescription is open ended, the opportunities are generic.

Such conventional strategy theory does not sufficiently acknowledge the constraints impacting opportunity capture. In reality, firms’ business opportunities and associated growth are typically restricted to a relatively small set of possibilities. Some are controlled already by competitors and others by players that cannot be easily influenced (such as foreign governments). Crucially, the available possibilities are often transient and also available to competitors. In these situations, operating factors may be far from decisive. Controlling parties, such as governments, are often more concerned with financing issues, capital project execution, and government revenue. Superior financing capacity then becomes an advantage in convincing controlling parties to award opportunities.

Standard strategy theory also says nothing about how capital market conditions change the strategic landscape. Implicitly, strategy theory adopts the ‘self-financing’ assumption of financial theory and ignores how superior financial flexibility allows some competitors to seize the best available prospects while others are immobilized.

This review of embedded assumptions helps make clear why existing Financial and Strategy theory provide so little help to practitioners trying to integrate firm strategic direction and financial policies. We can see these limitations and the need for more practitioner-oriented theory by examining a large capital project, through the lens of embedded real options. Over a decade ago, modest sized Australian firms found large gas deposits in Papua-New Guinea. Geologic assessments confirmed reserves of sufficient size that several ‘world-scale’ LNG projects could be commercialized. Thus, whoever ended up controlling the gas would enjoy several embedded expansion options. Legally, the projects would be controlled by the PNG government. It would write the legal and fiscal terms which would define the project’s economics. Meanwhile, the gas-discoverers faced daunting financing, project management and marketing challenges to even commercializing a first phase.

ExxonMobil was able not only to enter this consortium but gain the operating role on the strength of its financial and project execution capabilities. Yet, despite its strategic focus, Exxon

hesitated for years to proceed to project commercialization. It struggled to justify Phase 1 project economics which largely ignored the embedded expansion options. Standard financial theory warned against justifying a ‘threshold project’ on the basis of uncertain future expansions, while strategy theory was largely insensitive to the competitive advantages inherent in capturing capital project expansion options, each of which promised declining unit operating costs due to synergies with earlier capital investments.

ExxonMobil successfully used its financial advantages to capture an attractive opportunity and ultimately became convinced of the project’s economic value. PNG LNG was developed, coming on stream in 2015. However, the story also shows there is an opportunity to extend and integrate the current financial and strategic frameworks to make better and faster decisions. For these purposes, we first offer a means for recognizing the value of embedded real options at the ‘threshold investment stage.’ Building on the illustrations above, we then offer two concepts, the “Strategically Sustainable Cost of Capital” and “Reserve Financing Capacity.”

A Framework for Integrating Finance & Strategy: Reserve Financial Capacity, the Strategically Sustainable Cost of Capital, and the Value of Embedded Expansion Options

To better integrate strategic and financial theory, we begin by reconsidering how to value of embedded expansion options. Such options are often critical, even decisive, for firms executing a long term, cost-focused strategy. Yet, industrial firms have struggled to recognize them within their capital budgeting processes and to bring finance and strategy into a more informative dialogue.

Real options theory has long offered a plausible valuation framework.⁵ This methodology is sound as far as it goes; why then are so many companies reluctant to employ it?

They are often reluctant because expansion options usually lie so far into the future as to make projections of their ‘then-valuation’ very uncertain. Senior managements are understandably cautious. They are even more concerned that giving this power to planning staffs and project teams is an invitation to burnish marginal projects with dubious option value claims.

To overcome these dilemmas, we suggest that firms test the assumptions behind the expansion options against their expectations of how industry unit production costs will evolve. What matters here is not simply whether expansion options will exhibit lower unit costs but how unit cost reductions compare to the general trend of costs in the relevant markets. Only this assessment will reveal whether the options are likely to have value as the time for possible exercise approaches. Expansion options, often labeled ‘brownfield’ or ‘debottleneck’ investments in industry parlance, are primarily exercises in competitive cost leadership. Because the next production increment can be gained with a fraction of the original project’s investment costs, unit production costs should decline. However, most competitors usually follow some variant of this strategy. Thus, the value of expansion options is not their absolute gain versus original project

⁵ Assumptions are to be made as to when such options may be triggered with probabilities assigned to various valuations if triggered and to the possibility of the options never being employed. Said ‘net probability-weighted NPVs’ are then discounted back to the present and added to the base project’s economics.

production costs; rather their value lies in their relative advantage/disadvantage versus competitor projects at the time the options come up for triggering.

This means that the value of an embedded expansion option depends on the future *margins* arising from evolving industry investment/operations. Such margin projections will more reliably identify expansion options with true competitive advantage potential and allow the firm's expectations about the value of expansion options to be monitored in real time, leading to better decisions on option triggering.

That said, the task of valuing future expansion options is still daunting. For this reason, we suggest limiting the value of embedded expansion options to Sensitivity cases so that base case economics is kept clear of option-valuation gamesmanship. It also will allow management to consider the 'hard-case' proposition for what it is: e.g. 'are we looking at a marginal base project which may have considerable strategic value as a platform for latter, highly advantageous expansions?'

To deepen the Finance-Strategy connection, we turn now to Reserve Financing Capacity (RFC), a useful concept for measuring financial flexibility. RFC measures "surge capacity," that is the firm's ability to respond to unexpected opportunities by either ramping up capital programs or making a major acquisition. It has a multi-year horizon that can be matched to the capital programs envisioned in strategy execution. Users can adapt its components to their specific situation, e.g. whether they choose to preference financial flexibility or planned growth. Finally, the RFC's estimation feeds directly into the computation of the Strategically Sustainable Cost of Capital, a measure for assuring that both programmatic and extraordinary opportunities are value creating.

We define Reserve Financing Capacity as the amount of growth a firm can fund without triggering a step-change in its cost of capital. The RFC concept assumes that all firms seeking to grow will eventually face corporate finance constraints. Shareholders and lenders to such firms most likely are not basing their risk assessments on an expectation that new equity will be issued. Nor are they expecting a debt rating downgrade or a dividend cut. Dramatic capital spending cuts or divestments are also considered improbable in most cases. Such events constitute the "boundaries" within which a firm's cost of capital is typically set. The firm's RFC indicates how much flexibility exists before strategy collides with one of these boundaries.

While the components of the free cash flow calculation are familiar, two things make the estimating difficult: a) the time period used for calculation and b) how the firm defines maintenance capex. Firms have an understandable bias towards viewing this as an annual estimating exercise. The inputs are annual numbers and 24 months out can seem an eternity away. However, for RFC to be an aid to strategy, the calculation must embrace the same time horizon as the firm's strategic plan. Specifically, the RFC must be tied to the time required to implement (not simply approve) the capital program called forth by the strategy. By using the same horizon, firms will discover whether they can implement their strategy using their current estimate for the WACC. If not, they either will have to curtail or stretch out strategy implementation, or decide which boundary condition will be violated.

The Maintenance Capex issue will be familiar to devotees of Master Limited Partnerships. Maintenance Capex can mean several things. It can mean the spending necessary just to keep current operations functioning. It can mean the capex consistent with the firm's historic growth rate; or it can mean the spending necessary to preserve the firm's competitive position. But

maintenance capex is clearly not the additional spending required for a breakout to a new competitive status (that would be strategic capex). Emphasizing the minimum needed for operations magnifies the firm's estimate of its flexibility and its discretion to choose. Basing RFC on maintenance capex that preserves competitive position actually allows a firm to focus on the cost of funding a strategic breakout.

As an example, consider Firm XX which estimates its four year outlook as follows:

\$M	Year 1	Year 2	Year 3	Year 4
Operating Cash Flow	1000	1500	1700	1500
Maintenance Capex*	(200)	(300)	(300)	(300)
Dividends	(200)	(210)	(220)	(235)
Net Debt Redemptions	0	(500)	0	0
Free Cash Flow	600	490	1180	965
<i>Financial Flexibility</i>				
Net Borrowing w/o Downgrade	500**	1590***	2770 #	3735 #
Cash Reserves	100	100	100	100
Reserve Financial Flexibility ##	1200	1690	2870	3835

* Reflects only capex to maintain current operations

** Given starting position; going forward all Free Cash Flow reduces debt, increasing Net Borrowing w/o a Downgrade

*** Reflects Prior Year Net Borrowing w/o Downgrade + Prior Year Free Cash Flow + Current Year Free Cash Flow after Debt Redemptions

Prior Year Net Borrowing w/o Downgrade + Current Free Cash Flow after Debt Redemptions

Reflects Net Borrowing w/o Downgrade + Cash Reserves

Now assume that XX makes estimates both of the capex needed to preserve its competitive position and a program dedicated to strategic breakout. Assume these estimates as follows:

\$M	Year 1	Year 2	Year 3	Year 4
Competitive Capex	1000	1100	1300	1500
Strategic Capex	200	800	1000	1200

With these figures in the picture, it changes dramatically:

\$M	Year 1	Year 2	Year 3	Year 4
Operating Cash Flow	1000	1500	1700	1500
Maintenance Capex*	(200)	(300)	(300)	(300)
Competitive Capex	(1000)	(1100)	(1300)	(1500)
Dividends	(200)	(210)	(220)	(235)
Net Debt Redemptions	0	(500)	0	0
Free Cash Flow	400	610	120	535
<i>Financial Flexibility for Breakout</i>				
Net Borrowing w/o Downgrade	500	200^	0	0
Cash Reserves	100	0	0	0
Reserve Financial Flexibility	200	(410)	(530)	(1065)

^ Sum of prior year Free Cash Flow + Net Borrowing w/o Downgrade + Cash, but before Strategic Capex

Strategic Capex	(200)	(800)	(1000)	(1200)
<i>Net Reserve Financial Flexibility</i>	0	(1410)	(2430)	(4165)

After overlaying the Strategic Capex, XX discovers it will run out of Financial Flexibility in year 2, and that it is ‘short’ overall by \$4165 M. Therefore, either its cost of capital or its strategic program will have to change, possibly both. Said differently, XX finds it has only \$200 M of Reserve Financial Flexibility “surge capacity” after accounting for capital spending underpinning base strategy.

This possibility of a step change in the cost of capital brings the concept of Strategically Sustainable Cost of Capital (SSCoC) to the fore. Unlike traditional cost of capital frameworks, which are applied on a project-by-project basis, SSCoC is a program concept. As we have argued, Reserve Financial Capacity alerts the firm to whether it will have to cross a financing boundary to implement its strategy. SSCoC tells it the cost of doing so. This allows the firm to make sure that its strategic program justifies its real cost.

The SSCoC forces a firm to answer a series of questions:

1. Will my strategic program exhaust all Reserve Financing Capacity?
2. If/when it does, what will then be our marginal financing step – equity issuance, debt issuance w/downgrade, dividend cut, and/or project deferrals/asset divestment?
3. What will be the cost of this financing program and given this cost, do new projects and acquisitions still make economic sense?
4. Does this financing program imply a new ongoing capital structure and cost of capital?

A recent example from ConocoPhillips (COP) will illustrate this thinking in action. For some years COP has been “shrinking in order to grow.” This meant it was divesting assets to fund its future upstream investment program. The assets divested included mature producing properties, midstream assets, and a spin-off of refining/marketing. The entire program totaled almost \$30 billion of divestiture. During this time, COP maintained its debt rating [of what?] and increased its quarterly dividend. COP CEO Mulva described the program as follows:

“Some will say what we're doing essentially is that we're shrinking to grow,” Mulva said during a conference call to discuss the company's quarterly earnings. “That would be a fair assessment.” He went on to say the change is necessary in light of the global recession and the difficulty of accessing new oil and gas reserves around the globe, coupled with the massive costs of extracting them. (Reference needed)

Effectively, COP had concluded its RFC was exhausted. It then decided against issuing equity, cutting dividends or accepting a debt downgrade. Instead, it decided that asset divestments would fund its program. This meant COP would finance its future investments at the cost of its “Give-Up Return” on divestments, i.e., the IRR of its divested asset cash flows measured against the after-tax sales price achieved. This Give-Up Return constituted COP’s SSCoC, whether it labeled as such or not.

This discussion holds numerous implications for financial theory, especially as regards the use of surplus cash, dividends and stock buybacks, capital structure and cost of capital. Most of these lie outside the boundaries of this paper. We do observe that the role of equity finance needs to be

reconsidered. In our view, financial flexibility clearly has greater value than that assigned to it by core financial theory, implying that all things being equal firms should retain more equity in their capital base. They also will want to reconsider the tradeoffs between paying higher regular dividends and buying back stock. The former limits financial flexibility and establishes tighter boundaries beyond which the Sustainable Cost of Capital must adjust. Buybacks, on the other hand, are easier to suspend and provide a reserve currency that under some circumstances is additive to Reserve Financing Capacity

Conclusion

We have argued that a conceptual gap has kept financial theory and competitive strategy in separate silos for many reasons, not the least of which is the relative indifference of BOTH disciplines to opportunity capture. But, once one acknowledges the necessity and reality of opportunity capture, strategy must also admit that financial capacity and flexibility can be powerful advantages. Once it recognizes the challenges of opportunity capture, and their variation by industry, financial theory must accept the need to look at strategic programs rather than discrete, stand-alone project-by-project assessment. Within this new horizon, the financial discussion of cost of capital and capital structure has to change. Two specific concepts are offered to build bridges between Finance and Strategy. Reserve Financial Capacity is defined as the annual sum of Free Cash Flow, Financing Flexibility and Cash Reserves over the period envisioned for strategy execution. RFC also differentiates among capex categories in ways that connect well with strategy. Individual projects must be recognized as belonging to strategic programs in the sense that they either 1) keep the base business running; 2) preserve an existing competitive position; or 3) form part of a program to enhance advantage or fashion a strategic breakout. Dissecting capital programs in this fashion allows management to decide how it wants to allocate its Reserve Financial Capacity and what opportunity cost to apply to giving up a particular project. This process is aided by the concept of Strategically Sustainable Cost of Capital; it asks whether there is enough Reserve Financial Capacity to fund the entire capital program, and if not, what would be the true capital cost of completing its execution. Wrestling with this calculation provides the true opportunity cost for undertaking or cancelling individual projects. These concepts, RFC and SSCoC, can provide financial rigor for firms with well-defined strategies and associated capital investment programs. Thus, they help in the application of those uses of superior financial capacity discussed above.

We also identified Financial Flexibility as a strategic weapon – one tied to opportunity capture of a more opportunistic nature. This is a different exercise than envisioning strategy and executing an associated capital program. It can however, yield highly attractive strategic gains by creating options and capturing unique opportunities, such as those available at the bottom of industry cycles. For these opportunities, firms need financial ‘surge capacity.’ This they can plan for by quantifying an element of Reserve Financing Capacity they preserve for ‘Strategic Capex’ and by managing their capital structure and debt ratings accordingly.