Some Thoughts on the Theory of Corporate Venture Investing

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In this note I develop some further thoughts that build on my paper entitled a "A Theory of Corporate Venturing." In this paper I develop a formal economic model of why corporations may face difficulties when making venture capital investments. In thinking broadly about the reasons why corporations may have difficulties when investing in entrepreneurial companies, I see three main sets of issues. The first set of reasons revolves around issues of intellectual property rights. The second set relates to strategic conflicts of interest. The third set concerns issues of organizational design and conflict within the corporation.

The theory paper deals directly with the second set of issues, the conflicts of interest that result from the strategic objectives of the corporation. In this note I therefore want to focus on the first and third area of problems. Many would argue that entrepreneurs don't want corporate investors because they do not want their intellectual property stolen. I would actually argue that, while intellectual property is important, these problems should not be overstated.

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Indeed, there are two reasons why the problem of intellectual property is unlikely to be severe in many situations. First, not all entrepreneurial companies are based on intellectual property rights. Often the competitive advantage of entrepreneurial companies revolves around their ability to *implement* a technology, or around the capabilities of the entrepreneurs. In those cases intellectual property is of secondary importance. Second, even when intellectual property rights are an important asset of the entrepreneurial company there are reasons to believe that corporate investors should not have a significant disadvantage when competing with independent venture capitalists. We need to look at the *marginal effect* of a corporate venture investment. The intellectual property rights of the entrepreneurial companies may not be safe in the first place. The question is thus how the likelihood or the extent of intellectual property theft increases as a function of choosing the corporate investor, rather than a venture capitalist. One may make the argument that the marginal effect is sometimes negative: the corporation may find it more difficult to steal information once it becomes an investor, because any legal accusation is more likely to be taken serious.

The intellectual property rights of the entrepreneurial companies are not entirely safe with 'independent' venture capitalists either. Many venture capitalists have the ability to invest in competing companies, and they may even have the ability to set up competing companies. Precisely because venture capitalists have a network of contacts with entrepreneurs and other people in the area of technology, they may be well positioned to capitalize on a good idea. On this, venture capitalists would typically argue that they wouldn't do this explicitly, but they admit that they are influenced by *all* of the information that they receive as part of the investment process. It is therefore quite possible that some ideas that they hear from one corporation eventually get implemented with another corporation.

If we accept the argument that intellectual property rights are not always at the core of the problems that corporations face when making venture capital investments, we may turn to the other two arguments. In my theory paper I discussed the role of the strategic objectives of a corporate investor. Let me briefly explain the main insight from that paper. A corporation is likely to be a better investor than a venture capitalist if there is a fundamental complementarity between the profits and the core business of the corporation and the success of the entrepreneurial venture. If, however, there is cannibalization, then entrepreneurs prefer independent venture capitalists. The notion of complements and substitutes will be useful below.

The third set of reasons why corporations seem to have problems relates to the internal organization of corporate venturing. This is often discussed in the language of the 'inefficient bureaucratic nature' of large corporations, although I would argue that there are deeper internal conflicts within the corporation. This is a difficult area to understand for economists, given the intricacies of understanding transactions within the firm. In this note I will lay out a simple intuition of what I believe is central to understanding the phenomenon, leaving any formal modelling to future research.

The way that the problem of corporate venture investing is often depicted in the business literature is one of 'bureaucracy:' corporations are 'too formal' and 'too slow' to respond to the needs of entrepreneurial companies. While there may be some truth to this, I suspect that this is too simplistic. In particular, it ignores the economic forces that prevent corporations from being efficient venture capital investors.

There may be benefits to organizational inertia that economists have not understood very well so far. Indeed, sociologists probably have a much better understanding of these issues. Their line of reasoning is typically that if organizations were not inert, then they would be somehow more exposed to the evolutionary forces and more likely to die. The problem economists may have is that this counter-factual is rarely formally specified. The most natural conjecture I can think of is that it is in the interest of the company to make commitments, especially commitments to its work force, not to change its strategy too frequently. A commitment to a stable strategy gives employees better incentives to invest in human capital.

More generally it seems that a central problem for corporations is that some managers may face a decline in the value of their human capital as a result of corporate venture investing. In my theory paper I had a single net benefit function for the corporation's core business. The above argument suggests that different people in the organization are affected differently by the corporate venturing activities. In particular, it may be that the net profits that accrue to shareholders are positive, individual managers may experience a net loss of human capital. This can easily lead to a situation where a certain venture investment is in fact a complement to shareholder value, but a substitute to the managers' human capital. Or there may be a distribution of human capital changes. While individuals in the corporation at large (including shareholders) may benefit from a particular corporate venture investment, there may be one individual department or a particular group of people that will be significantly harmed. We have a situation where the benefit accrues to many and the cost to few. This is a classic setting to expect strong resistance activity by a minority coalition. The minority coalition may have much stronger incentive in fighting or derailing the corporate venture investment, and it may be able to do so if there is no clear political representation of the majority benefit.

The question then is whether shareholders could write contracts with the managers to compensate them for the loss of human capital. It is hard to imagine how shareholders could make contacts on future changes in technology or future changes in manager's human capital. We are therefore faced with a situation where managers bias their decisions to protect their human capital, and the financial incentives of the usual sort are insufficient to prevent this self-interested behavior.

The issues discussed here are in fact much broader than the problem of corporate venture investing. The logic I alluded to might be thought of as a building block of a more general economic theory of the 'not-invented-here' syndrome. This seems to be a fairly pervasive problem across corporations: inventions that are not generated internally are less likely to be adopted. The traditional explanation for this phenomenon relies on cognitive biases.

So far I have emphasized the existence of conflicts within the corporation that turn investments that seem to be complements into effective substitutes. One question is whether the corporation can create organizational designs to minimize conflicts. I have already mentioned that simple financial contracts may fail. One can think of other organizational solutions to address this problem. In fact we do observe a number of different organizational structures that corporations use when engaging in venture capital investments. Within the corporation a key question is how active senior management is in the supervision of the corporate venturing efforts. There is an argument to be made that this decision is not sufficiently general for the board of directors to take care of it. And while the CEO ought to be involved, he or she probably ought not to be the main person in charge of it. The key question is then which senior vice-president ought to be made responsible. While this answer cannot be answered in general, our discussion makes it clear that to supervise the venture investing efforts, it is important to have somebody in charge that represents the benefits of the corporation at large. Moreover, if the corporate venturing efforts are left to lower levels of management then the potential for internal conflict is likely to grow, as lower level managers are less likely to assess the overall interests of the corporation.

If the company wants to 'outsource' its venture capital activities, then we have a spectrum of alternatives. The corporation can create a venture capital subsidiary, it can engage in joint ventures, or it can give its money to an independent venture capitalist. The example of Apple Computer is interesting. Apple Computer created a subsidiary with considerable independence, but a number of reasons suggest that the experiment was not entirely successful. For example, while the managers of the subsidiary were given independent financial incentives - in fact Apple Computer compensated them along the lines of an independent venture capitalist – this did not eliminate the career concerns of the employees within a corporation. In order to avoid any of the problems of internal and strategic conflict, there is a possibility of leaving all venture capital decisions to an external venture capital fund. But there is a general trade-off here. The more remote a corporation is from its venture investing, the better it is able to solve the problems of strategic interference, but by the same token, it is less able to benefit strategically from these venture capital investments.

To conclude, in this note I have explored three reasons why corporations seem to have difficulty making venture capital investments. Theft of intellectual property, is a concern, although it is probably relatively unimportant in many circumstances. The problem of strategic conflict is important if the entrepreneurial company is a substitute for the corporate investor’s core business. Finally, internal conflicts are probably pervasive, but they are still difficult to understand for economists, making them a promising area for future research.