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Revenue Capital & Disruptive Models: Venture Funding Tools for Developing Nations

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What is killing entrepreneurship in developing nations? Countless entrepreneurs have the skills and motivation to create profitable new businesses. Yet this potential has disproportionately gone to waste in developing countries. It has not been a failure of imagination, intellect or resourcefulness. Rather, entrepreneurs have been plagued by insufficient funding. There is simply poor access to growth capital – especially in the developing world.

The Right Tools

Growth capital largely does not exist for most startups in developing nations. Angel investment and venture capital is scarce, bank loans are onerous and only available to large businesses, and microfinance does not scale well for most entrepreneurs. So if these are the wrong tools, what might the right tools look like?

- The ideal funding tool would profit investors and entrepreneurs alike;
- It would serve broad startups, even those traditionally scorned by venture capitalists (VCs) such as businesses with less growth potential and little probability of being acquired or having an initial public offering (IPO);
- It would need to be practical in nations with less developed legal, market and regulatory structures;
- It must overcome the limits of debt funding, and be applicable across varying cultural sensitivities to finance and risk;
- It would ideally remove some of the inherent risks in traditional venture capital (VC).

Designing such tools would be challenging indeed. Presumably, if it were possible, someone would already be doing it. Yet in truth the tools do exist; people are “doing it.” For decades the tools have patiently evolved, and like most breakthrough innovations they began at the periphery of mainstream markets. Although they have many names, they will be described here summarily as Revenue Capital and Disruptive Models.

Revenue Capital

Revenue capital allows investors to fund businesses and generate returns based on the venture's revenue, rather than via debt or equity; hence the name “revenue” capital. In other words, investors put cash into a startup, and rather than receiving the company's stock, the investor receives a percentage of the business's future revenue for a period of time.

Early versions of revenue capital were pioneered in the oil, gas and mining industries and resembled collateralized debt. As the concept became popular with natural resources, it emerged in other industries such as life sciences, biotech and intellectual property financing.

With growing popularity in specialized niches, in the early 1990s revenue capital began to evolve as a promising structure for venture investment. An early pioneer was Arthur Fox, an innovator and venture capitalist. Fox, a Massachusetts Institute of Technology graduate and former engineer at Westinghouse and Hewlett-Packard, had early success as an entrepreneur and angel investor from the 1970s to mid 1980s. Intrigued by alternative funding tools he began a small revenue-based fund in 1992, then a second larger fund in 1995. With both funds returning an IRR of more than 50%, a third fund is being planned. Overall returns are often more than 20% annualized, over 5-8 year timeframes, with the initially invested capital typically

recouped within a mere 28-30 months. [1]

As in the case of traditional venture capital, revenue capital invests in promising growth businesses. Yet instead of receiving equity in the target ventures, the revenue capital fund receives 1-5% of the venture's gross revenue, on a monthly basis, until a multiple of the fund's initial investment (usually 5X) is paid back within a 5-10 year period.

Revenue capital explicitly structures the deal as a special form of debt called a "royalty note." Payments on royalty notes are not fixed, but variable. Payments are expressed as a fixed percentage of a venture's gross cash receipts from sales activity. There are also no minimum payments required, so if a venture has no cash receipts in a month, no payment is due on the royalty note that month.

While having to carry a royalty and to repay five times the invested capital may seem unduly burdensome, in many cases revenue capital is an unusually equitable and low cost source of growth capital. By structuring the royalty as a note, not only can ventures often tax-deduct a large portion of their repayments, but no equity ownership in the venture is given up by entrepreneurs in exchange for funding. Entrepreneurs keep ownership and do not risk dilution.

Royalty notes are secured by the company's assets, yet no additional physical collateral is required for investment. Entrepreneurs do not have to incur personal liability for repayment, and the investment is only repaid to the extent that the venture generates revenue. As a result, the investor and entrepreneur share the risk of failure. Often a royalty note will subordinate its first priority position in the venture's tangible assets to other creditors such as banks, although a first position can be kept in the intangible assets. To help the investor better profit from the venture's "upside," additional warrants, options, or other instruments can also be negotiated if desired.

While all forms of growth capital involve risk, at its core revenue capital has inherently lower structural risk than traditional venture capital. This is because revenue capital returns start as soon as a venture first earns revenue. At that moment the investor gets its percentage of revenues on a monthly basis – which can potentially be reinvested in an evergreen manner. Therefore some amount of invested capital is almost always returned, even if the target venture ultimately fails. This is why Fox's first and primary objective is to set the royalty rate such that the original invested capital can, on a conservatively projected basis, be fully returned within 18-30 months. By comparison, traditional VCs receive 0% of their invested capital until there is an exit, often 5-10 years later (if at all).

Revenue capital has caught on quietly, yet persistently. It has also spawned a number of innovative variations, such as the hybrid debt-royalty structure used by the Business Development Company (BDC), a \$400 million venture capital, lending and investment firm. BDC raised a revenue-based fund in 1999, and has since raised three. The first fund saw 17% cash returns for investors, placing it near the top of all private equity funds for that vintage year. The second fund (2003) realized cash returns exceeding 20%. Investors in the third fund include Bank of America, Sovereign Bank, Citizens Bank, and many others. It targets growth-oriented private ventures needing between \$1-5 million infusions. [2]

Revenue-based investment funds also include Cowen Healthcare Royalty Partners, DRI Capital Inc., Paul Capital Healthcare, Royalty Pharma, and Rockwater Capital Partners to name a few. In the healthcare industry royalty and revenue-based investments grew from 2 publicly announced deals in 2000 totaling around \$145 million, to 27 deals in 2007-08 totaling around \$3.3 billion (roughly a 22x increase). [3]

Breaking Old Tradeoffs

By breaking free from dependence on exits, revenue capital widens the “deal flow” that investors can tap into. After all, masses of sound businesses will never get acquired or go IPO. In other words, like venture capital, revenue capital can provide large investments to large businesses. Yet unlike traditional venture capital, revenue capital can also entertain many small investments that have no likely exit.

Another benefit of freedom from “exit dependence” is a reduction in the level of legal, market and regulatory infrastructure needed for investment. Rather than requiring liquid capital markets and sophisticated securities environments, revenue capital can potentially be effective anywhere with enforceable contract law (and perhaps usury law, depending on the circumstances). While a bar to be crossed, it is a lower bar indeed. This allows revenue capital to be made available not only to more types of businesses, but in more nations as well.

Structured appropriately, revenue capital can even meet Sharia principles making it an effective financing vehicle in Islamic societies. Under some interpretations revenue capital may even be more Sharia-friendly than traditional VC because it allows the venture to – in a sense – reclaim the underlying asset after the negotiated amount is paid back (whereas traditional VCs can often keep a venture’s equity indefinitely). This can vary in nations that force an imputed interest rate on royalty notes, even though revenue capital contains no actual stated interest. As such, Sharia compliance must be navigated separately in each jurisdiction.

Yet perhaps most appealing is revenue capital’s removal of a conflict of interest that can pervade venture capital. A common criticism of VCs is that their goals (i.e. grow and exit the venture as soon as possible) can be at odds with long-term business planning. Due to the manner in which they get paid, VCs are often “impatient for growth, but patient for profits,” when ventures need to be “patient for growth, but impatient for profits.”[4] By aligning the interests of investor and entrepreneur around revenue and profitability, rather than rampant growth and a quick exit, revenue capital can better favor “patient capital” and long-term planning.

Disruptive Models

Highlighting the benefits of revenue capital is not to suggest that it is free of limitations. Ventures funded by revenue capital must have large enough gross margins to remain profitable despite 1-5% gross revenue payments. This disqualifies many potential investments and favors business categories with historically high margins such as services and software. It can also complicate follow-on or multiple revenue-based investments in a single venture; most ventures cannot support more than one royalty at a time.

Moreover, ventures must generate sufficient revenue within acceptable time horizons. While revenue-based funds need only identify ventures that can generate revenues – a much lower bar than with traditional VC – revenue capital continues to hinge on effective screening and due diligence. Like VCs, revenue capitalists must still be able to pick winners; or at least survivors.

This can be more difficult in developing nations where the specialized talent needed to screen deals is often in short supply. Typically guided by personal intuition, General Partners in VC firms tend to be very accomplished, highly educated former executives with decades of experience in large and small businesses alike. Such talent is rare even in developed nations, as 80% of VCs in the US achieve poor results or fail. [5] Without innovations in venture screening that substitute for the rare, elite intuition of top VCs, venture investment simply cannot scale.

To address this gap, relatively quiet innovations in venture screening have recently demonstrated promise for

developed and developing nations alike. These “innovations” refer to a body of research that grew from pioneering work on “disruptive innovation” by Professor Clayton Christensen of the Harvard Business School. Subsequent work by Thomas Thurston and Christensen revealed a process that has since predicted the likely survival or failure of ventures with more than 85% gross accuracy and over 99% statistical significance. Thurston, a former attorney and venture professional at the Intel Corporation, began building such models at Intel in 2006. Continuing his work at Harvard in 2007, the models were refined and currently apply regardless of geography, industry or venture stage of maturity. Moreover, these “disruptive models” require no investment in advanced technologies or sophisticated resources.

At a high level, disruptive models analyze whether a venture meets strict, refined criteria that define its strategy as either “sustaining” or “disruptive.” A second litmus test defines whether the business is an “incumbent” or a “new entrant” in its target market. With these variables, probabilities are assigned to a venture’s likely future. For example, when new entrants position their products or services as sustaining (i.e. offering superior performance) to their competitors, such new entrants almost always fail. Therefore they can quickly be identified as poor investments. This was the case in 1970 when IBM was a new entrant in the office photocopier industry (at the time the market was dominated by Xerox, which was less than a quarter of IBM’s size). Despite deeper pockets, outstanding technology and nearly two decades of dedication, IBM was defeated and exited the market in 1988. IBM had fallen into the snare of being a new entrant with a sustaining strategy.

However, when new entrants arise with “disruptive” strategies – entering either at the low-end of a market or in a new market category – they exhibit unusually high probabilities of success. For example, the new entrant Canon used a disruptive strategy to ultimately usurp Xerox in all but niche segments of the copier market through relatively low-end, low cost desktop printers. Such outcomes are surprisingly predictable. For example, a study of the disk drive industry found that early disruptive ventures were six times more likely to survive than other startups. [6]

Disruption is critical because – unlike the subtle intuition of seasoned VCs – it can be taught. It can scale. To explore this Christensen and Thurston engaged more than 200 MBA students attending either Harvard or the Massachusetts Institute of Technology in a series of controlled experiments during 2007 and 2008. Students were randomly given anonymous, disguised, one page summaries of ventures and were then asked to predict whether they believed each venture would survive or fail.

When student predictions were compared with real-life outcomes, those with little-to-no training on disruption frameworks did not achieve statistically significant predictions. Their guesses were statistically random. Yet those with one month of training on disruption were 61% accurate, with more than 99% statistical confidence. Through this and other research, disruption models continue to prove highly effective and teachable methods of venture screening. Innovations such as these are critical. This is especially the case in developing nations, where high demand for specialized expertise can face disproportionately short supply.

Conclusion

Venture investing can catalyze economic development. For example, as of 2008 venture capital-backed businesses accounted for 12.1 million jobs and \$2.9 trillion in revenue in the US alone. [7] Yet today investors have been challenged to develop new risk-reward models for developing nations. This is where revenue capital and disruptive models hold promise. In the wake of global economic chaos, the decades ahead will be shaped by those with the right tools.

This article is written jointly by Arthur Fox (SM'72), Thomas Thurston (Growth Science Int'l, LLC), and Safwan Zaheer (Sr. Fellow Growth Science Int'l, SM'08).

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