

BOOTSTRAPPING BUSINESS START-UPS: ENTREPRENEURSHIP LITERATURE,
TEXTBOOKS, AND TEACHING PRACTICES VERSUS CURRENT BUSINESS
PRACTICES?

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ABSTRACT

Existing scholarly research on bootstrapping is limited, despite the widespread use of bootstrapping strategies in actual practice among start-up entrepreneurs. Popular academic textbooks used in college and university entrepreneurship courses seldom provide in-depth coverage of bootstrapping; many devote just a few paragraphs or pages to the subject. In sharp contrast to the coverage given in these textbooks, bootstrapping in its various forms has been advocated in, and documented by, the popular business press as a widespread phenomenon. Given that textbooks in any established discipline often draw heavily upon that discipline's existing body of literature, it is not surprising that a lack of formal research by members of the entrepreneurship scholarly community reflects the possibility that textbooks, and courses (if they are based on those textbooks), may be out-of-step with entrepreneurial reality.

INTRODUCTION

Bootstrapping is entrepreneurship in its purest form. It is the transformation of human capital into financial capital. The overwhelming majority of entrepreneurial companies are financed through this highly creative process (Freear, Sohl & Wetzel, 1995), which typically involves the use personal savings, credit-card debt (Cole, Lahm, Little & Seipel 2005), loans from friends and family and other nontraditional forms of capital.

The entrepreneurship academic community has not fully recognized the effect of bootstrapping on entrepreneurial behavior and organizational success (or failure) through formal research. The above positioning statement is supported by the recent observations of other scholars such as Van Auken, (2005) who observed: "Although bootstrap financing commonly is used and is an important source of capital, few...studies comprehensively have examined the role of bootstrap financing in small firm financing" (p. 94). Winborg and Landstrom (2001) similarly observed that "bootstrapping is a phenomenon which deserves more attention in future research on small business finance" (p. 235).

We also submit a logical chain-of-events argument that suggests a lack of coverage in the literature, which also seems to be reflected in our review of popular academic textbooks, may impact both teaching (if course content is anchored to assigned textbooks) and students' views about the realities that they will face as nascent entrepreneurs.

Bhide (1992) suggested that the success of an enterprise hinges on the ability of its owner(s) to create and leverage financial resources. This paper discusses methods which broadly address bootstrapping options such as bootstrapping product development, bootstrapping business development, bootstrapping to minimize the need for (outside) capital financing, and

bootstrapping to minimize the need for capital; these have been previously identified by Freear, Sohl, and Wetzel (1995) and Winborg and Landstrom (2001). The aforementioned methods generally involve the acquisition and control of resources (both tangible and intangible) through creative means. Control also encompasses the efficient uses of those resources to finance the enterprise for growth.

REVIEW OF EXISTING LITERATURE ON BOOTSTRAPPING

A series of searches of the academic literature revealed that rigorous study of bootstrapping, as a serious variable in entrepreneurial success has been minimal. Besides the conclusions mentioned above from prior researchers who have pointed to a dearth of research, our search attempts conducted on databases used by *Proquest* also demonstrated the scarcity of scholarly research on bootstrapping. With parameters for the searches set to select only scholarly journal articles (with full-text availability), the low number of articles in search results from those *Proquest* databases suggested an opportunity for future studies of bootstrapping as an antecedent to entrepreneurial success or failure.

Subsequent search efforts resulting from a broader Internet search encompassing the business press, practitioner journals, and magazines revealed that the term, “bootstrapping” (which has different meanings in different contexts; homonymic variations may apply to computing, statistical methods, and meanings other than that which pertained to our interest in bootstrapping business start-ups), is often commingled with numerous subjects in search results. A *Google* search on the term “bootstrapping” returned 1,710,000 hits (retrieved September 9, 2005). It should be noted that the authors of this paper recognize the instability, bias, and imprecision of commercial search engines; for instance, the same search conducted a few months earlier produced 650,000 hits. Nevertheless, as we have indicated, the body of scholarly literature available for review is limited, yet bootstrapping is widely recognized as entrepreneurial reality.

BOOTSTRAPPING IN TEXTBOOKS AND CLASSROOM IMPLICATIONS

Bootstrapping is often characterized as a means to an end when other choices (i.e., traditional sources through venture capitalists, banks, and angel investors) do not exist (Van Auken, 2005). Popular academic textbooks used in college and university entrepreneurship courses seldom provide in-depth coverage of bootstrapping; many devote just a few paragraphs or pages to the subject. For example, even though credit cards (both business and personal) are widely used (Cole, Lahm, Little & Seipel, 2005; Report to the Congress, 2002), almost any indexed reference to credit cards in these text books is likely to lead the reader to a section on accepting cards as a merchant, as compared to using credit cards for start-up capital.

Writing a business plan has been described as “the sine qua non of modern entrepreneurship education” by Katz, Harshman and Dean (2000, p. 235). However, the explanation given by these authors as to “why?” suggests the need for far more discussion and research, as they also mention that the importance of these student-written plans is to address the requirements of “bankers, investors, and lawyers” (p. 235).

The above observations about textbooks and any teaching based on the content within those entrepreneurship textbooks (reasons for writing a business plan, and so forth), is in stark contrast with the reality faced by students as well as more seasoned professionals who may

endeavor to start a business. To illustrate the aforementioned reality, we submit the instance of industry sponsored research commissioned by MasterCard (de Paula, 2003), which has indicated the increasing popularity of credit cards: “Of the 64 percent of small business owners who use plastic for business expenses, 57 percent use personal cards, with 33 percent using those personal cards exclusively and 24 percent using them in addition to small-business cards” (p.54). Indeed, Nixon (1997) observed that some entrepreneurs have in practice adopted credit cards as a new type of “venture capital card” (p. 33):

Many entrepreneurs perceive that the process of obtaining a commercial loan from a bank is too difficult, or that it would ultimately be a vain effort. In some respects, this perception is not far off the mark....A credit card, or multiple credit cards, can be obtained over the telephone or through the mail, although the interest rate likely is higher. The bottom line for the entrepreneur is that this source of credit is easier to tap. “Some [credit card issuers] just give you the mirror test”....“They hold a mirror up to your face and if you’re breathing, you get a card.” (p. 33).

Not only is it the case that business founders are using credit cards (Loftus, 2004; Hise 1998), credit cards are being aggressively marketed by banks (Streeter, 1996) “with little or no documentation required” (p.15). The authors of this paper are not arguing that students should be taught to use credit cards for start-up capital. Nor are we suggesting that any entrepreneur should use them, or attempting to otherwise enter that debate (Prince, 2003; Scully, 2002; Rosenfeld, 1999; Streeter, 1996), which is a separate issue. However, given that credit cards are being used by a majority of businesses as one popular form of bootstrapping among several alternative forms (McCue, 1999; Hyatt & Mamis, 1997; Mamis, 1992), entrepreneurship educators should at least address credit cards as well as other forms of bootstrapping more openly. A realistic review of current businesses suggests that bootstrapping is the norm, and that business founders are often operating on a shoestring budget (Rohland, 2000; Pell, 2004), substituting “ingenuity and a lot of gumption” (Fenn, 1999, p.43) for cash.

Scholars must proactively address reality in their efforts to construct a relevant and connected body of entrepreneurial literature in this important, yet emergent area of inquiry. The position advanced here is under the logical supposition that unless instructors are supplementing popular entrepreneurship textbooks with other resources drawn from practitioner-based materials to a substantial degree, it may be the case that contemporary courses underemphasize the likelihood that nascent entrepreneurs will engage in some form of bootstrapping (e.g., using credit cards as a source of start-up capital), as compared to obtaining traditional sources of start-up capital.

We would maintain the position stated above even if the message that students receive is an implicit one: “write a plan; go to the bank; get the money; start your business; live happily ever after,” as this message is tantamount to telling a fairy tale relative to the reality that most entrepreneurs face. Finally, we also acknowledge our own aforementioned supposition, and that future researchers (including the authors of this present paper) should investigate how closely scholarly research, textbooks arising from that research, and subsequently, classroom practices based on those textbooks are, or are not, in alignment.

THE WIDESPREAD USE OF BOOTSTRAPPING

While numerous articles appearing in periodicals such as *Entrepreneur* and *Inc.* tend to suggest bootstrapping can be risky, they nevertheless also emphasize that the vast number of

start-up businesses utilize bootstrapping techniques. Interestingly, existing academic research has suggested that bootstrapping techniques can minimize risk because of the absence of outside venture capital investors (Carter, et. al., 2002). Although the percentage of start-ups that actually use bootstrapping quoted by Worrell (2002) in *Entrepreneur* magazine might be disputed as a figure of speech, he wrote:

Despite the dream of some entrepreneurs to meet a VC with deep pockets, the fact is that 99.9 percent of business owners will struggle alone, pulling themselves up by their bootstraps. That is not necessarily a bad thing. With a little luck and a lot of pluck, bootstrapping a business can be both financially and emotionally rewarding. (p. 1)

McCune (1999) quoted Tom S. Gail's, executive professor at the University of Houston's Center for Entrepreneurship and Innovation, who estimated that "between 75 percent and 85 percent of startups use some form of bootstrapping to help finance themselves" (p. 1). Although the number of start-up businesses that rely on bootstrapping may be difficult to determine exactly (and may fluctuate based on economic conditions and other factors), it is evident that a substantial number, constituting an overwhelming majority, engage in the practice.

In the months prior to 911, the handwriting was on the wall and what had been popularly known as the "dot-com frenzy," was coming, or did come, to an end. In a July 21, 2001 article published in the *Fedgazette* (a publication of the Federal Reserve Bank of Minneapolis), Wirtz reported "nervousness" (p. 1) about the new economy and observed efforts to expand the availability of venture capital. The exact moment in time when the so-called "bubble" burst may be the subject of some debate among economists. However, what has transpired post-911, is a radical tightening of venture capital availability, and hence, even more bootstrapping efforts on the part of entrepreneurs. Hamilton (2001) has written about the culture of self-funded e-commerce firms. He identified self-funded entrepreneurs as "classic 'bootstrapping' types, often using credit cards, second mortgages, or retirement funds to bring a dream alive" (p.279).

Roberts (2003), in an article titled "Bootstrapping is back: Entrepreneurs dig deep and make personal sacrifices for their businesses," observed: "Entrepreneurs were spoiled during the dot-com era, often receiving funding before they had a business model or a customer, in the past two years, however, venture backers have become much stingier, especially with seed money" (p. 44). Whatever the state of the economy is, has been, or will become, the use of bootstrapping among nascent entrepreneurs can be logically predicted, or observed through formal study. In other words, when there are no other sources of capital to be found, bootstrapping becomes the method of choice (Freear, Sohl, and Wetzel, 1995).

Cole, Lahm, Little, & Seipel (2005) observed the scarcity of academic research on the use of credit cards by entrepreneurs and small business owners, despite the widespread use of credit card financing in actual practice. The Federal Reserve Board has estimated that 46% of small businesses include credit cards as a source of start-up capital and provider of cash for ongoing operations (Report to the Congress, 2002). Some entrepreneurs parlay multiple cards to amass significant funds, such as a Los Angeles entrepreneur and his partner, who used 10 Visa and MasterCard accounts and accumulated \$40,000 in debt (Deceglie, 1998). The entrepreneurs subsequently reported having a thriving business (that was also paying high interest credit card debt). An online article from *morebusiness.com* (Charge wisely, 2004) admonished that reliance on credit cards could be "dangerous," but then offered "nine rules" for using credit cards to finance a start-up business (p. 1). Besides leveraging credit cards, self-funded entrepreneurs tend to utilize personal resources (Longnecker, Moore, and Petty, 2002) and whatever additional creative strategies may be at their disposal.

BOOTSTRAPPING METHODS

However one might approach a discussion of bootstrapping, simply put, there are only two basic methods employed by nascent entrepreneurs: 1) gaining control of resources, and 2) efficiently utilizing resources (e.g., minimizing expenses). Taken together, these two methods form the basis for an overall strategy. A bootstrapping entrepreneur's very survival may well depend on his or her ability to be highly adaptable and operate on a shoestring budget (Goodman, 1996; Pliagas, 2005; Willcocks, 2002).

BOOTSTRAPPING RISKS AND ADVANTAGES

“When everybody says ‘no’--from the banker to the private investor--the tough small business owners turn to themselves....they raise money from within by bootstrapping” (McCune, 1999, p.1). Because bootstrappers have no choice except to be resourceful, they may have an ironic advantage over other individuals who hail from more resource-rich environments in terms of developing their managerial and entrepreneurial skill-sets. To a certain extent, being deprived of resources forces (Bhide, 1992) the entrepreneur to find other inventive ways to make-do (Lahm, 2005), or do without. For instance, a traditionally funded organization with more assets is in a better position to offer open credit terms to its customers. Bootstrappers, not being in the same position to bankroll the operations of customers, may conversely be compelled to negotiate for payments (or a portion thereof) in advance (McCune, 1999). For anyone who has experienced the not so pleasant situation of having to collect on a past due account, the sound of “ching-ching” in advance is most reassuring.

Bootstrappers may also consciously consider strategies that can actually reduce risks associated with their entrepreneurial pursuits. By purposely opting to create a business that provides services and requires little or no inventory, the entrepreneur, who does not have access to traditional (i.e., external) funding sources can make the business more “bootstrappable” than others (Mamis, 1992). However, bootstrapping entrepreneurs may tend to cut corners too close in areas such as property insurance (Sekula, 2005) and by foregoing health insurance. Another pitfall of being in a constant “do-it-yourself” mode is that the entrepreneur may spend too much time learning to perform or performing tasks that are worth less than other tasks. For instance, if meeting with a prospective customer could possibly generate a \$5000 sale, and yet the entrepreneur is too busy performing a more menial task such as bookkeeping or copying documents (tasks that could easily be farmed out), then the business may not ever realize its full revenue potential.

There are manifestations of bootstrapping that are not high risk at all; indeed, these methods—properly envisioned and executed—may actually reduce risk to a bare minimum. Publishers’ of Who’s Who-type directories have employed this tactic successfully. The scenario works as follows: (1) identify a special interest group or category; (2) solicit individuals for inclusion in an upcoming directory; (3) congratulate or otherwise flatter the individual for his or her achievements (and thus, eligibility for inclusion); (4) offer a pre-publication discount for ordering an advance copy of the directory; (5) collect the money for the purchase(s); (6) pay the printing bill (supposing 5,000 advance copy sales at \$125.00 each, paying the printing bill is easily attainable); (6) ship the printed book; (7) repeat the process with more prestigious or alternate books. According to book industry consultant John Kremer (1998), other directories

“come in at least 57 varieties” (p. 53) and can “form the foundation for an entire line of related books” (p. 52); these books may also require annual updating, and thus create a perennial sales cycle. Accordingly, risk is reduced as a result of a business model under which money is collected in advance of the service being provided.

METHODS FOR GAINING CONTROL OF RESOURCES

A hybrid of selling a product or service up-front is to pre-sell a promise of performance, and a specific example would be the sale of gift certificates, prior to providing (or even having the capacity to do so) a product or service. Detamore-Rodman (2003) chronicled the instance of entrepreneur and founder of The Chocolate Gecko, Lissa D'Aquanni, who employed the tactic:

In 1999, the cash-strapped chocolatier needed molds and a temperer for the Christmas rush. Recalling a strategy she had seen in a magazine, she sold discounted gift certificates to raise capital. D'Aquanni offered customers \$25 in free chocolates for every \$100 in gift certificates purchased. Within two weeks, she had \$5,000 for the equipment purchase. 'A lot of folks mailed them as gifts to friends, family and co-workers,' D'Aquanni says. 'And most of those people ordered chocolates. My customer base exploded'....D'Aquanni routinely barter to pay for professional services for her business; both her accountant and Web site designer accept chocolates in exchange for their services.

Another method that bootstrappers can utilize is to identify those individuals or organizations that stand to gain, and enlist them as participants in the enterprise. Small businesses, especially those started from a home-based location, often suffer from an image problem. Mamis (1992), writing for *Inc. Magazine*, wrote about an entrepreneur who satisfied this problem in a unique way, by trading office space in exchange for potential gain that the host business might incur:

'One thing I realized very quickly is that people want to see fancy offices, fancy letterhead, fancy everything,' says founder Michael Kempner of MWW/Strategic Communications Inc., in River Edge, N.J. He did not have fancy anything, but he had a friend in advertising who did. Kempner moved into the friend's office at no expense, on the quid pro quo understanding that his public-relations firm would steer advertising in the friend's direction. He even moved in on the ad company's name: 'I put a slash on it, added "Strategic Communications," and looked like I was part of a big company. It was all a mirage at the beginning. As far as my clients knew, here I was with a fancy name in a fancy office. Those were important, or people would not hire me. This way, they came upstairs and saw 40 employees, and thought they were working for me. I never told clients those people didn't work for me, and they never asked.' (p.7)

Bootstrappers do not just concentrate on ways to raise cash through leveraging financial resourcefulness (such as by using credit cards, home equity loans, and so forth), they often think of clever ways to bring a plethora of resources into their businesses. Mamis (1992) identified these practices as “the distinction between capital-dependent and wit-dependent commerce” (p. 1). Manifestations might mean gaining access to people and their talents, inventory (e.g., on consignment), shared office space, and just about anything else through bartering. Local media are accustomed to bartering advertising with small and large companies, and many do it so often that they have standard contracts and are ready to trade on a moment's notice—they also trade with one another.

Bootstrappers may find help in the form of labor by trading on skills (the combinations are virtually endless) or banding together to form larger teams. For example, small advertising agencies frequently employ this technique by hiring out video production, design, market

research, and numerous other services. Even three-way trades are possible: a magazine may provide advertising for a resort property or restaurant on trade; after accumulating trade credits, that magazine might in-turn satisfy one of its payment obligations by offering a stay at the property or dinner in lieu of cash payment. (Some crossover between gaining control of resources and minimizing expenses as discussed in this paper is unavoidable.)

METHODS FOR MINIMIZING EXPENSES

Arora (2002) suggested, “Dedicate yourself to becoming a frugal minimalist, and you’ll be well on your way.” The popular author of the “Guerilla” series of books (seminars and ancillary products) Jay Conrad Levinson (2005) observed:

By understanding that economizing does not mean saving money, but investing it wisely, guerrillas test their investments on a small scale before plunging headlong into any kind of marketing. They have no fear of failure, providing the failures are small ones and knowing that even one success in ten tries means discovering a path to wealth and profitability. They know in their hearts that money is not the key to happiness or success, but that enough of it enables them to have a key made. Real frugality is more about priorities and results than just saving money. (p. 1)

As Levinson suggests, bootstrapping companies can reduce risk and minimize expenses (by taking smaller chances and making better decisions) in the same ways that large organizations ensure their successes, through research--before charging headlong into anything, not just marketing. Montana State University has created a program administered through its Center for Entrepreneurship for the New West that assigns student interns to technology businesses at the incubation stage of their development. The executive director of TechRanch, an associated organization that implements the incubation program stated: “If you are a young company in a heavy bootstrapping mode, getting pro-bono research is a big deal...the student interns get credit and real world experience. Our clients get free research. It is a good match” (Schmidt, 2004).

An initial reaction to the dictum to save money is to pay a lower price for purchases. It is obvious that one should obtain quotes and provide a vendor with a general idea of a needed end result for a manufactured product (or a service) and ask for design specifications, pricing, projected delivery schedules and terms. One should also negotiate terms for purchases from vendors and sales to customers carefully.

Notwithstanding the above, and while buying cheaper may have its benefits, spending wisely and purchasing with scalability and longevity in mind can be another way of economizing (and in our view deserves tremendous emphasis). For instance, regarding the preparation of marketing communications materials, Levinson advised: “When you say in a brochure that you’ve been in business five years, you must update that brochure next year. When you say you’ve been in business since 1995, that’s always going to be the truth” (p. 1). Following Levinson, business founders may wish to develop business communications and media skills. Being worthy of media attention (i.e., being newsworthy) due to a unique product, company history, team, or even aspiration can generate tremendous advantages and momentum that begets stories in hindsight of “being at the right place at the right time.”

On the spending side of the equation, nascent entrepreneurs may minimize expenses by being taught to think differently about various business models. On the Internet, there are single-person businesses using technologies such as auto-responders, fully automated shopping carts

with merchant processing, automated affiliate programs, drop shipping of tangible goods or digital delivery of intangible goods, and additional outsourced services (e.g., Web hosting). Some of these individuals are generating significant incomes, often by selling or reselling information products “twenty-four hours a day without any intervention on...[their] part” (Kremer, 1998, p. 338). Entrepreneurship courses (and the stories told by entrepreneurs) may tend to portray a one-size-fits-all, life-consuming image of entrepreneurship relative to business models, business plans, and notions of bigness and growth; it might be argued that “micro, self-sufficient, virtual, part-time (or non-labor intensive), and automated” are desirable characteristics of a business model for undercapitalized entrepreneurs (including students).

Bootstrappers should probably avoid capital investment in virtually any item that can be outsourced. Common advice is to lease, not buy (Arora, 2002). However, advice that is more practical may be to minimize any long-term obligation if external production resources are available. Any kind of hardware is notorious for depreciation, yet entrepreneurs often buy or lease expensive copy machines, computers, phone systems, and other capital items that might be outsourced through a copy center, secretarial service, and answering service, respectively. A perfect example is Web hosting, which is available for less than five dollars per month, thereby making the purchase, or lease, of a server costing in excess of \$2,000 hard to justify.

Hence, start-up entrepreneurs with little capital should be advised to strongly consider a business model that entails compensation prior to the delivery of a product or service (e.g., consulting, mail order, or niche oriented Internet businesses that do not require a glitzy Web site). An agency or brokerage-type business: connecting a party who needs to sell, with a party who needs to buy is consistent with the above notion.

An emphasis on pre-launch preparations, perhaps several years in advance may also be wise. For instance, an aspiring entrepreneur might stockpile non-perishable business assets over a long period of time. Businesses that have resulted from a hobby often start out with many of the necessary tools, contacts, sources, and skills on the part of the owner to be well equipped from their inception. A long-range approach also allows would-be business founders to conduct enormous amounts of research: library research, bookstore research, Internet research, and especially field research (the non-scholarly translation of field research: network, network, network, with prospective suppliers, customers, advisory board members, and other potential friends of the business). A greater emphasis on a long range process such as that which is described in general terms above would serve to minimize other risks by identifying stakeholders, economic development dollars, co-location opportunities or other cohorts with synergistic potential relative to the founding of a business.

CONCLUSION

What we are able to conclude is that: 1) beyond our own search efforts, previous scholars who have studied the use of bootstrapping (Van Auken, 2004) as well as differences among firms and consequences of various start-up financing strategies (Van Auken & Neely, 1996) have noticed a lack of scholarship pertaining to bootstrapping. Van Auken observed a “serious gap in the literature” (in apparent concurrence with the authors of this paper) and stated that “research on the use of bootstrap financing is limited” (Van Auken, 2005, p.95), even though “bootstrap financing is a common source of financing” (p. 146); 2) textbook authors often do (and should) draw upon the existing literature in a given discipline in framing their content; 3) the popular textbooks that we have examined seemed to mirror the lack of coverage we found in the

literature; 4) students' views and understanding in a given course should be informed in terms of depth, breadth, and a realistic view of their given subject area(s) after they have processed the content of their assigned textbooks.

More education and training are needed for would-be entrepreneurs such that they are more familiar with traditional sources of capital and non-traditional sources. Bootstrapping should perhaps be a course unto itself as an addition to university level entrepreneurship programs (Mamis, 1995). Mamis (1992) observed, "there's no course book of bootstrapping techniques, but there ought to be...the approach has much to teach--and even companies that have progressed beyond their bootstrap days would do well to relearn some of the proven tactics" (p. 2).

Van Auken (2005) has suggested that small business owners lack familiarity with sources of capital, and this influences their capital structure. However, it is also evident that raising capital from banks, venture capitalists, and other traditional sources for initial capitalization can at the very least, be difficult (Van Auken & Neely 1999) in the absence of a substantial inducement to join the entrepreneur's cause in the form of investors' potential for gain (Fried & Hisrich, 1995), collateral (Van Auken & Carter 1989), or both. Conversely, it does not seem adequate to send would-be entrepreneurs an abstinence message with respect to some of the more risk-prone methods that they might employ, or simply admonish that bootstrapping is fly-by-night and less than respectable (Rosenfeld, 1999) as compared to conventional wisdom (i.e., write a business plan, impress a banker).

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