

***Unplugged* - "Carte blanche"**

The Downside of Entrepreneurial Opportunities

by Saras SARASVATHY

In the original tradition of the "Unplugged" section, "carte blanche" grants a wild card to world-class scholars to share their own perspective on novel ways to conceive of management today. They may offer new avenues and draw up an agenda for a specific research question. Authors have to be invited to submit to the "carte blanche" series by one of the editors.

Abstract. The conceptualization of opportunities at the core of the research field of entrepreneurship has led to a growing stream of interesting work. This essay seeks to build on that scholarship and focus the conversation on the downside of opportunities. Focusing on the downside puts the person back in the person-opportunity nexus, puts the nexus into the stream of literature on occupational choice and shows how effectual logic may be applied to the occupational choice problem, especially in dealing with findings from prospect theory on loss aversion in human behavior.

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I have never been a fan of universal definitions for important phenomena at the heart of a field of research. On the one hand, universal definitions fail because they are never universal. There is always someone who has or comes up with a different conceptualization that merits attention. Take something as simple (?) as gender. When we define gender as male and female, we leave out transgendered people. Moreover, the simple dichotomy makes us blind to conceptualizing gender as a continuum, which affords relevant insights into important phenomena such as creativity (Harrington & Anderson, 1981; Jönsson & Carlsson, 2000; Norlander, Erixon, & Archer, 2000). On the other hand, near-universal or generally accepted definitions that are too focused or too precise tend to narrow down a field of research in ways that are detrimental to the intellectual development of the field, even when they may enable legitimization and institutionalization. For example, if we (as some do) defined the entire field of strategic management as the pursuit of sustained competitive advantage within

existing markets, we would become blind to the possibility that markets may be endogenous to strategic action (Barney, 1991; Peteraf, 1993), or shy away from studying exactly when and how organizational failure could and should be firms' chosen objective (Dew, Goldfarb, & Sarasvathy, 2006). Contrarian perspectives have been an integral part of intellectual progress, be it Godel's challenge to formal mathematics (Smullyan, 1992) or Arrow's impossibility theorem, which shook the foundations of welfare economics (Arrow, 1950).

Yet some broad agreement on a cluster of loosely related definitions can be useful and may even be necessary for a field to come together at the core and cumulate knowledge in a rigorous way. Conceptualizations of "opportunities" serve this less sweeping yet more valuable purpose in the field of entrepreneurship. I deliberately use the plural here not only because there are several different kinds of entrepreneurial opportunities in the world but also because there are a multiplicity of definitions of entrepreneurial opportunities even within the field of research as practiced by scholars in the Academy of Management. And that, in my opinion, is a positive thing.

Let us consider a few examples. Note that my selection is most likely neither complete nor representative. It is simply an ad hoc assembly that allows us to glimpse at once the difficulties and possibilities of placing opportunities at the heart of entrepreneurship research while acknowledging their importance and value from practical and pedagogical standpoints.

In his seminal essay on *The Distinctive Domain of Entrepreneurship*, Venkataraman (1997) proposes that "entrepreneurship as a scholarly field seeks to understand how opportunities to bring into existence "future" goods and services are discovered, created, and exploited, by whom, and with what consequences" (1997: 120; italics in the original). This puts opportunities at the center of the field of research. But Venkataraman (1997) does not define entrepreneurial opportunities per se. His later, better-known and highly cited co-authored article appears to build on Casson's definition of opportunities, as follows:

Entrepreneurial opportunities are those situations in which new goods, services, raw materials, and organizing methods can be introduced and sold at greater than their cost of production (Casson, 1982). Although recognition of entrepreneurial opportunities is a subjective process, the opportunities themselves are objective phenomena that are not known to all parties at all times (Shane & Venkataraman, 2000).

This definition has led to ontological debates in the field as to whether opportunities are objective constructs or subjective perceptions (Alvarez & Barney, 2013; Dimov, 2007, 2011; Eckhardt & Shane, 2013; McMullen, Plummer, & Acs, 2007; Sarason, Dean, & Dillard, 2006; Vaghely & Julien, 2010), whether they can be perceived ex ante even if they exist objectively at all (Davidsson, 2003; Dimov, 2011), and whether they are generated by forces external to the entrepreneurial process or endogenous to the actions of entrepreneurs (De Carolis & Saporito, 2006; Sarasvathy, Dew, Velamuri, & Venkataraman, 2003; Venkataraman, Sarasvathy, Dew, & Forster, 2012). Shane has argued rather firmly that opportunities arise from technological, demographic, and regulatory changes largely outside the entrepreneurial process (Shane, 2000). I have argued otherwise, mentioning sources that are not antithetical to the three which Shane mentions but additional to them (Sarasvathy, 2008). My view, shared by my colleague and co-author Venkataraman, is that there is no need to make an absolute choice between these alternative points of view. Instead, the debates are pointing to a taxonomy that can form a productive basis for research using multiple theoretical perspectives and every empirical method imaginable.

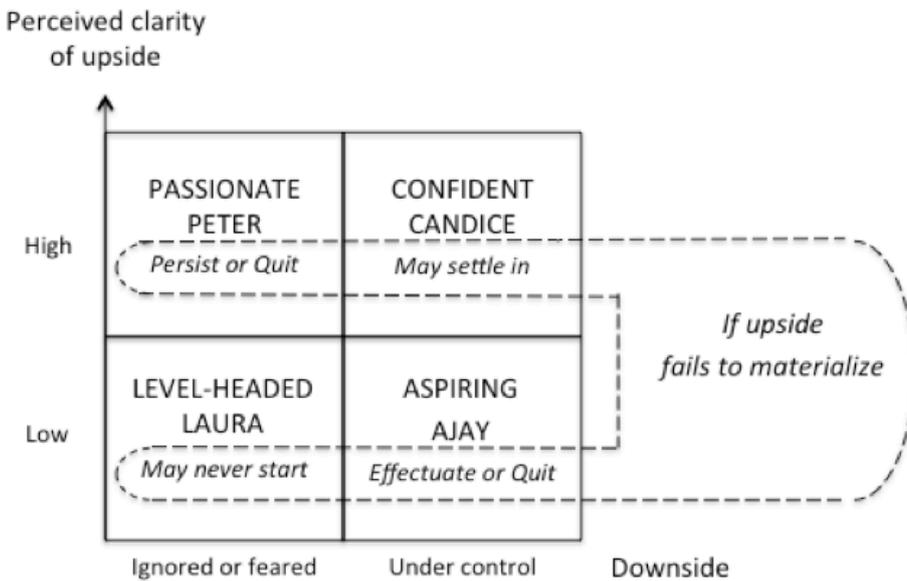
While a variety of spirited debates continue on the pros and cons of treating opportunities as the central phenomena of entrepreneurship research, empirical work has flourished around the recognition, discovery, and creation, amongst other things, of opportunities, for-profit, nonprofit and social ventures, and even new markets and new institutions (Corbett, 2007; Corner & Ho, 2010; Dutta & Crossan, 2005; Mueller, 2007; Saemundsson & Dahlstrand, 2005; van Gelderen, van der Sluis, & Jansen, 2005). Yet almost all this research emphasizes the upside potential of opportunities, with downside issues either ignored or relegated to heuristics and biases of one kind or another. For example, the literature stream on occupational choice models entrepreneurial opportunities as the probability of achieving risk-adjusted expected return (Amit, Muller, & Cockburn, 1995; Douglas & Shepherd, 2000; Evans & Jovanovic, 1989; Kihlstrom & Laffont, 1979). The literature stream on overconfidence bias argues that entrepreneurs tend to overestimate the upside potential, thereby underestimating downside risk (Baron, 2000; Busenitz & Barney, 1997; Camerer & Lovallo, 1999). In general, extant research on opportunities pays less attention to how entrepreneurs think about, manage, and cope with downside risk than how they perceive, pursue, and achieve the upside potential of opportunities.

The very word "opportunity" has positive connotations. It brings to mind success, achievement, prosperity, and even health and happiness. The word entices. We instinctively suspect that even those who fear the downside sigh in wishful fantasies about the upside. It brings to mind self-help books that urge us to view our misfortunes as opportunities. Merely "seeing" something as an opportunity, it seems, can deliver us from the downside. The shining clarity of the upside enables—nay, empowers—us to overcome any risks it may entail or any hurdles that may come our way in its pursuit.

Yet the most compelling opportunities are the ones where the upside is not clear, but the downside is clear or can be defined and brought within one's control (Dew, Sarasvathy, Read, & Wiltbank, 2009). For if the upside is clear, that will attract a multitude of competitors, many of whom may be better suited both in terms of talent and treasure to pursue it. With the downside under control, and the upside unclear, it is highly likely that only those who care about the upside in ways other than externally defined metrics of "winning" will pursue the opportunity. In other words, unclear upsides act as selection mechanisms that cue in intrinsic motivation. More importantly, intrinsically motivated entrepreneurs and their stakeholders will seek not merely to reach the upside they care about, but to keep pushing its frontiers upward even as they achieve it. The rest of this essay is an elaboration of this argument.

Many of my insights into questions worth pursuing in research come from the classroom and interactions with students struggling with practical issues which arise when starting, running, and growing new ventures. In terms of entrepreneurial opportunities, I have encountered at least four typical situations with which my students struggle. For ease of reading and for the fun of writing, I will first introduce the four scenarios in theatrical fashion (also illustrated in Figure 1 for readers who find my tastes in drama a little tedious). Thereafter, I will show how these scenarios fit into a model of entrepreneurial opportunities organized according to both upside and downside aspects of each opportunity.

Figure 1. Upside and Downside Saliency of Entrepreneurial Opportunities



CURTAINS RISE: PASSIONATE PETER

We have all encountered Peter. Perhaps we even believe Peter is the only “true” entrepreneur. Peter is passionate about his venture idea. In fact, it is not merely an idea to him. He is convinced that his venture is doable and worth doing and that he should do it without regard to the downside. Failure is not an option for Peter. And he has a thousand arguments why the upside is going to be great, even overwhelming. He has data; he has passion; he is persistent. Peter is not on the job market. While his classmates are sweating in suits trying to line up as many interviews as they can, Peter is busy working on his venture, making prototypes, presentations and pitches. Peter is usually distracted in class. While he has no problems calling up customers and investors and energetically moving them toward deals, he finds it very difficult to compromise if those deals don’t happen on his own terms. Peter doesn’t often seek out meetings during office hours, but every time I see him in or out of my office, he has exciting stories of potential progress and previous triumphs over obstacles of all kinds. No cautionary tales about downside possibilities bring Peter’s enthusiasm down; he simply does not hear them.

THE LIGHTS DIM: LEVEL-HEADED LAURA

Laura is very different from Peter. Laura has already lined up a job, but she is also keen on starting a venture sooner or later in life, and preferably sooner. Laura too has been working hard on her venture, collecting data, building prototypes, and constructing pitch-decks. She is busy setting up meetings with potential stakeholders to garner commitments and is often in my room asking for advice on how to deal with decisions facing her: what to change vs what to fight for; how to respond to new opportunities that some of these changes open up; which stakeholders to heed and which to ignore; and so on. Perhaps because of this, Laura is bullish about her efforts and yet not entirely sure what the upside will be or how big or how close. Laura’s biggest struggle is with calculating her

affordable loss. She keeps bringing up the opportunity-cost issue and repeatedly asks me how she will know whether to walk away from her job offer or not.

A FIRM KNOCK ON THE DOOR: CONFIDENT CANDICE

Candice does not like sharing her idea with others. She asked the most detailed questions on intellectual property in class. She is not keen on co-founders and would prefer to go it alone. She is very attentive in class and is most likely to raise her hand, along with endless doubts about how and why certain actions and techniques and advice may or may not work for her particular venture. Like Peter, Candice is convinced about the upside of her venture and is not open to substantive changes suggested by stakeholders. Unlike Peter, however, she definitely craves external validation before she will take the plunge. And like Laura, Candice has lined up a job that she admits she does not much care about given her passion for her new venture. After several meetings with her, I convinced her to reach out to a variety of stakeholders, including top managers of existing companies that she sees as her competitors. She is now in my office on the verge of tears because one of them made her a job offer to build her venture within his company. Of course, she is now even more convinced about the upside of the opportunity and is sad and mad that she followed my advice and did not go at it alone.

THE PHONE RINGS: ASPIRING AJAY

Ajay is an alumnus who graduated five years ago and has since then been working in industry and doing very well. Ajay tells me he is finally ready to take the plunge. He has a couple of different venture ideas, all within the industry he has been working in. He laughs and recalls the bird-in-hand principle. He explains that he has been building relationships with key stakeholders and that he is now ready to ask some of them to come aboard his new venture. I ask Ajay about his family situation and savings and whether he has thought through his affordable loss in terms of time, money, and emotion. Ajay answers in the affirmative. He then goes on to describe possible revenue models for his ideas and what it might take to secure them. His excitement becomes more evident as he talks but he invites me to shoot holes in his premises and asks if he can see me in person for a more detailed discussion. When I ask him if the meeting is to decide whether to leave his job to start the venture, Ajay replies calmly that he's already given notice to his employer, so the meeting is to focus on execution of the new venture.

It is not difficult to imagine specific opportunities that fit each of these theatrical scenarios; the theoretical insight embedded in them reveals itself, however, when we imagine these four scenarios around the exact same venture idea or opportunity.

THEORETICAL FRAMEWORK

In developing theoretical insights as suggested above, we need to tackle the ontological problem of whether opportunities are found or made. Even if we take an ontologically objective stance towards the single opportunity that our four potential entrepreneurs are exploring, we need to consider two ex-post cases: one in which the perceived opportunity is realized and one in which it fails to materialize.

The first theoretical insight that comes to mind here is the notion of person-opportunity nexus. Even when the opportunity exists in an ontologically objective

manner, the particular beliefs and circumstances of each potential entrepreneur make the decision facing them fundamentally different. Assuming that all four students are capable of executing well on their ventures, we can connect their immediate decisions with eventual outcomes in certain practically informed yet theoretically useful ways.

CASE 1: PERCEIVED OPPORTUNITY IS REALIZED

Peter would naturally pursue the opportunity without worrying about the downside and so will reap the upside benefits of it. Laura, meanwhile, may decide not to pursue it and hence lose out on the eventual upside. Candice, like Peter, will likely pursue the opportunity, but, unlike Peter, she will reap only a part of the upside since she has to share a large portion of it with her employer. Ajay, like Peter and Candice, will also pursue the opportunity and avail himself of the upside to the same extent, or almost the same extent, as Peter. The only difference is that Ajay will probably sleep more soundly more often than Peter.

This is because beliefs about the opportunity and individual circumstances are not entirely independent. Beliefs about the opportunity may also influence the circumstances of the potential entrepreneur. Peter, for example, did not even look for a job and so does not have to deal with the opportunity-cost problem that prevented Laura from seizing the opportunity. Similarly, actions to shore up the downside influence circumstances and beliefs. The job offer from a potential competitor convinces Candice about the upside, while Ajay's savings and network of high potential contacts allow him to sleep better at night.

CASE 2: PERCEIVED OPPORTUNITY FAILS TO MATERIALIZE

In this case, Laura is unaffected since she did not pursue the opportunity. Candice may simply settle into her job and move on to other projects within the company employing her. Peter and Ajay, however, face rather stark choices now. Peter can either continue to persist for as long as he is physically able or give up in despair as reality hits him sooner or later. Ajay, too, has to face the decision to quit. Since control over the downside is important to him, he is likely to face that decision sooner than Peter. Depending on when he decides to quit, Ajay can either go back on the job market or start another venture after taking inventory of his bird-in-hand resources and affordable loss considerations at the moment of quitting on the failed opportunity.

CASE 3: PERCEIVED OPPORTUNITIES ARE ENDOGENOUS TO ACTION

An entirely different case to consider is when our four students perceive the opportunity at hand not as exogenous to their actions but as subject to being shaped and even constructed through their actions. In this case, all four students are likely to pursue the opportunity they perceive. The way they pursue it is likely to be very different, however. Peter will probably chart a visionary path searching for true believers and learning to pitch, sell, convince, compel, and persuade stakeholders to work with him. To the extent that he finds these stakeholders, he is likely to succeed in making his vision a reality. Laura, on the other hand, will likely proceed in a more causal fashion, relying on external data, customer validation, and investor input to build the venture of her dreams. Like Peter, since she is not inclined to deviate from her vision, Laura will succeed only to the extent that like-minded people sign on to work with her. Unlike Peter, however, since she worries more about the downside, she is likely to move more slowly and prudently. Hence, while the venture she ends up building may be smaller than Peter's, it will most probably endure better. Yet, Laura's success is subject to the

same constraint as Peter's, namely an unwillingness to change the original vision in response to input from others.

Without that constraint, Candice and Ajay will not only be able to shape the perceived opportunity into new venture success, but they are also likely to come up with more opportunities along the way, and those opportunities will be more innovative in nature. Since they are not tethered to a pre-determined vision of the opportunity and maintain a constructive stance toward opportunities in general, they remain free to innovate, morph, and create. Given that Candice builds her opportunities within an existing firm while Ajay ventures on his own, however, their long-term outcomes may turn out to be very different as well.

Notice, however, that while Peter and Laura may be focusing their constructive energies too narrowly on their own visions, Candice and Ajay may very well spread themselves too thinly over a variety of exciting possibilities that distract them from building any one of them to endure and thrive. It is here, of course, that proceeding effectually, through pre-commitments from self-selected stakeholders, becomes a useful lesson for potential entrepreneurs to learn.

CASE 4: ACCIDENTAL OPPORTUNITIES

In the theoretical framework and theatrical scenarios constructed thus far, I have assumed a certain amount of rational thought and deliberate choice on the part of my students. This is of course an artifact of casting my entire theatrical production with MBA students. In the real world, people often start ventures without resort to such cognitive deliberations. They may be:

- pushed through necessity (Grameen families in Bangladesh)
- or contingency, in response to life's tragedies (Steve Mariotti, founder of NFTE, and Slavica Singer, founder of the entrepreneurship program at the University of Osijek)
- and unanticipated windfalls (Cynthia Stafford, founder of Queen Nefertari Productions);
- or may start ventures as a joke (Gary Dahl, founder of Pet Rock),
- or to enact quixotic visions (17th century Scottish entrepreneur William Paterson),
- or through utopian zeal (Kellogg),
- and may even be dragged reluctantly into another person's ambitions (the original founders of Starbucks, and Kiran Mazumdar-Shaw, founder of Biocon).

While I am sympathetic to critics who see my theoretical "framework" above as an unjustified attempt to impose neat theoretical "stories" on the giddy, irrational, messy, emotional, animal spirits of actual entrepreneurship set in the mud of Kierkegaard's existential reality, I would still like to doggedly advocate the importance and usefulness of such "stories", even when applied to the more human and humane list in Case 4 here. In fact, I would argue that the framework is particularly useful for incorporating the people, ventures, and opportunities on this list precisely because these entrepreneurs exemplify the importance of intrinsic motivation disconnected from the predictable consequences deemed desirable through extrinsic metrics. It is precisely because viable and valuable ventures often arise from human action that is not consequence-driven within a "rational" rubric of some sort that we need to focus, embrace, and leverage the downside rather than the upside of entrepreneurship opportunities.

In sum, in all four cases in the foregoing exposition, I have argued the need to more explicitly incorporate the downside potential of opportunities into our research. Yet this line of argument might immediately raise a few flags for behavioral scholars, especially those working within the venerable stream of research in prospect theory (Kahneman & Tversky, 1979, 1984).

HOW DOES THE CURRENT FRAMEWORK DOVETAIL WITH PROSPECT THEORY?

Prospect theory has demonstrated the fact that human beings are more averse to losses than they are motivated by gains. My urging potential entrepreneurs to come to grips with downside possibilities before they even begin seems to fly in the face of findings about loss aversion. Wouldn't paying attention to the downside reduce the number of people wanting to start ventures in the first place? Furthermore, given the growing policy and financial incentives designed to entice more people to become entrepreneurs, would the framework presented here not become counter-productive to those worthwhile efforts?

Well, yes and no.

Yes. And that would be a good thing, because I am not at all convinced about the value of "incentivizing" more people to start ventures.

First, such incentives may constitute a perverse selection mechanism whereby people start ventures not because they want to, but because the incentives entice them to, both by removing liquidity constraints and by increasing the "cool" factor of entrepreneurship. Consider this in light of what we know from creativity research, namely that intrinsic motivation is the strongest predictor of innovation (Amabile, 1996; Sternberg, 1999).

Second, this selecting of people without intrinsic motivation is further propelled by the fact that most incentives are designed without rigorous investigations into what potential entrepreneurs actually value or want or should value and want. In a recent empirical examination of this issue, Ramesh, Dew, Read, and Sarasvathy (2014) found that the incentives potential entrepreneurs value the most actually cost less to provide than the resources policymakers currently spend in the (mostly) financial incentives they offer.

Third, these incentives divert valuable taxpayer resources away from more effective, albeit long-term, investments such as education, including entrepreneurship education toward a short-sighted race to the bottom, where cities and countries compete to offer more and more enticements that cost them more and more money. This frenetic competition has the unhealthy side effect of ignoring and even shutting out existing entrepreneurs who are beginning to do well and could perhaps use those resources to scale up to create more jobs and income growth. Moreover, it also disincentivizes those who failed in their first venture but have learned valuable lessons that could lead them to restart more efficacious ones next.

Fourth, a larger percentage of people who become entrepreneurs in response to financial incentives rather than through intrinsic motivation are likely to fail, and as the failure rate increases, fewer people are likely to be intrinsically motivated to venture in the future.

And no. Because, by limiting incentives and expanding entrepreneurship beyond potential entrepreneurs, we could actually end up with more, higher-quality jobs while reducing the number of ventures started.

In a recent article, my co-author and I showed why conceptualizing entrepreneurship as a method rather than as a phenomenon could be of considerable importance (Sarasvathy & Venkataraman, 2011). There we offered an analogy with the history of the scientific method and also contrasted the constituent elements of both methods. Here, I would like to offer a counterfactual argument. What if we had decided to treat the rise of science in the way that we are approaching the rise of entrepreneurship? What if we had "incentivized" potential scientists instead of educating them, starting with everyone in

elementary and middle school and slowly beginning to broaden and deepen applications in high school, then offering specializations and expertise through undergraduate and graduate programs? What if we had decided what to teach at each level by focusing on successful versus unsuccessful scientists rather than painstakingly working out the internal logic, practical techniques, and experiential teaching methods based on actual experiences of working scientists?

This brings me back to the content of the entrepreneurial method that we need to be teaching to everyone just as we teach science. Developing the content of this method without falling prey to post-hoc theorizing based on so-called "success factors" requires us to invest in careful thinking. This thinking should square with extant findings from rigorous research into human experience and build on the history of ideas to date. In other words, should the content of the entrepreneurial method emerge from the actual experiences of entrepreneurs, both successful and otherwise, but ignore human experience more broadly? This is clearly not the case, hence the need to pay attention to well-established theories from outside the field of entrepreneurship as well. Prospect theory is a case in point.

Loss aversion is a fact of human behavior. Not only do we dislike losses, but we tend to go even further out of our way to avoid them than we would to obtain gains. At first glance, this suggests that some form of denial about the downside would be an appropriate strategy for encouraging potential entrepreneurs to actually take the plunge. However, experienced entrepreneurs learn the hard way that denial may not be the best or only strategy here. A more useful strategy might be to actively gain control over the downside through the affordable loss principle.

Affordable loss has at least two components, one independent of the opportunity being envisioned or designed and the other closely intertwining the person and the opportunity. Potential entrepreneurs can calculate their idiosyncratic affordable loss without taking into account any particular venture opportunity. The only opportunity of interest here is the opportunity to become an entrepreneur. This calculation entails pre-committing to certain outer bounds on investment such as time, money, effort, and emotion. A potential entrepreneur can say to herself, "I am willing to invest about 10% of my current savings and a year of nights and weekends in building this opportunity."

In parallel or subsequent to this calculation she can define a set of bounds on her willingness to lose on particular opportunities. Depending on individual circumstances, beliefs, and abilities, potential entrepreneurs might start with one or more opportunities. They may even start with none, simply generating possible venture ideas or initial courses of action based on who they are and what and whom they know. Choices depend less on upside potential than on whether particular opportunities are worth pursuing or creating, even if the entrepreneur ends up losing whatever she has set aside as affordable loss. This focuses the decision maker's attention on the value of the upside potential in non-financial terms. In other words, the opportunities envisioned have to cross the higher threshold of loss aversion rather than the lower one of gain-seeking. The potential entrepreneur is no longer deducting the probability of failing from the expected gains, but examining the value of the venture in terms of certain failure and asking if it would still be worth attempting. The tough love embodied in this criterion has the opposite psychological effect of upside incentives. It cues in intrinsic motivation. It forges prospect theory into an effective selection mechanism. Finally, it is less costly for taxpayers.

In sum, a focus on the downside such as the incessant repetition in the media and even in academic journals about exaggerated failure rates and biases such as overconfidence may disincentivize potential entrepreneurs, including those who are intrinsically motivated. When combined with financial incentives that increase entry that in turn increase exit, this tom-tomming of the downside

gains momentum and serves to further increase the disincentives to start new ventures. However, training potential entrepreneurs to proactively control the downside, both in personal terms and in terms of the opportunities they envision, will have the opposite effect. Beginning with affordable loss calculations and learning techniques such as bootstrapping and bricolage can not only encourage potential entrepreneurs to start ventures, but also cue in intrinsic motivation and even reduce actual costs of failure, should failure occur, thereby increasing potential restarts in the future.

Now consider the possible impact of teaching these techniques not only to potential entrepreneurs but to everyone, as part of the broader education system, starting earlier rather than later in elementary to high school. What an opportunity that would be for the human species! The question facing us is not whether we can afford to take the plunge, but whether we can afford not to.

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