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The venturesome economy: how innovation sustains prosperity in a more connected world, by Amar Bhidé, Princeton, NJ and Oxford, Princeton University Press, 2008, xii+508 pp., US$35.00, ISBN 978-0-691-13517-5

The world is flat, Thomas Friedman (2007) famously argued. Amar Bhidé disagrees. He thinks there are still contours all over, deep differences between what happens and what is possible in different places. It is this texture that interests him, especially what it means for one place, his adopted home, the United States of America. Where many are pessimistic about what a flat world means for America, Bhidé is optimistic about the advantage offered by one special contour. America's consumers, he says, are uniquely 'venturesome'. He thinks this is the key to developing innovative products and prospering in a modern economy dominated by services.

In the third edition of *The World is Flat*, Friedman acknowledges that '[w]henever you opt for a big metaphor … you trade a certain degree of academic precision for a much larger degree of explanatory power. Of course the world is not flat. But it isn't round anymore either'. With every passing year, it becomes flatter, 'because the flattening forces are empowering more and more individuals … to reach farther, faster, deeper and cheaper than ever before'. The flattening of the playing field is 'the most important thing happening in the world today' (p. x).

Flatness, in Friedman's view, means economic tasks that once needed to be done by certain people in particular places can now be done anywhere. As tasks shift, the people in the places where they used to happen worry that they are being left behind. The anxiety is acute where the off-shoring is not just in clichés about manufacturing to China and call centres to India, but 'cutting-edge science and technology' tasks like research and development. Traditional R&D strongholds, such as the United States, fear they are losing the engine of their prosperity. Bhidé calls this 'techno-nationalism', a contemporary form of the obsession that followed Sputnik's launch in the 1950s. He thinks this is bunk.

The Venturesome Economy is really two books. The first, 'Cautious Voyagers', reports the results of a research project about US-based companies backed by venture capitalists. Despite the rhetoric of globalization, Bhidé finds they overwhelmingly concentrate on their domestic market. But he does not deny that international economic engagement has grown. Book 2, 'Embrace or Resist?', asks whether this increasing globalization, especially of technical innovation, will threaten the United States' prosperity in the future. He concludes not only that it will not, but that it is *good* for America: 'techno-nationalist prescriptions to "maintain the US lead" will tend to impair rather than enhance the US capacity to harness high-level research and are therefore likely to do more harm than good' (p. 255).

America's venturesome consumers will shape national prosperity more than any absolute or relative decline in the output of its high-level researchers. Bhidé builds this argument in stages. Prosperity is driven by productivity and productivity comes from innovation. Developed economies are dominated by services rather than goods. Innovation in services is more likely to come from ground level innovations than from breakthroughs in high-level scientific principles. Where breakthrough ideas are important, they are generally published by their public-spirited academic inventors, or licensed by their profit-maximizing commercial ones. Ground-level innovation is different. It benefits from close proximity between suppliers and customers, and from customers who are prepared to try out new products. American service providers are closest to American household and business consumers, who happen to be more prepared to try something new than their counterparts elsewhere. This gives American suppliers a unique advantage in developing new products that they can then sell not only to their own road-tested, risk-taking consumers, but also to less venturesome ones elsewhere.

Bhidé acknowledges the argument is not wholly new, and is generous to such intellectual sources as Joel Mokyr, Nathan Rosenberg and L.E. Birdsall Jr, who argue that societies' openness to technological change was an important source of economic growth, and to Paul Krugman, who rails against the US obsession with 'national competitiveness' in the mid-1990s.

Some of the best material in the book is the detail of companies backed by venture capitalists (VCs) that Bhidé and research associate Elizabeth Gordon surveyed from 2002. They interviewed executives and gathered data where possible from a somewhat haphazard sample of 106 US-based companies. Technology, especially enterprise software, dominated the products they were developing: VCs 'favour the high-tech novelty of a computer, not the aesthetic novelty of a luxury handbag' (p. 44). They generally want to sell out in five–seven years, not stay around and be shareholders forever, and technology-based businesses can produce large payoffs in this timeframe. A large share of customers can be locked-in, competition can be deterred and a VC-backed company can expand more rapidly than self-funded entrepreneurs. VCs take risks but they don't want the very high level of risk that comes with products that are too new: 'they are early settlers in New Worlds … [not] Christopher Columbus' (pp. 65–66).

The striking feature of most of the companies was that they were not very global. Of the 83 companies for which revenue data were obtained, less than 4% generated two-thirds or more of their revenue overseas. Some 60% earned at least 90% of their revenue within the US. While there were 'poster child' exceptions, most had clear reasons for remaining focused on domestic customers. The iterative process of developing products that customers wanted favoured those designed for people nearby. 'Ideally, I want people who are a bicycle ride away', said one CEO of a Silicon Valley software company (p. 112). Companies were less sure about demand for product combinations and the effectiveness of sales processes outside the home market. Managing international activities and localizing products, marketing and support were expensive. Another CEO, resisting pressure from US-based multinational customers to expand overseas, said:

> I *know* I have a pretty fertile hunting ground right here in my backyard. And then somebody tells me that if I climb Mt Kilimanjaro and get past the lions and tigers and the cold

> and the snow, I might find another good hunting ground. Well, why don't I hunt in my backyard for a while and see how I can do? (p. 117)

Because these VC-backed companies were trying to 'refine and demonstrate the long-term potential of their technology and business model to the satisfaction of public markets and acquirers', they concentrated on:

> mid-level combinations whose complex features require extensive tweaking for local conditions and a labor-intensive, time-consuming process for building relationships with customers … [T]he basic attributes of their innovative activities may discourage many VC-backed businesses from an early and vigorous pursuit of overseas markets. (p. 149)

There is lots of interesting detail about how and why the sampled companies are, or are not, off-shoring activities, and their different attitudes to patenting inventions.

The book's argument about the importance of America's venturesome consumers, however, requires more than the evidence of this survey. Indeed, it sometimes seems inconsistent with it. Bhidé and Gordon found 'virtually no evidence of user-led innovation except in the very broad sense that most innovators do put themselves in the shoes of users', although the study did reveal 'other important roles that users play in the innovation game'. For example, developers of mid-level products engaged with so-called alpha or beta users far more intensively than by focus groups or market research questionnaires. It may just be a question of degree. Users do not lead or initiate new products, but they 'often play an important, "venturesome" role in developing them' (p. 310).

Bhidé's evidence for the venturesome nature of US consumers turns out to be rather more impressionistic. He cites Apple's iPod as an 'iConic' illustration: '[a]lthough Apple markets the iPod all over the world, its army of true believers enrols largely in the United States' (p. 22). Apple did not invent many of the components, the high-level breakthroughs incorporated in the iPod, but bought rights to them or the companies that controlled them. It did the mid-level job of integrating them into a slick product for its loyal, risk-taking consumers. Much is made of the evidence of the US's productivity surge from the mid-1990s and the role played by information and communications technology. Measures are cited to prove the US leads the Internet Age in almost everything, except – rather crucially, one would have thought – fixed broadband and mobile communications.

While not entirely implausible – everyone has anecdotes of can-do Americans – it feels a shaky premise on which to base Bhidé's resolute confidence in the country's economic future, even before the global economic crisis. Are America's consumers more venturesome than Korea's mobile phone users? South Africa's? Hong Kong's fibre-to-the-home broadband adopters? They were not particularly venturesome in the gas-guzzling motor cars they kept choosing until suddenly it was too late for local manufacturers to catch up to the small-car skills their overseas competitors had been developing for decades. The venturesome taste for innovative financial products in America and elsewhere was a catastrophe. The never-ending, venturesome taste for the new may be an uncomfortable business model in a carbon-constrained world.

Bhidé loves the 'innovation game' that the USA hosts (p. 15), right through to the spendthrift students he teaches who max out credit cards to keep buying the latest whatever. He may condemn techno-nationalism, but not nationalism itself. He is more an optimo-nationalist, convinced that the nation that wins in the future will not be the one with the brainiest inventors but the one that is most optimistic, the one whose consumers are most prepared to keep taking chances on new products while throwing away old ones. And he is optimistic that the USA will be that nation.

Joel Mokyr's study of the relationship between technological creativity and economic progress throughout history warns that '[b]y and large, the forces opposing technological progress have been stronger than those striving for changes. The study of technological progress is therefore a study of exceptionalism …' (Mokyr, 1990, p. 16). This was written before the Internet and mobile communications boom, as exceptionalist America declared victory in the great ideological battle of the twentieth century, but confronted another round of threats to its own economic performance. Drawing a similar distinction to Bhidé's between high- and mid/low-level creativity, Mokyr argued 'in the long run, technologically creative societies must be both inventive and innovative. Without invention, innovation will eventually slow down and grind to a halt … Without innovation, inventors will lack focus and have little economic incentive to pursue new ideas' (pp. 10–11).

This is a fine book, a book for thinking with, providing rich detail and a carefully-constructed argument about a big idea.

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