

The macroeconomic options, however, deemed respectable in the 1930s are different from those today. Here Irwin usefully reminds us of the economic orthodoxy of the time that promoted government budget balance, removing expansionary fiscal policy as a policy alternative. Moreover, those nations with an awful history of high—in some cases hyper—inflation in the 1920s were minded in the 1930s to retain the gold standard, thereby limiting room for monetary policy expansion.

When confronted with deflation, a shrinking global economy, and losses in gold reserves, national governments reacted in different ways. Those governments that favored the macroeconomic orthodoxy tended ultimately to resort to protectionism (not just tariff barriers but also other measures such as limitations on access to foreign exchange necessary to buy imports) and others chose exchange rate devaluation. Of course, both policy responses disadvantage certain foreign commercial interests and seek to shift the burden of adjustment abroad. A focus on what caused trade barriers to go up, then, would have missed the broader point that discrimination against foreign commercial interests was the outcome of much 1930s policy choice. Arguably, the same narrow focus has influenced too much contemporary analysis of crisis-era protectionism.

In Irwin's formulation, a trilemma exists for open economies, now and in the 1930s. A national government can pursue only two of the following three objectives: a fixed exchange rate, an independent monetary policy, and a liberal trade policy. Today, when fiscal policy expansion is no longer a taboo and there is much lower premium placed on fixed nominal exchange rates, then the argument goes it is not surprising that there has been less across-the-board protectionism since the global economic crisis began.

If one considers increases in traditional trade barriers, then only Ecuador, Ukraine, and probably Russia have engaged in substantial protectionism in recent years. Moreover, according to the monitoring by the Global Trade Alert, which I coordinate, only six countries have engaged in competitive devaluations where a government official has gone on record as saying the purpose of the devaluation was to disadvantage

foreign commerce. So monetary and fiscal policy flexibility has saved the day, at least as far as open borders are concerned.

Even if this is the right conclusion, it has two interesting implications. First, the backlash against fiscal stimulus packages from 2010 on and the promotion of austerity packages could amount to a reimposition of one 1930s-style constraint on policy choice. To be fair, in subsequent writings Irwin has made this point too.

Second, where is the World Trade Organization (WTO) in the trilemma argument? If the threat of WTO-sanctioned retaliation made contemporary governments more likely to devalue their currencies instead of resorting to protectionism, then the WTO could induce other nations to devalue as well; neither policy decision shows much fealty to a level international playing field! Finally, recent years have substantial resort to bailouts of manufacturers and farmers (not just bankers which has tended to get most of the press). For understanding contemporary developments, then, perhaps the trilemma needs to be extended to a quadrilemma with insisting on hard corporate budget constraints as a fourth government objective?

SIMON J. EVENETT
University of St. Gallen

L Industrial Organization

Valuing an Entrepreneurial Enterprise. By David B. Audretsch and Albert N. Link. Oxford and New York: Oxford University Press, 2012. Pp. xii, 173. \$35.00. ISBN 978-0-19-973037-7.

JEL 2012-1394

In the last two decades, entrepreneurship has entered most fields of economics and business economics. This is the consequence of major changes in the economy that have inevitably led to changes in the scholarly models we use when describing how the economy actually works. Entrepreneurship is a concept that now plays a role in such diverse fields as industrial economics, spatial economics, small business economics, organizational economics, innovation economics, and development economics. Ultimately, the valuation of the essential firm of the modern economy is being reconsidered. *Valuing an Entrepreneurial Enterprise* is a first step in this

new approach and is bound to influence the world of valuation and valuers.

The large enterprise was the dominant form of business organization until the late 1980s (Chandler 1990). Its essential input factors were capital and labor while developments in technology, consumer preferences, and resource procurement were relatively predictable. Economies of scale became a decisive factor for global competition in this period of mass production. The emergence of knowledge as an input factor seemed to be the final blow to the future of small firms. They were no match for the routinized innovation machine of their large counterparts, which exploited R&D activities while employing knowledge workers in well-organized laboratories and bringing their efforts to commercial use (Winter 1984).

Despite these forces, small and young firms have returned as the engine of economic development. This situation was brought about by the ICT revolution that began in the early 1990s. Together with the demise of the communist system and the ensuing wave of globalization, this meant the end of the large corporation as the dominant form of economic organization.

The economy underwent a drastic transformation (Baumol 2002; Audretsch 2007; Baumol, Litan, and Schramm 2007). The essence of the new economy is that small and young firms play an important role in creating economic growth (Wennekers et al. 2005) and in the interplay with the business cycle (Koellinger and Thurik 2012) because they are better at absorbing the uncertainties of technology, consumer preferences and resource procurement (Audretsch and Keilbach 2007). Audretsch and Thurik (2001) refer to this transformation as the switch from the managed economy to the entrepreneurial economy.

The economic community in the managed economy attempted to understand the main problem of that era: maximizing the efficiency and productivity of large-scale production while minimizing negative externalities from a concentration of economic power. During the entrepreneurial economy, this community attempts to understand the creation and commercialization of knowledge through entrepreneurial activity. In their second chapter, Audretsch and Link show that the Schumpeterian model is a school

of economic thinking that is better equipped to understand the entrepreneurial economy than the neoclassical and Keynesian schools. This is because the Schumpeterian school includes two focal concepts that are lacking in the other two models: innovation, as the driving force of progress, and the entrepreneur, without whom new ideas would not be pursued and implemented.

In section 1.3, Audretsch and Link show that entrepreneurial firms play an essential role not only in the Schumpeterian model but also in the real economy. Earlier in their book, they ask the obvious question of whether valuing the entrepreneurial firm, which is the main carrier of the entrepreneurial economy, should follow the same rules as valuing firms in the managed economy. Given the drastic transformation of the economy, this is an obvious question. The answer is also obvious: of course not. Traditional valuation is broadly based upon comparison. Either a firm is compared with itself because it is an ongoing business with a history of sales and revenues, or it is compared with others with similar technology, market approaches and resource procurement. By definition, the entrepreneurial firm in the modern economy has no history and operates idiosyncratically in an attempt to discover a new product (section 1.2).

After summarizing the traditional valuation techniques and illustrating them with examples, Audretsch and Link show that they are limited and sometimes misleading; hence, they are inapplicable to entrepreneurial firms. They develop a technique “the key of which is to focus on and understand the availability of alternative or complementary technologies” (157). One example seems to be a bit meager to justify their initial and implicit claim that the valuation of entrepreneurial firms must change. This may be true, but their method has overly broad applicability. Audretsch and Link take the technology-based entrepreneurial firm as the model for their exposition, but similar approaches can be suggested in other areas in which entrepreneurs are pursuing newness in terms of new markets, new market approaches or new resource procurement.

What to think of two economists writing a book about the limitations of current valuation techniques and proposing a novel approach? By

comparing the role of small firms that shape the organization of industry (Audretsch 1995) to that of the entrepreneur shaping society (Audretsch 2007), Audretsch arrived at the entrepreneur as the driver of growth in the modern economy. Through historical accounts of the role of the entrepreneur (Hébert and Link 1988, 2009) and a long tenure as editor-in-chief of the *Journal of Technology Transfer* while studying the public and private roles of technology and innovation, Link arrived at the assessment of the value of the essential firm of the modern economy. The intimate link between the entrepreneur and his small and young firm as well as the link between the value of a firm and its prospective contribution to growth make the two economists an obvious choice to write this book.

Whether the valuation community is willing to embrace the novel approach remains to be seen. Many years after the ENRON affair, which, in a benevolent mood, could be viewed as a “misunderstanding” between an entrepreneurial way of running a firm and traditional valuation techniques, I perceive no solid entrepreneurship caput in accountancy training programs, at least in continental Europe. Therefore, if insiders do not accept the challenge to adapt the techniques to the changing requirements of the entrepreneurial economy, then it is up to well-informed and highly motivated outsiders to throw a stone in the valuation pond.

REFERENCES

- Audretsch, David B. 1995. *Innovation and Industry Evolution*. Cambridge and London: MIT Press.
- Audretsch, David B. 2007. *The Entrepreneurial Society*. Oxford and New York: Oxford University Press.
- Audretsch, David B., and Max Keilbach. 2007. “The Theory of Knowledge Spillover Entrepreneurship.” *Journal of Management Studies* 44 (7): 1242–54.
- Audretsch, David B., and A. Roy Thurik. 2001. “What’s New about the New Economy? Sources of Growth in the Managed and Entrepreneurial Economies.” *Industrial and Corporate Change* 10 (1): 267–315.
- Baumol, William J. 2002. *The Free-Market Innovation Machine: Analyzing the Growth Miracle of Capitalism*. Princeton and Oxford: Princeton University Press.
- Baumol, William J., Robert E. Litan, and Carl J. Schramm. 2007. *Good Capitalism, Bad Capitalism, and the Economics of Growth and Prosperity*. New Haven and London: Yale University Press.
- Chandler, Alfred D. 1990. *Scale and Scope: The Dynamics of Industrial Capitalism*. Cambridge and London: Harvard University Press, Belknap Press.
- Hébert, Robert F., and Albert N. Link. 1988. *The Entrepreneur: Mainstream Views and Radical Critiques*, Second edition. Westport, Conn. and London: Praeger.
- Hébert, Robert F., and Albert N. Link. 2009. *A History of Entrepreneurship*. London: Routledge.
- Koellinger, Philipp D., and A. Roy Thurik. 2012. “Entrepreneurship and the Business Cycle.” *Review of Economics and Statistics* 94 (4): 1143–56.
- Wennekers, Sander, Andre van Stel, A. Roy Thurik, and Paul Reynolds. 2005. “Nascent Entrepreneurship and the Level of Economic Development.” *Small Business Economics* 24 (3): 293–309.
- Winter, Sidney G. 1984. “Schumpeterian Competition in Alternative Technological Regimes.” *Journal of Economic Behavior and Organization* 5 (3–4): 287–320.

ROY THURIK

Erasmus School of Economics and
GSCM Montpellier Business School**O Economic Development,
Technological Change, and Growth**

China’s Remarkable Economic Growth. By John Knight and Sai Ding. Oxford and New York: Oxford University Press, 2012. Pp. xvii, 336. \$45.00. ISBN 978–0–19–969869–1.

JEL 2012–1025

The authors set themselves a formidable challenge: to explain why, how, and with what consequences China has achieved rapid economic growth in the reform period (since 1978). The “why and how” and the “consequences” find their expression in the second and third part of the book, framed by an introductory and a concluding part.

The introductory part 1, in three chapters, covers the setting and data issues, approaches to understanding economic growth, and the evolution of institutions and policies. Part 2 begins with a broad cross-country empirical analysis and finds that growth in China is driven by accumulation of physical capital, conditional convergence, improvements in factor productivity through structural change, and slow population growth (chapter 4). The subsequent chapter examines the determinants of economic growth in China in cross-provincial analysis using six equal intervals for the period from 1978 through