from convergence to divergence in global growth rates. Leading up to the crisis, the major and minor economies in the world were largely in sync and growing strongly at roughly similar rates. Once the crisis occurred, the same major and minor economics declined together. This global business cycle and the synchronized movements of economics reflected, to some extent, the long-term vision of Keynes where global institutions coordinated growth and beggar-thy-neighbor policies were limited in their effect. Years after the crisis, a divergence has emerged with the United States growing three times faster than Germany and India growing annually at 8% while Russia faces the prospects of a deep recession. The return of country-wide business cycles signals a lack of coordination and an incentive for policy makers to treat trading partners with disdain if it means boosting domestic growth of Gross Domestic Product.

This transition from convergence to divergence in global growth rates bears mentioning when discussing the consequences of us all being Keynesians now. Is it the case that divergence in growth rates reflects policymakers forgetting Keynesian theory? And if the answer to that question is in the affirmative, doesn't the presence of this divergence pose problems for capital flows and international cooperation? Or is it the case that the return of divergence highlights the limits of Keynesian theory? And if the answer to that question is in the affirmative, could it be said that policymakers won't resolve problems by following Keynesian theory more closely but rather fuel the problems? Temin and Vines in this text artfully present one side of this debate. What is needed now is someone to take up the other side of this debate as effectively as Temin and Vines.

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Making in America: From Innovation to Market. SUZANNE BERGER. Cambridge, MA.: MIT Press, 2013. Pp. xiv, 250. $24.95.

Suzanne Berger provides a detailed account of how innovation flows from ideas into production and the implications for the manufacturing sector in the United States and abroad. Her analysis is primarily based upon interviews and surveys of managers in U.S. manufacturing

establishments of all sizes across a variety of industries. She also included a select group of manufacturing firms from Europe and Asia. The interviews and surveys were conducted by MIT's Production in the Innovation Economy (PIE) research group. This group was composed of faculty across disciplines for the purpose of learning how manufacturing contributes to knowledge creation and economic growth.

One objective of the PIE research group was to determine why there has been slow productivity growth and industrial stagnation across many areas of U.S. manufacturing. The recent evolution of manufacturing has been influenced by structural change within the United States and competitive pressure stemming from globalization.

In the 1970s and 1980s, large, vertically integrated manufacturing firms in the United States often controlled all stages of production. This kept research and development, design, fabrication, prototyping, simulation, testing, demonstration, pilot production, packaging, test marketing, and full-scale commercialization activities in house. It was believed that complete control of each production stage improved efficiency and reduced risks associated with multiple suppliers. Manufacturing processes embody valuable knowledge that many firms do not want to lose to potential competitors. Patents may offer little protection if they reveal too many details. In many cases, trade secrets and tacit production knowledge can be more valuable than patent protection.

Over time, the benefits of vertical integration began to decline. Outside forces such as increased manufacturing capabilities from abroad (e.g. China) including lower wages, taxes and land prices began to entice U.S. firms to begin outsourcing some production activities.

Manufacturing firms began to restructure production processes and focus on activities where they had a comparative advantage. This led to greater specialization by identifying production activities that were most closely aligned with their "core competencies". Any remaining activities were spun-off or closed if they were not in the "core". Some residual activities not in the core were sold off and often became targets of mergers or takeovers by firms already engaged in similar activities. Essentially, there was a restructuring of firms moving towards buying up activities of other firms related to their core competencies and shedding activities that were related to the core competencies of acquiring firms. This restructuring was also a partial response to the demands imposed by the financial markets. Greater emphasis on "shareholder value" requires

large, integrated manufacturing firms to break-up. Many investors believe that conglomerate firms – those that are vertically and horizontally integrated – suffer from diseconomies of scale. Breaking them up should reduce long-run per-unit average costs, improving profitability and raise stock prices.

The restructuring of U.S. manufacturing eventually began to separate innovation from production activities. While this strategy can improve short-run efficiency and profitability, it can jeopardize future innovation. A significant amount of learning takes place on the factory floor as technicians bring problems back to engineers and designers. These face-to-face interactions can create tacit knowledge critical for future innovations and profits. Further, new jobs can be created when production stays close to R+D and design. New knowledge often leads to new and improved products enabling firms to enter new markets.

As the various stages of manufacturing have become fragmented and distributed across the domestic and global supply chain, many smaller and specialized firms have been created. The fragmentation of U.S. manufacturing has led to holes in the industrial ecosystem that is not conducive to supporting the innovation required for a dynamic economy.

Excluding regional economies such as the Silicon Valley, holes in the industrial ecosystem result from market failure or absence of complementary resources that diminish local capabilities. Smaller firms typically operate with only internally generated resources. Many smaller firms are isolated from complementary resources and have underexploited potential for expansion, job creation and profits. In some cases, smaller firms find it harder to get loans as local banks are absorbed by national basks with little understanding of local manufacturing.

Berger emphasizes that coordination failures and lack of public goods have contributed to the development of holes in the United States industrial ecosystem. Leadership is essential if the United States is to improve productivity and expand its industrial base. Leaders could be dynamic individuals or public authorities, emerge from industry, industry associations, trade schools, colleges and universities. Leaders must be able to see the connection between complementary resources and their impact on the innovative process. The role of leaders is to serve as a catalyst or convener. A convener can create new regional manufacturing capabilities and ultimately attract new industry and partners. The creation of public goods and shared resources is essential if the U.S. is to fill in the holes of the industrial ecosystem.

The PIE researchers emphasize that the United States has the resources to transform regional manufacturing economies into engines of growth. These resources need to be organized in a way that generates new knowledge and innovations that propel productivity and economic growth.

Knowledge spillovers occur when firms are in close proximity. Interdependencies among complementary activities, not narrow specialized clusters produce innovations. While specialization can improve short-run efficiency and profits, collaboration is essential for innovation and long-run regional and economic growth.

Berger provides interesting examples of innovation in specific manufacturing firms and how these firms have evolved in the United States and abroad. The value added of this book is to give readers a much richer picture of U.S. manufacturing than could be obtained from inside the walls of a university. This book would be an excellent complement to standard undergraduate or graduate texts in courses such as: industrial organization, regional economics, technological change, economic geography, economic growth and development, supply-chain management, organizational behavior and learning and strategic management.

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