The Dynamics of Local Learning in Global Value Chains

Experiences from East Asia

Edited by
Momoko Kawakami and
Timothy J. Sturgeon

IDE-JETRO

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Preface

International trade and foreign direct investment have long been central features of the world economy, but their importance has been growing rapidly, especially since the late 1980s. While the scale of this increase is easy to see in international trade statistics, a qualitative change has also been unfolding, one that is more difficult to discern. Alongside the well-documented flow of goods in the global economy are streams of services, information, and knowledge that are very poorly documented, if they are documented at all. Official statistics reveal very little about the volume and character of these invisible flows and even less about the firm-level power asymmetries and ownership patterns that structure them and, in many ways, determine opportunities for technological learning and the distribution of gains. Nevertheless, the density of information and knowledge transfer in the world economy has increased at least as quickly as the flow of goods. Information technology and plummeting prices for international communications enable this transformation, along with the accelerated flow of people and the leveling effects of mass media, which drive the scale and homogeneity of product markets.

Researchers studying this structural shift in the global economy have generated a very long list of terms to describe it, including new international divisions of labor, integrative trade, inter-industry trade, fragmentation, global production sharing, multistage production, slicing up the value chain, disintegration of production, and offshore outsourcing. The enduring structures that contain and structure these new forms of trade and investment have been referred to as global commodity chains, global production networks, and, most recently, global value chains. While the cross-border flow of intermediate goods and foreign direct investment are the primary statistical evidence for these new structures, qualitative research methods have revealed that the cross-border inter-firm relationships involved come with varying degrees of power asymmetry, requirements for explicit coordination, and potential for knowledge transfer. These qualitative features of trade, though difficult to define and measure, are important objects of

study because they help to determine how profits are divided in the global economy, and increasingly, how technological learning and economic development happen in both the developed and the developing world.

Because ownership and control of economic assets are hard to discern in international statistics, and the divisions of knowledge and power in the global economy are unequal, we cannot automatically assume that countries which export large quantities of goods or services have domestic companies with the full competencies required for their development and production. We cannot even assume the country has the supply base needed to provide needed inputs, or the know-how to build and operate the infrastructure required. Factories can be owned and controlled from a great distance, products can be designed and developed in one country and assembled in another, largely from imported inputs, multinational firms can build, own, and operate port facilities, and financing can be drawn from global capital markets. Even with production spread across the globe, the world is far from being "flat." Access to technologies can be controlled through intellectual property rights protection, careful knowledge partitioning, or by embedding capabilities in machinery, software, or advanced components. To judge where developing countries truly stand in terms of economic development, we must look beyond industrial output and export statistics to the less visible, but critically important, structures and processes that underlie them. The research collected in this book does exactly that.

The central question asked here is straightforward, "How can local firms in developing countries increase their capabilities by participating in global value chains (GVCs)?" The answer, however, is not so simple. The specificities of industries, regulations and standards, technologies, policies, and regions within countries all structure the ways that learning occurs in GVCs. Since learning is cumulative and relational, outcomes hinge to a large degree on starting points, the length and intensity of global engagement, and on the strategies and practices of lead firms, suppliers, and other actors in the chain, including international and government agencies. While it is clear that the capabilities of firms in developing countries have increased and that this learning has happened in a variety of ways, we suspect that there must be generalities and best practices to be uncovered. We simply know very little about the process. This book helps to fill that gap by examining how the dynamic interactions between firms from developed and developing

economies, together with other factors, have stimulated and shaped the rise of local firm capabilities in East Asia. We see how and why local firms in late-industrializing countries have sometimes seized and sometimes been excluded from the learning opportunities offered by global integration.

Timothy J. Sturgeon,
Cambridge, Massachusetts,
February 8, 2010

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Many scholars from across Japan provided us with inspiration, insight, and opportunity for reflection. We would like to thank Tomoo Marukawa, Yumiko Nakahara, Koichi Ogawa, Hirofumi Tatsumoto, and Masanori Yasumoto for enriching our project as guest speakers at our study meetings. We also benefited greatly from the rich intellectual resources within IDE-JETRO. We are grateful to Takahiro Fukunishi for his valuable input to our research. As a specialist on African manufacturing sectors, he provided us with rich insights and crucial points of comparison that enabled us to place our East Asian cases in a broader context. Our discussions throughout the study with Makoto Abe, Ke Ding, Koichiro Kimura, Yoichi Koike, and Yukihito Sato were especially useful. Special thanks go to the administrative staff of IDE-JETRO, especially to Kyoko Miura and Ritsuko Takakusagi, for their dedication, generous support, and encouragement.

We note with deep sadness the tragic passing of two colleagues who participated in this research project. The late Dr Seishi Kimura was the co-organizer of the project. He provided us with our core ideas, intellectual framework, and working hypotheses. His enthusiasm for testing GVC theory with in-depth field studies in East Asia was the main impetus and driving force for our study. Since his passing, Seishi's influence has not waned, and this has helped to sustain us. We have carried on as best we could without him. Even with its faults, this volume stands as a testament to Seishi's innovativeness, energy, vision, and charisma. He is deeply and constantly missed.

Ken Imai passed away shortly after finishing his co-authored chapter. Ken was the most dedicated of researchers. He brought a historian's eye for detail and accuracy to his field research and a craft-person's sense of care to his writing, and these high standards served as an inspiration to all of his colleagues. All the authors enjoyed and deeply benefited from

working with him. Because of his generosity, Ken's keen insights are present in all of the chapters, and this has carried us forward in spite of his very large absence. Ken's dedication to scholarship, warm friendship, and generous spirit will always remain in our memories.

This book is dedicated to the memory of Seishi Kimura and Ken Imai.

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