World Intellectual Property Report 2017

Intangible Capital in Global Value Chains

WIPO
WORLD INTELLECTUAL PROPERTY ORGANIZATION

Suggested citation: WIPO (2017). *World Intellectual Property Report 2017: Intangible capital in global value chains*. Geneva: World Intellectual Property Organization.

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CH-1211 Geneva 20, Switzerland

ISBN: 978-92-805-2895-4

Photo credits:
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Printed in Switzerland

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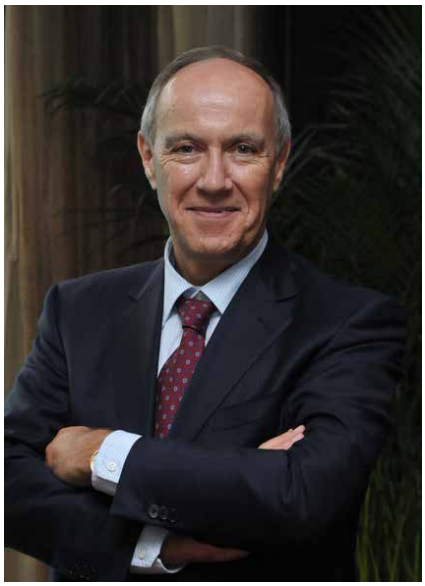

Foreword

Technological innovations and openness of trade have profoundly changed the face of global production. Converting raw materials into parts and components, assembling final products and delivering them to the end consumer involves supply chains that span an increasing number of economies across the globe.

The emergence of these so-called global value chains has been a force for good: they have made a large range of consumer products more affordable, stimulated economic growth and promoted the integration of developing countries into the global economy – creating opportunities for economic development and the alleviation of poverty.

Intangible capital – notably in the form of technology, design and branding – permeates global value chains in important ways. It accounts for a good part of what consumers pay for in a product and determines which companies are successful in the marketplace. It also lies at the heart of the organization of global value chains: decisions on where to locate different production tasks and with whom to partner are closely tied to how companies manage their intangible capital.

A large number of research reports have been published on the causes and consequences of the rise of global value chains, and many of these reports have acknowledged the key role played by intangible capital. However, few insights are available on why, how and how much. With our *World Intellectual Property Report 2017*, we hope to help unpack the intangibles black box, in particular by shedding light on how intellectual property (IP) fits into this box.

The report begins by reviewing how global value chains have come about and how they are organized. Against this background, it reveals new estimates of the macroeconomic contribution of intangible capital to global value chain production. These estimates show that intangibles account for around one-third of production value – or some 5.9 trillion United States dollars in 2014 – across 19 manufacturing industries.

Following the approach of our 2015 report, we complement these economy-wide perspectives with case studies of specific global value chains – namely, coffee, photovoltaics and smartphones. These three cases highlight the different mix of intangibles embedded in different consumer products and provide concrete insight into the role that different forms of IP play in generating returns to investments in innovation and branding.

In addition, they explore how developing economies – notably China – have succeeded in participating in global value chains by building their own intangibles, and what opportunities may exist to pursue similar strategies in the future.

The evolution of global value chains has been disruptive, with some companies thriving and others failing. It has accelerated the structural transformation of economies, with some workers losing their jobs and others seeing their skills richly rewarded. Technology continues to transform global patterns of production and is bound to lead to further disruption. For example, advances in 3D printing, robotics and automated manufacturing may well lead companies to relocate certain production tasks closer to the end consumer. In addition, the fast growth of emerging economies is set to prompt shifts in the geography of global value chains.

Policymakers need to respond to the disruptive forces unleashed by globalized production. Global value chains are a human creation and could be reversed, but this would risk even bigger disruption. Shaping them in such a way that they benefit societies as a whole is thus an important policy imperative.

As always, a report of this nature leaves important questions open. Most importantly, while we present – for the first time – concrete estimates of how much income accrues to intangibles in global value chain production, it remains to be established who ultimately gains this income. At the level of countries, cross-border ownership and sharing of intangible assets make it difficult to associate assets and earnings with a particular country location. At the level of individual earnings, little systematic evidence exists on how intangibles affect the compensation of workers at different skills levels. Future research that offers empirical guidance on these questions would be of great value.

We hope that this report will inform discussions on the evolving nature of global value chains taking place in different policy forums, and look forward to exploring the contribution of the IP system to global value chain production in our ongoing dialogue with Member States.

Francis GURRY
Director General

Acknowledgements

This report was developed under the general direction of Francis Gurry (Director General). It was prepared and coordinated by a team led by Carsten Fink (Chief Economist) and comprising Intan Hamdan-Livramento (Economist), Julio Raffo (Senior Economist) and Sacha Wunsch-Vincent (Senior Economist), all from WIPO's Economics and Statistics Division (ESD). Lorena Rivera León (Consultant) and Giulia Valacchi (Fellow) provided helpful research assistance.

The four report chapters draw on background research commissioned for this report. In particular, the estimates of the returns to intangible assets in global value chains presented in chapter 1 were prepared by Wen Chen, Reitze Gouma, Bart Los and Marcel P. Timmer (University of Groningen). Carol Corrado (The Conference Board) contributed written comments on their research. Additional substantive inputs on the measurement of intangible asset flows were provided by Tony Clayton (Imperial College London), Tom Neubig (Tax Sage Network) and Dylan Rassier (U.S. Bureau of Economic Analysis).

Luis F. Samper (4.0 Brands) and Daniele Giovannucci (Committee on Sustainability Assessment) contributed the background report for the case study on coffee in chapter 2. Written comments on this report were prepared by Luciana Marques Vieira (Universidade do Vale do Rio dos Sinos). Leontino Rezende Taveira (International Union for the Protection of New Varieties of Plants) offered valuable advice throughout the development of this case study. Premium Quality Consulting provided the coffee market data used in the chapter.

The case study on photovoltaics in chapter 3 relies on background research conducted by Maria Carvalho (London School of Economics), Antoine Dechezleprêtre (London School of Economics) and Matthieu Glachant (MINES ParisTech). Data were provided by ENF Solar.

Finally, the smartphone case study in chapter 4 draws on a background report prepared by Jason Dedrick (Syracuse University) and Ken Kraemer (University of California, Irvine). Robin Stitzing (Nokia) offered written comments on the report. Christian Helmers (Santa Clara University) provided research input for the trademark and industrial design mappings. Data were received from the Chief Economist Service of the European Union Intellectual Property Office, Clarivate Analytics, Deutsche Patent- und Markenamt (DPMA), IHS Markit, IPlytics and the U.K. Intellectual Property Office.

The report team benefited greatly from external reviews of the draft chapters by Patrick Low. Additional input, comments and data were provided by Janice Anderson, Mohsen Bonakdarpour, Roger Burt, Seong Joon Chen, Robert Cline, Alica Daly, Jenn Figueroa, Marina Foschi, Tim Frain, Kirti Gupta, Christopher Harrison, Vasheharan Kanesarajah, Michał Kazimiercza, Richard Lambert, Cecilia Jona-Lasinio, Moshe Leimberg, Robert Lemperle, Lutz Mailänder, Keith Maskus, Raymond Mataloni Jr., Yann Ménière, Sébastien Miroudot, David Muls, Amanda Myers, Giovanni Napolitano, Tim Pohlmann, Marie Paule Rizo, Pekka Sääskilahti, Thomas Verbeet, Nathan Wajsman, Pamela Wille, Irene Wong and Brian York.

Samiah Do Carmo Figueiredo and Caterina Valles Galmès provided valuable administrative support.

Finally, gratitude is due to editorial and design colleagues in the Communications Division for leading the production of the report, especially to Toby Boyd for his editing work. The WIPO Library provided helpful research support throughout the report's development and the Printing Plant provided high-quality printing services. All worked hard to meet tight deadlines.

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