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Xue Peng

# Location-Specific Advantages: Modified Application of the Arm's Length Principle in a Knowledge-Based Economy

22

European and International Tax Law and Policy Series

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# Location-Specific Advantages: Modified Application of the Arm's Length Principle in a Knowledge-Based Economy

**Why this book?**
The term "location-specific advantages" (LSAs), including location savings and market premiums, is a novel concept originating from the transfer pricing practice in China and India.

The term refers to the general features of a specific geographical location that may (positively) influence the profitability of a multinational enterprise (MNE). International consensus has been reached that LSAs are comparability factors and that local comparable can capture the value of LSAs. Following such rule, countries with LSAs (i.e. host countries) are entitled to tax only a very limited amount of MNEs' business profits when only low-functionality nexuses exist locally. Modern MNEs increasingly use the principal/central entrepreneur structure and digitalization in their operating business models, strategically arrange low-functionality nexuses in host countries and therefore pay reduced or minimized taxes in those countries, while continuing to exploit their LSAs.

This practice will eventually disrupt the allocation of global taxing rights to host countries vis-à-vis home countries (where the entrepreneur entity resides). Doubt therefore arises as to whether the arm's length principle is still an appropriate or the preferred approach for global profit allocation. Notably, the OECD has proposed a profit allocation system that partially departs from the arm's length principle under BEPS 2.0 Pillar One to address the tax challenges arising from digitalization.

Against such background, this book focuses on how to amend the profit allocation rules based on the arm's length principle when there is only a low-functionality nexus in the host country, acknowledging that the current guidance and practical rules in respect of applying the arm's length principle have not sufficiently recognized the LSAs of host countries. It aims to strengthen the taxing rights of host countries and to restore confidence in the arm's length principle in transfer pricing.


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*Visitors' address:*
Rietlandpark 301
1019 DW Amsterdam
The Netherlands

*Postal address:*
P.O. Box 20237
1000 HE Amsterdam
The Netherlands

Telephone: 31-20-554 0100
Email: info@ibfd.org
www.ibfd.org



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# Preface

This book is inspired by the topical debate in transfer pricing with respect to location-specific advantages (LSAs). LSAs, commonly known as location savings and market premiums, are a novel concept originating from the transfer pricing practice in China (People's Rep.) and India. The term refers to the general features of a specific geographical location that may (positively) influence the profitability of a multinational enterprise (MNE). International consensus has been reached that LSAs are comparability factors and that local comparables can capture the value of LSAs. Accordingly, a country with LSAs (i.e. a host country) is entitled to tax only a very limited amount of MNEs' business profits when only low-functionality nexuses reside locally. Modern MNEs increasingly use the principal/central entrepreneur structure and digitalization in their operating business models and strategically arrange low-functionality nexuses in host countries, thereby paying reduced or minimized tax bills in host countries while continue to exploit their LSAs.

This dynamic will eventually disrupt the allocation of global taxing rights to host countries vis-à-vis home countries (where the entrepreneur entity resides). Doubt therefore arises as to whether the arm's length principle is still an appropriate (or a preferred) approach for global profit allocation. Notably, the OECD has proposed a profit allocation system that partially departs from the arm's length principle under BEPS 2.0 Pillar One to address the tax challenges arising from digitalization.

Against this background, this book is focused on how to amend the profit allocation rules based on the arm's length principle when there is only a low-functionality nexus in a host country, acknowledging that the current transfer pricing guidance and practical rules in respect of applying the arm's length principle have not sufficiently recognized the LSAs of host countries. It aims to strengthen the taxing rights of host countries and restore confidence in the arm's length principle in transfer pricing.

## Acknowledgements

The book is based on the doctoral thesis written during my time as a research and teaching associate at the WU Transfer Pricing Center established at the Institute for Austrian and International Tax Law of the Vienna University of Economics and Business (WU) and defended in October 2020.

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Claire (Xue) Peng
London, April 2021

# Abbreviations

| | |
|---|---|
| ADS | Automated digital services |
| AMP | Advertisement, marketing and promotion |
| AOA | Authorized OECD approach |
| APA | Advance pricing arrangement |
| AStG | Außensteuergesetz (External Tax Relations Act) |
| BALRM | Basic arm's length return method |
| BEPS | Base erosion and profit shifting |
| BRICS | Brazil, Russia, India, China and South Africa |
| CbCR | Country-by-country reporting |
| CCA | Cost contribution arrangement |
| CCCTB | Common Consolidated Corporate Tax Base |
| CFB | Consumer-facing businesses |
| CFC | Controlled foreign corporation |
| COGS | Cost of goods sold |
| CPM | Comparable profit method |
| CUP method | Comparable uncontrolled price method |
| CWI | Commensurate with income |
| DAEMPE | Development, acquisition, enhancement, maintenance, protection and exploitation |
| DBCFT | Destination-based cash flow tax |
| DEMP | Development, enhancement, maintenance and protection |
| DEMPE | Development, enhancement, maintenance, protection and exploitation |
| DEMPEP | Development, enhancement, maintenance, protection, exploitation and promotion |
| EU | European Union |
| FAR | Functions, assets and risks |
| FCMU | Full-cost markup |
| FDI | Foreign direct investment |
| FVerlV | Funktionsverlagerungsverordnung (Business Function Relocation Ordinance) |
| GDP | Gross domestic product |
| HTVI | Hard-to-value-intangibles |
| ICC | International Chamber of Commerce |
| ICT | Information and communication technology |
| IMF | International Monetary Fund |
| IP | Intellectual property |
| IPR | Intellectual property rights |
| IRS | Internal Revenue Service |

| | |
|---|---|
| KBC | Knowledge-based capital |
| KPI | Key performance index |
| LSA | Location-specific advantage |
| LVAS | Low value-adding services |
| MNE | Multinational enterprise |
| NAFTZ | North American Free Trade Zone |
| NBER | National Bureau of Economic Research |
| OECD | Organisation for Economic Co-operation and Development |
| OECD MC | OECD Model Convention |
| OECD TP Guidelines | OECD Transfer Pricing Guidelines |
| OLI | Ownership advantage, locational advantage and internalization advantage |
| P&L | Profit and loss |
| PE | Permanent establishment |
| R&D | Research and development |
| RGI | Residual gross income |
| RPA-I | Residual profit allocation by income |
| STA[1] | State Taxation Administration (China (People's Rep.)) |
| TNMM | Transactional net margin method |
| TPSM | Transactional profit split method |
| UN | United Nations |
| UN MC | UN Model Convention |
| UN TP Manual | UN Transfer Pricing Manual |
| UNCTAD | United Nations Conference on Trade and Development |
| VAT | Value added tax |
| VCLT | Vienna Convention on the Law of Treaties |
| WACC | Weighted average cost of capital |
| WBG | World Bank Group |

1. Formally known as the State Administration of Taxation (SAT).

# Chapter 1

# Introduction

## 1.1. Background

### 1.1.1. From where it started: A query of emerging countries[2]

Multinational enterprises (MNEs) have given rise to an emerging issue in transfer pricing when choosing the countries in which they engage in different economic activities. This is the issue of location-specific advantages (LSAs). In common terms, LSAs are the benefits that are attributable to a specific geographical location that MNEs are able or are expected to exploit.

A location is unique with respect to its physical endowments (including land, labour and capital) and non-physical endowments (including economy, culture and politics). When making decisions as to whether and how to engage in a geographical location, MNEs need to evaluate a series of criteria, depending on the targeted investment. The criteria include, for example, the size of the market, the preferences of consumers, the types of manufacturing facilities, the manufacturing supports, the availability of raw materials, the geographical proximity to the target consumers and the export/import logistical costs.

Choices of locations and the types of business operations to establish in those locations as part of the value chain are crucial for MNEs' success. Their income generation requires a combined exploitation of proprietary productive resources with LSAs in the host countries, both of which are key elements in a specified value chain. Manufacturing and production cannot happen and be sustained without using water, electricity, people, infrastructures, etc. in the host countries. Moreover, a firm, even if the products it produces are flawless, may not necessarily succeed if those products do not (or do not sufficiently) meet the tastes and expectations of consumers in the country where it conducts sales.

2. In this book, the terms "emerging countries" and "developing countries" are used interchangeably, as they mostly represent the same group of countries.

The debate on LSAs[3] has attracted a particular spotlight in transfer pricing. It originates from the arguments regarding location savings and market premiums that emerging countries continue to assert.

China (People's Rep.) and India are internationally known for their strong views on LSAs. Basically, they contend that additional profits that are attributable to the particular attributes of geographical locations should be taxable in the jurisdictions in which the business operations actually take place.[4] Tizhong Liao, deputy director general of the International Taxation Department of the State Taxation Administration (STA (China)), pointed out[5] in an interview that the quantification and allocation of LSAs are particularly difficult challenges for developing countries that the Organisation for Economic Co-operation and Development (OECD) has not addressed.[6] A practitioner in Deloitte Boston observed that the Indian tax authorities are more aggressive than the Chinese tax authorities and that they tend to allocate all of the location savings to India based on the related-party bargaining power or an allocation key.[7] Some developing countries, such as a number of African countries[8] and Vietnam,[9] have also shown interest in the topic of LSAs.

3. Para. B.2.3.2.53. *UN Transfer Pricing Manual* (*UN TP Manual*) (2017). LSAs also include, but are not limited to, highly specialized skilled manpower and knowledge, proximity to growing local/regional markets, large customer bases with increased spending capacity and advanced infrastructure (e.g. information/communication networks and distribution systems).

4. J. Cooper et al., *Transfer Pricing and Developing Economies: A Handbook for Policy Makers and Practitioners* pp. 218-219 (WBG 2016) [hereinafter *World Bank TP Handbook*].

5. BNA, *China: Location-Specific Advantages "Unavoidable" According to Chinese Competent Authority*, BNA Transfer Pricing Report: New Archive (2013).

6. Details of the interview are available at http://www.internationaltaxreview.com/Article/3288251/Tizhong-Liao.html (accessed 26 Mar. 2021).

7. K.A. Bell, *China: China Asserts Location Savings, Profit Split in One-Third of Audits, Deloitte Survey Finds*, 23 BNA Tax Management Transfer Pricing Report 597 (2014).

8. For detailed comments, *see* PWC, *Spotlight on Africa's Transfer Pricing Landscape*, Transfer Pricing Perspectives: Special Edition, available at https://www.pwc.com/gx/en/tax/transfer-pricing/management-strategy/assets/pwc-transfer-pricing-africa-pdf.pdf (accessed 26 Mar. 2021).

9. Vietnam introduced the concept of LSAs in its legislation through Circular 41/2017/TT-BTC on 22 June 2017. The new rules require LSAs to be taken into account in a comparability analysis and in the case of material adjustments but do not provide for the determination, quantification and allocation of location savings or local market premiums. *See* A. Ferraton, *Location-Specific Advantages and Transfer Pricing*, 26 Intl. Transfer Pricing J. 6, pp. 426-427 (2019), Journal Articles & Opinion Pieces IBFD.

Some developed countries, for example the United States,[10] treat LSAs as comparability factors in their domestic transfer pricing rules. Perspectives on this topic therefore differ across emerging and developed countries. Considering this, the OECD and the United Nations (UN) have been prompted to provide some specific guidance on LSAs in their updated transfer pricing guidelines and handbooks that are in favour of the developed countries' approach.[11] Echoing the international development, China and India have reassessed their positions on this topic. India changed its statement in the 2017 version of the United Nations Transfer Pricing Manual (UN TP Manual), stating that good local comparables[12] can capture location savings, while China has announced that LSAs are comparability factors through a change of its domestic transfer pricing regulations.

However, the international consensus on LSAs reached thus far is as weak as it is illusive. First, the international guidance explores a very limited perspective on LSAs (primarily related to location savings), while other aspects of LSAs that represent problems that are more challenging in practice remain unanswered. Second, outside the international agreements, diverging approaches in practice remain at the country level. As a result, double taxation is inevitable, and MNEs may suffer. From the perspective of MNEs, it would not be a realistic (or wise) option to circumvent certain countries in their business landscape just to avoid or reduce additional exposures from LSA-related tax rules and audits. From the perspective of countries, MNEs leaving their jurisdictions is not what they want to see, as this may lead to a reduction in foreign direct investment (FDI), economic development, job opportunities, etc. Hence, tensions between MNEs and tax administrations are expected to increase if disagreements regarding LSAs remain unresolved.

Concisely, the transfer pricing problem of LSAs first breaks out as a conflict of interests between emerging countries and developed countries in the international tax world. The contentious point mainly surrounds the cost savings that result from using the productive resources physically located in emerging countries and that would not have been attained in developed countries (location savings). The transfer pricing problem at stake is how to divide the cost savings between the specific countries, and this normally involves an emerging country and a developed country.

10. US: Treasury Regulations, sec. 1.482-1(d)(4)(ii)(C) and (D).
11. Ch. I, sec. D.6. *OECD TP Guidelines* (2017); and paras. B.2.3.2.47-B.2.3.2.61 *UN TP Manual* (2017).
12. Local comparables are uncontrolled comparables selected from the same geographic jurisdiction as the controlled enterprise.

### 1.1.2. Developing countries are a rising force in the global economy and in the international tax community

There is a clear trend in the last three decades of MNEs moving many elements of their global value chains from developed economies to developing economies.[13] Along with the momentum this has generated, the last decade has also witnessed emerging countries outperform in the global economy.[14] Among emerging countries, the BRICS countries[15] stand out, given the striking data of their gross domestic product (GDP) growth.

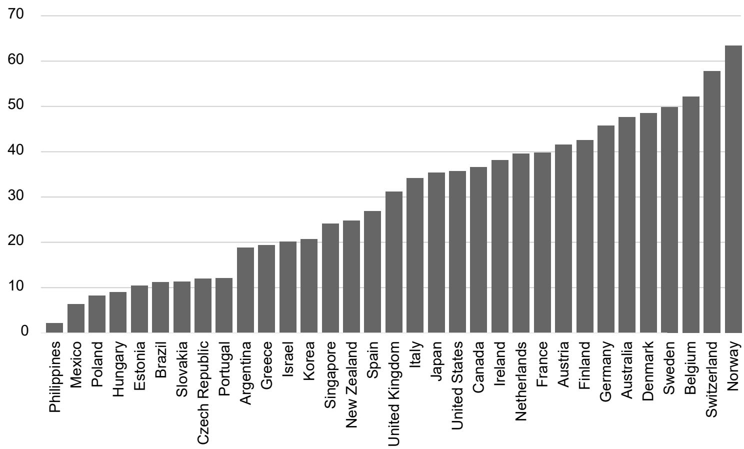
Generally speaking, the salary levels of emerging countries are below the average of the global standard. As Figure 1.1 shows, countries in Southern Europe, Eastern Europe, Asia and Latin America have lower hourly compensation costs than others, and these are classic emerging countries. For that reason, businesses often regard them as ideal locations to accommodate labour-intensive industries such as agriculture, mining and food services or tend to increase the use of labour in such countries.

Additionally, some emerging countries are also well known as highly active and growing markets with a large base of middle-class residents. For instance, China and India are cumulatively home to 40% of the world's population.[16] In 2014, China had the world's largest number of middle-class households, amounting to 112 million, and by 2030, the number is expected to increase to 137 million.[17] Moreover, by 2050, China and India

13. According to the UNCTAD, the contribution of developing countries in global value chains has been increasing rapidly, from approximately 20% in 1990, to 30% in 2000, to over 40% in 2010. *See* UNCTAD, *World Investment Report 2013: Global Value Chains: Investment and Trade for Development* p. 133 (UNCTAD 2013).
14. "Emerging market" is a term that investors use to describe a developing country in which investment would be expected to achieve higher returns but also be accompanied by greater risk. The four largest emerging and developing economies by either nominal or purchasing power parity-adjusted GDP are the BRIC countries (Brazil, Russia, India and China (People's Rep.)). The next five largest markets are Indonesia, Korea (Rep.) (although considered a developed market), Mexico, Saudi Arabia and Turkey. The Morgan Stanley Capital International Emerging Market Index lists Brazil, Chile, China (People's Rep.), Colombia, the Czech Republic, Egypt, Greece, Hungary, India, Indonesia, Korea (Rep.), Malaysia, Mexico, Pakistan, Peru, the Philippines, Poland, Qatar, Russia, South Africa, Thailand, Turkey and the United Arab Emirates.
15. BRICS is a widely used acronym designating Brazil, Russia, India, China (People's Rep.) and South Africa.
16. US Central Intelligence Agency, World Factbook, 2015 statistics (accessed 11 Apr. 2021).
17. Middle-class consumers are defined as those with 75%-125% of the median income. The source of data is Euromonitor International, Top 5 Emerging Markets with the Best Middle Class Potential, available at http://blog.euromonitor.com/2015/09/top-5-emerging-markets-with-the-best-middle-class-potential.html (accessed 26 Mar. 2021).

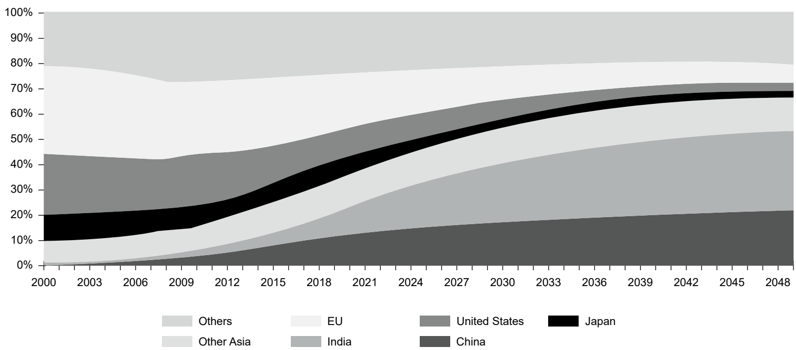
are expected to be the top two nations globally in terms of middle-class consumption (*see* Figure 1.2).

Figure 1.1. Hourly compensation costs in the manufacturing industry (USD, 2012)




Source: US Bureau of Labor Statistics, International Labor Comparisons, available at https://www.bls.gov/fls/home.htm (accessed 27 March 2021).

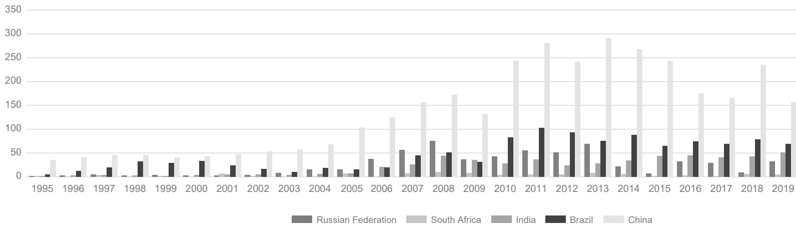
Figure 1.2. Share of global middle-class consumption (2000-2050)




Source: H. Kharas, *The Emerging Middle Class in Developing Countries*, OECD Development Centre Working Papers, No. 285, sec. IV (OECD 2010), available at: https://doi.org/10.1787/5kmmp8lncrns-en (accessed 27 March 2021).

Driven by profit maximization, FDI[18] shifts to where the return is high. Emerging countries are certainly FDI-favoured destinations and currently host a considerable amount of FDI inflow. As can be seen in Figure 1.3, among the BRICS countries, Brazil and China are the two most popular countries when it comes to MNEs' tendencies to establish their business operations. At the global level (*see* Figure 1.4), from 1970 to 2019, emerging countries accounted for an average of 20% of global FDI inflows, and, in particular, the BRICS countries accounted for an average of 10%.

Figure 1.3. Foreign direct investment in the BRICS countries (net inflows, USD billions, 1995-2019)

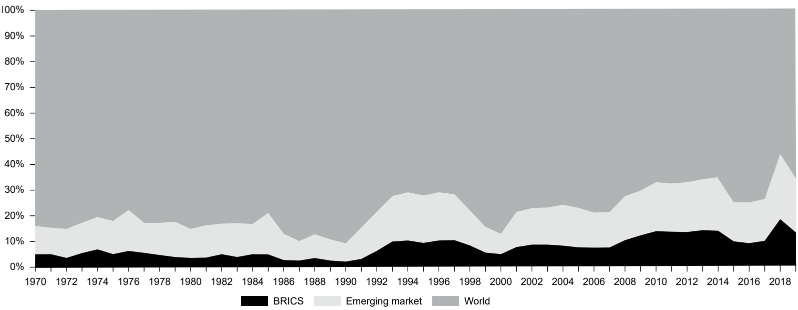



Note: According to the World Bank, "foreign direct investment" refers to direct investment equity flows in the reporting economy. It is the sum of equity capital, reinvestment of earnings and other capital. Direct investment is a category of cross-border investment associated with a resident in one economy having control of or a significant degree of influence over the management of an enterprise that is resident in another economy. Ownership of 10% or more of the ordinary shares of voting stock is the criterion for determining the existence of a direct investment relationship.
Source: The World Bank, data available at https://data.worldbank.org/indicator/BX.KLT.DINV.CD.WD (accessed 27 March 2021).

Emerging countries provide economic conditions favourable to MNEs in their pursuit of continuous and sustainable economic growth. It is commercially beneficial for MNEs to include emerging countries in their global business landscapes. Therefore, it is important that MNEs are aware of the tax environments in emerging countries, especially where they have business operations. LSAs are one set of influential parameters to be aware of.

18. Direct investment is defined by the OECD benchmark definition (BMD4) as a category of cross-border investment made by an entity resident in one economy (the direct investor) with the objective of establishing a lasting interest in an enterprise (the direct investment enterprise) resident in an economy other than that of the direct investor. The main motivation of the direct investor is to exert some degree of influence over the management of its direct investment enterprise(s), whether or not this entails exercising a controlling interest.

Figure 1.4. Share of global FDI (net inflows, 1970-2019)




Source: The World Bank, data available at https://data.worldbank.org/indicator/BX.KLT.DINV.CD.WD (accessed 27 March 2021).

Furthermore, developing countries, because of their growing economic power, are becoming more internationally influential. The world as such cannot afford to ignore the voice of developing counties. The OECD/G20 Base Erosion and Profit Shifting (BEPS) Project, as a good example, has already seen the active participation of developing countries at the international level in reshaping international standards. The framework of international tax law has been predominantly developed by developed countries, led by the United States, whereas the BEPS Project has included a larger group of countries, especially a considerable number of non-OECD member countries.

Participation in the BEPS Project has specific significance for developing countries. They are considered easy victims of BEPS problems for various reasons, such as domestic tax law loopholes and an insufficient capacity to detect tax avoidance and fraud in complex business arrangements. Participation in the developing stages of the BEPS Project has been important to ensure that they can receive the necessary support to address their specific needs. Moreover, developing countries indeed have an active role in the discussions of the BEPS Project that has been influencing the international tax agenda. According to the OECD, "[o]ver 80 developing countries and other non-OECD/non-G20 economies discuss the challenges of BEPS through direct participation in the Committee on Fiscal Affairs, regional meetings in partnership with regional tax organizations, and thematic global fora".[19]

19. For the source of the quote, *see* https://www.oecd.org/tax/beps/beps-about.htm/ (accessed 26 Mar. 2021).

In addition, the OECD is working together with the UN, the International Monetary Fund (IMF) and the World Bank Group (WBG) to identify the top BEPS-related concerns of developing countries and assisting developing countries in implementing the outcomes of the BEPS Project.[20] For that purpose, these international organizations are dedicated to developing practical toolkits for developing countries to address the identified BEPS-related matters.[21]

Moreover, over 125 countries around the world have committed to implementing the minimum standards on the same footing under the Inclusive Framework on BEPS.[22] Its significance is that it allows interested countries and jurisdictions to work with OECD and G20 members on developing standards on BEPS-related issues and reviewing and monitoring the implementation of the entire BEPS Package, especially the four minimum standards.[23]

Among the four minimum standards, Action 5, on harmful tax competition, and Action 13, on transfer pricing documentation, contain transfer pricing-related topics. Actions 8-10 are not minimum standards in the BEPS Project. Hence, participating countries are not obligated to implement the measures proposed therein, even though they represent international agreement. The important fact about Actions 8-10 is that they contain a set of rules to interpret the arm's length principle, including, inter alia, the transfer pricing aspects of LSAs. Allowing countries to have discretion in substance at the implementation stage provides them a margin of freedom to have individual versions of the arm's length principle. As a result, it is highly likely that departures from international standards in the field of transfer pricing as proposed by the OECD will continue and more deviations will arise.

20. The four international organizations are jointly known as the Platform for Collaboration on Tax, which was launched in Apr. 2016 to intensify the cooperation between international organizations on tax issues. For more information on this topic, *see* http://www.oecd.org/tax/platform-for-collaboration-on-tax.htm (accessed 26 Mar. 2021).

21. Eight areas are identified: (i) options for low-income countries' effective and efficient use of tax incentives for investment; (ii) addressing difficulties in accessing comparables data for transfer pricing analyses; (iii) taxation of offshore indirect transfers; (iv) transfer pricing documentation requirements; (v) tax treaty negotiations; (vi) base eroding payments; (vii) supply chain restructuring; and (viii) assessment of BEPS risks.

22. For more discussion on this topic, *see* http://www.oecd.org/tax/beps/beps-about.htm (accessed 26 Mar. 2021).

23. The four minimum standards include BEPS Action 5 (harmful tax competition), BEPS Action 6 (treaty abuse), BEPS Action 13 (transfer pricing documentation) and BEPS Action 14 (dispute resolution).

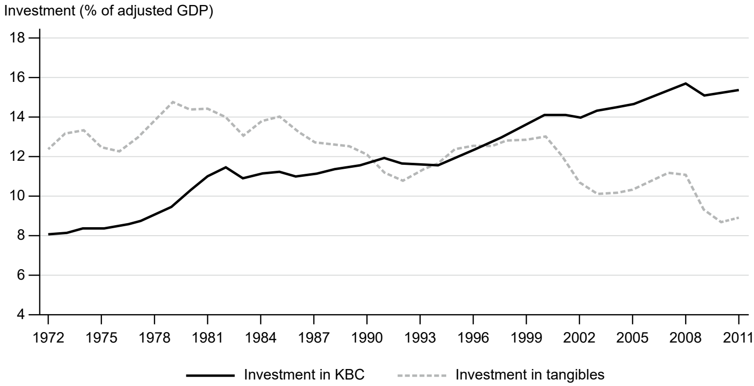
### 1.1.3. Global businesses embrace a knowledge-based economy

While tangible capital is still important, the growth of international trade and investments is increasingly reliant on investment in intangible assets, also known as knowledge-based capital (KBC).[24] This has marked the shift to a knowledge-based economy, which further leads to transformations in the way that business is set up, goods and services are consumed, and LSAs in host countries are exploited.

Investment in KBC has seen an increase in business sectors all over the world. In many OECD member countries, businesses are now investing as much or more in KBC as they are in physical capital. The United States (*see* Figure 1.5) is a good example. From 1996, investment in KBC in private sectors there exceeded the amount invested in tangible capital. By 2001, US investment in KBC (which accounted for nearly 16% of adjusted GDP) was almost twice as much as investment in tangible capital. Additionally, many emerging countries are directing more resources towards investment in KBC and prioritizing spending on education and research and development (R&D) in their policy agendas. According to a study on China's investment in KBC, the figure was 7.5% of GDP in 2006, an increase of 3.8% from 1990.[25] The WBG's study found that Brazil slightly increased business investment in KBC from 3% of GDP in 2000 to 5% in 2008.[26]

24. OECD, *Supporting Investment in Knowledge Capital, Growth and Innovation* (OECD 2013) [hereinafter *OECD KBC Report*].
25. P. 25 *OECD KBC Report*. The study was performed by Hulten and Hao (2011). *See* C.R. Hulten & J.X. Hao, *The Role of Intangible Capital in the Transformation and Growth of the Chinese Economy*, NBER Working Paper 18405 (Sept. 2012).
26. P. 25 *OECD KBC Report*; and M.A. Dutz et al., *Measuring Intangible Assets in an Emerging Market Economy: An Application to Brazil*, World Bank Policy Research Working Paper No. 6142 (1 July 2012), available at https://ssrn.com/abstract=2116140 (accessed 26 Mar. 2021).

Figure 1.5. Business investment in KBC and tangible capital (% of adjusted GDP, United States, 1972-2011)[27]




Note: Estimates are for private industries excluding real estate, health and education.
Source: OECD, *Supporting Investment in Knowledge Capital, Growth and Innovation* p. 24 (OECD 2013), which is further sourced from an unpublished update on C.A. Corrado & C.R. Hulten, *How Do You Measure a "Technological Revolution"?*, 100 American Economic Review 2, pp. 99-104 (2010).

The term KBC covers a wide range of intangible assets that create future benefits for a firm and includes many more items than those commonly believed to be legally protected intangible properties. The OECD classifies KBC into three categories: (i) computerized information (e.g. software and databases); (ii) innovative property (e.g. patents, copyrights, designs and trademarks); and (ii) economic competencies (e.g. brand equity, firm-specific human capital, networks of people and institutions, and organizational know-how that increases enterprise efficiency).[28] Some forms of KBC, as in category (i), are codifiable and thus contained in computer programs (e.g. software) and computerized databases (e.g. big data). For some types of KBC, codification is impossible, as they are embodied in individuals and cannot be used without intimate human contacts.

In various forms, KBC comprises far more than just R&D. In fact, in private sectors, investment in R&D generally accounts for no more than 20%-25% of KBC investment stocks.[29] The business community has widely accepted that spending on things such as marketing, data, design and business process reorganization, inter alia, represents KBC investment. It also believes

27. P. 24 *OECD KBC Report*.
28. Id., at p. 22.
29. Id., at p. 23.

that such investment is closely linked to the prospect of corporate success. However, most of these costs are not treated as investment by accounting conventions. Indeed, they are poorly reported and measured in both firm and national accounts.

Supported by macroeconomic statistical evidence, investment in KBC increases labour productivity and elevates the rate of return in comparison to investment in tangible capital.[30] This growth-enhancing effect is particularly attributed to the general qualities of knowledge that are partially exclusive and non-rivalled in the market. Investment in KBC yields knowledge that can benefit other parts of the economy, and investors cannot completely prevent those that do not invest in KBC from receiving those benefits (knowledge spillovers). Moreover, once knowledge is produced, it can be replicated and reused without re-incurring the production costs. Therefore, knowledge has a powerful cost-saving effect and leads to increasing returns to scale in production.

With the prevalence of information and communication technologies (ICT), digitalization is disseminating and becoming a more important component of the knowledge-based economy. Advanced technologies are completely transforming and reshaping modern business models. They enhance the efficiency of communication beyond national boundaries and enable effective centralized management despite the distances involved. With certain digitalized tools that are more sophisticated, high-tech MNEs can reach foreign markets without (or with reduced) physical footprints in host countries. The United Nations Conference on Trade and Development (UNCTAD) sampled a wide range of digital companies, including MNEs providing and supporting ICT infrastructure, MNEs performing traditional economic activities via the internet and MNEs operating businesses purely online. The study ascertained that, as the intensity of the internet increases, MNEs tend to generate more foreign sales with fewer foreign assets (asset-light FDI).[31]

Certainly, KBC influences value distribution in the global value chain. The term "global value chain" is used to describe the ways MNEs fragment the full range of their economic activities and allocate them across different countries. Under this concept, international investors are increasingly competing for high value-adding activities in the global value chain. Participants

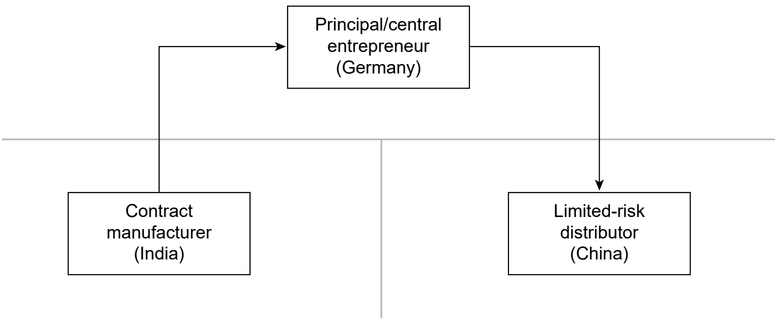
30. C. Corrado et al., *Intangible Capital and Growth in Advanced Economies: Measurement Methods and Comparative Results*, IZA Discussion Paper 6733 (2012).
31. B. Cassela & L. Formenti, *FDI in the Digital Economy: A Shift to Asset-Light International Footprints*, 25 Transnational Corporations 3, Special Issue on Investment and International Taxation (part 2) (2018).

in the value chain are more likely to retain value as their capability to supply sophisticated and hard-to-imitate products or services increases. Their capabilities, such as brand, R&D, designs, organizational structures and managerial skills, after all, stem from KBC.

### 1.1.4. Modern business models erode physical presence in host countries

From incubating to eventually commercializing business ideas, firms require the use of a wide range of tangible resources, such as machinery, equipment and buildings. For example, in the hotel industry, maintaining locally presentable crews that make guests always feel welcomed and well taken care of and that can respond to their requests in a proper and timely manner is a significant factor in the success of the business. Therefore, having on-site business operations and physically exploiting LSAs in host countries are relevant and still necessary for many industry sectors. However, in the transition to a knowledge-based economy, knowledge-seeking FDI is becoming more important than (tangible) resource-seeking FDI and market-seeking FDI. In particular, knowledge-seeking FDI reforms modern business models and provides opportunities for exploiting LSAs in a manner that significantly reduces physical presence in host countries.

Figure 1.6. The central entrepreneur model




As an example, Figure 1.6, in simplification, illustrates a frequently observed business model – the central entrepreneur model.[32] This example concerns an MNE headquartered in Germany. To achieve operational efficiency and

32. X. Peng & R. Petruzzi, *Transfer Pricing and Intra-group Services*, in *Fundamentals of Transfer Pricing: A Practical Guide* p. 341 (M. Lang et al. eds., Wolters Kluwer 2018).

effectiveness, as well as to save costs, the group runs a centralized business model in which the German headquarters company is the central entrepreneur entity with central management and control functions. The main functions related to R&D, marketing, sales and international brand management are also with the German headquarters company. Accordingly, the German headquarters company assumes major R&D risk and market risk and owns all of the valuable technologies and marketing intangibles of the group. Additionally, the German headquarters company bears responsibility and accountability for the group's supply chain strategy, including target setting, planning, controlling and sourcing.

The group has a manufacturer and a distributor, located in India and China, respectively. The Indian manufacturer is structured as a contract manufacturer,[33] the sole function of which is to produce goods as per the instructions from the German headquarters company. For the purpose of production, the Indian manufacturer uses its own manufacturing technologies, which are necessary but not unique, and technologies from the German headquarters company. In addition, the Indian manufacturer also performs some technical development activities related to the manufacturing technologies. However, those activities are less economically significant than the R&D activities performed by the German headquarters company. The Indian manufacturer owns factories and machinery but not inventories of raw materials and finished products. The German headquarters company orders and coordinates raw materials to ensure timely deliveries and optimized inventory stocks. Once the goods are produced, the German headquarters company purchases them all by contract and shortly thereafter arranges direct shipment of the finished goods to China. The Indian manufacturer assumes limited inventory risks for raw materials and finished goods and minimal market risks as well.

The Chinese distributor purchases finished branded goods from the German headquarters company (though it receives the goods logistically from India) and then sells them to third-party customers in China. The Chinese distributor is arranged as a limited-risk distributor.[34] In an extreme situation, the Chinese distributor carries only a "flash-title" of the finished goods and, therefore, assumes very limited inventory risks. The Chinese distributor primarily implements and executes the global marketing and sales strategies developed by the German headquarters company and performs only minimal domestic marketing, promotion and sales activities. Additionally, for any goods that the Chinese distributor fails to sell, the German headquarters

33. Id., at p. 340.
34. Id.

## Notes

## Notes

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## Contact


**IBFD Head Office**
Tel.: +31-20-554 0100 (GMT+2)
Email: info@ibfd.org

**Visitors' Address:**
Rietlandpark 301
1019 DW, Amsterdam
The Netherlands

**Postal Address:**
P.O. Box 20237
1000 HE Amsterdam
The Netherlands