MULTINATIONAL CORPORATIONS
IN THE 21ST CENTURY ECONOMY

Hutchins Center
on Fiscal & Monetary Policy
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Excerpted from chapter one of ***Global Goliaths: Multinational Corporations in the 21st Century Economy*** (Brookings Institution Press, 2021)

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Multinational corporations (MNCs) are the global goliaths of modern times, responsible for large portions of world production, employment, investment, international trade, research, and innovation. Decisions made by these firms affect those who work for them, buy from them, do business with them, and compete with them, as well as the economies and societies of the places in which they are located.

Some are critical of MNCs. They say that these firms seek to monopolize markets, exploit foreign and domestic labor, avoid paying taxes, dodge government regulations, manage innovation inappropriately, and exploit their financial positions to the detriment of other companies. They note that large multinational firms are uniquely capable of deploying their market positions and influence over government to solidify their control, obtaining outsized profits with actions that undermine the public interest. Others view MNCs more favorably. They say that multinational firms represent the epitome of modern capitalism, producing the benefits of economic life that many take for granted. They argue that multinational firms propel innovation and productivity, thereby contributing to rising living standards, both at home and abroad.

Differing views of MNCs carry implications not only for understanding the operation of the economy but also for government policies. Governments contract with MNCs, tax them, and regulate them. Diplomatic negotiations, international treaties and economic agreements, and even military interventions are of central concern to international investors. Governments offer multinational firms tax concessions and other inducements to attract and retain their activities. All these interactions are premised on views of the nature of the multinational enterprise and its role in the modern economy, over which there is considerable difference of opinion.

This brief draws on the contents of a book that we edited that contains contributions from 27 distinguished scholars who offer fact-based analysis of the activities of MNCs. The book's goal is to augment understanding of multinational firms, contributing to informed public discussion and better public policies.

What is a multinational corporation?

We define a multinational corporation (MNC) as a business entity with one or more foreign affiliates in which the parent company holds at least a 10 percent ownership stake. Because most foreign affiliates are 100 percent owned by their parents, and because more data are available for majority-owned foreign affiliates, most of our calculations focus on majority-owned affiliates.

We have assembled the best evidence available to address several key questions about MNCs that arise in public debates: Do U.S. multinationals export jobs? Do they exploit foreign workers? What drives multinationals to look beyond home-country borders? Do they shift profits to tax havens, to the detriment of other countries? Where do they conduct R&D, and why? Does the rise of the digital economy allow multinationals to dominate their markets, or does it challenge their market power? Do multinational corporations have an edge over other firms in raising money? How important are cross-border takeovers, and what drives them? How have U.S., European, and Japanese multinationals responded to the remarkable rise of the rest of Asia—China, in particular?

This work was largely completed prior to the outbreak of the COVID-19 pandemic. Even before the pandemic, the rise of protectionist political leaders, animosity toward foreigners and immigrants, and attacks on multinational institutions led to rethinking of global supply chains and the virtues of keeping more production at home. These forces, and those prompted by the pandemic, undoubtedly will shape decisions made by MNCs and by governments. We do not attempt to predict what they will decide, or how these decisions will affect the trends that we describe, though we expect future decisions to be affected by the underlying economics of multinational enterprises.

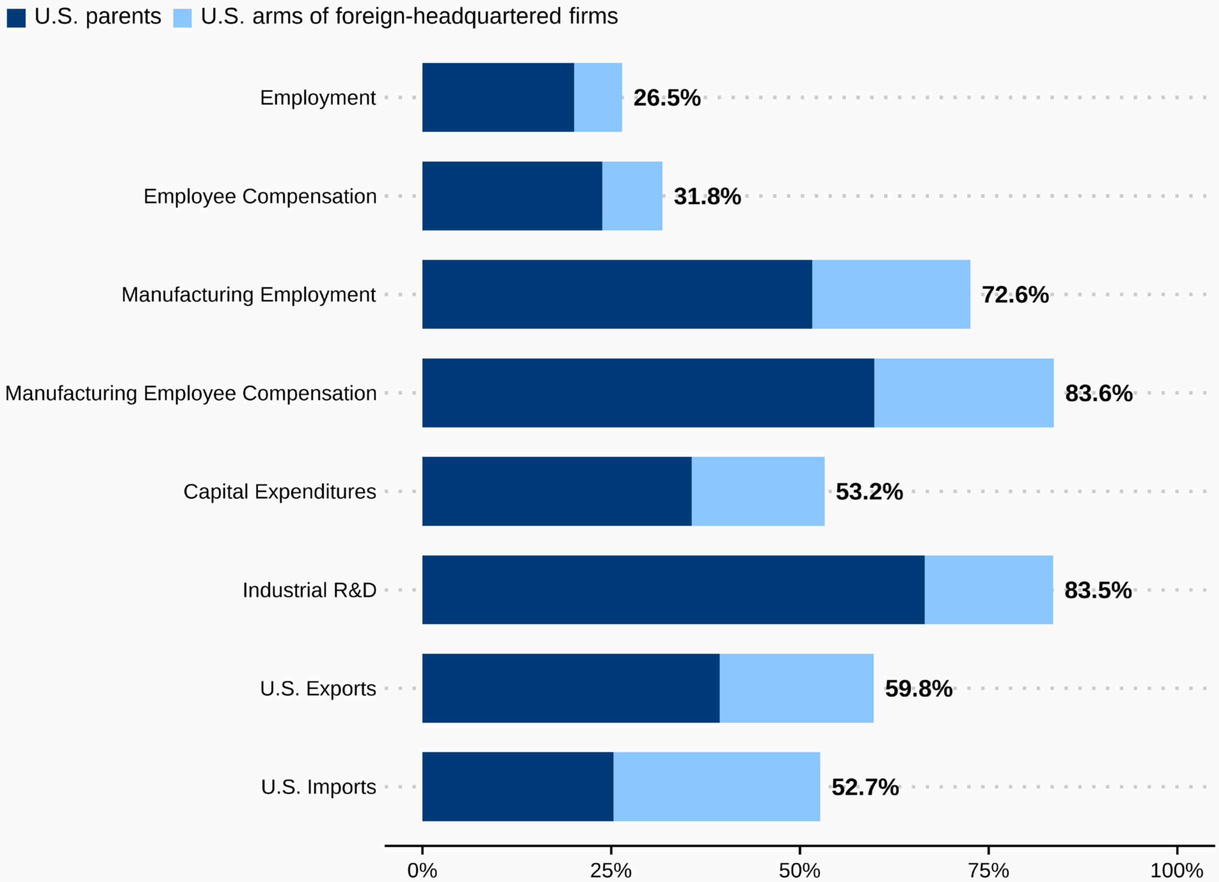
Concerns about the role of MNCs in the economy and society are not new. In 1978, C. Fred Bergsten, Thomas Horst, and Theodore Moran published *American Multinationals and American Interests*, which notes: "The multinational corporation has become one of the most controversial economic and political institutions of our time. What international investment does to jobs, exports, prices, income distribution, access to raw materials, taxes, and market power is debated in host and home countries alike. To some observers, multinationals threaten the international economic and political system; to others, they stabilize international relations. In one view, they are engines of progress; in another, agents of exploitation."

When these authors wrote in the late 1970s, the U.S. economy still exhibited its postwar economic preeminence, and large U.S. MNCs seemingly controlled the industries and markets in which they operated, apparently able to keep foreign competitors and governments at bay. While subsequent events offer new reasons to worry about the behavior of MNCs, the dire predictions of the 1970s—that U.S. multinationals would take over the global economy—have not materialized. Concerns that multinational firms, particularly those based in the United States, would overcome any constraints on their behavior did not reckon with large changes in the world economy. Yet many of the 1978 concerns about MNCs persist.

To lay a factual foundation for the continuing debate over MNCs, here are some highlights of the data on multinationals corporations presented in *Global Goliaths*.

Multinationals are major players in the U.S. economy

Multinationals' share of economic activity in 2017, by category



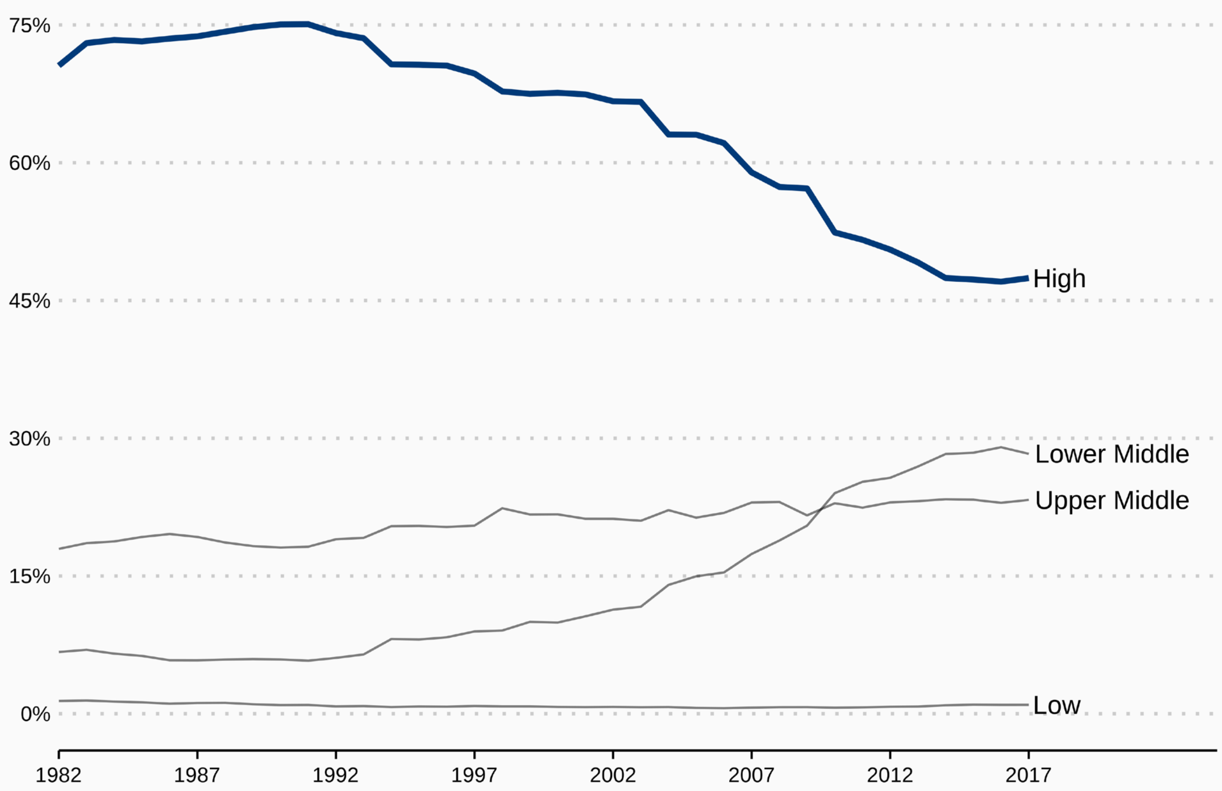
Note: The original figure appears in *Global Goliaths*, Brookings Institution Press, 2021.
Source: Bureau of Economic Analysis, National Income and Product Accounts; National Science Foundation, Science and Engineering Indicators; Census Bureau Annual Capital Expenditure Survey.

Multinationals are major contributors to the U.S. economy. U.S.-headquartered MNCs accounted for 20.1 percent of all U.S. private sector employment in 2017, and foreign-headquartered firms accounted for another 6.4 percent. And that does not count workers at their suppliers and customers. Jobs at multinationals tend to pay more, on average, than others, in part due to the industries in which MNCs are most active and the occupations of the workers they employ, so multinationals account for a larger share of total labor compensation than their share of workers.

Multinationals play a particularly large role in manufacturing: more than 70% of all U.S. manufacturing employment is in MNCs. Multinational firms accounted for more than half of all non-residential capital expenditures in 2017 and more than 80 percent of all industrial R&D done in the United States. Multinationals account for more than half of U.S. exports and imports of goods and services.

The bulk of multinationals' employees are in high-wage economies

Share of U.S. multinational foreign affiliate employment, by host country income

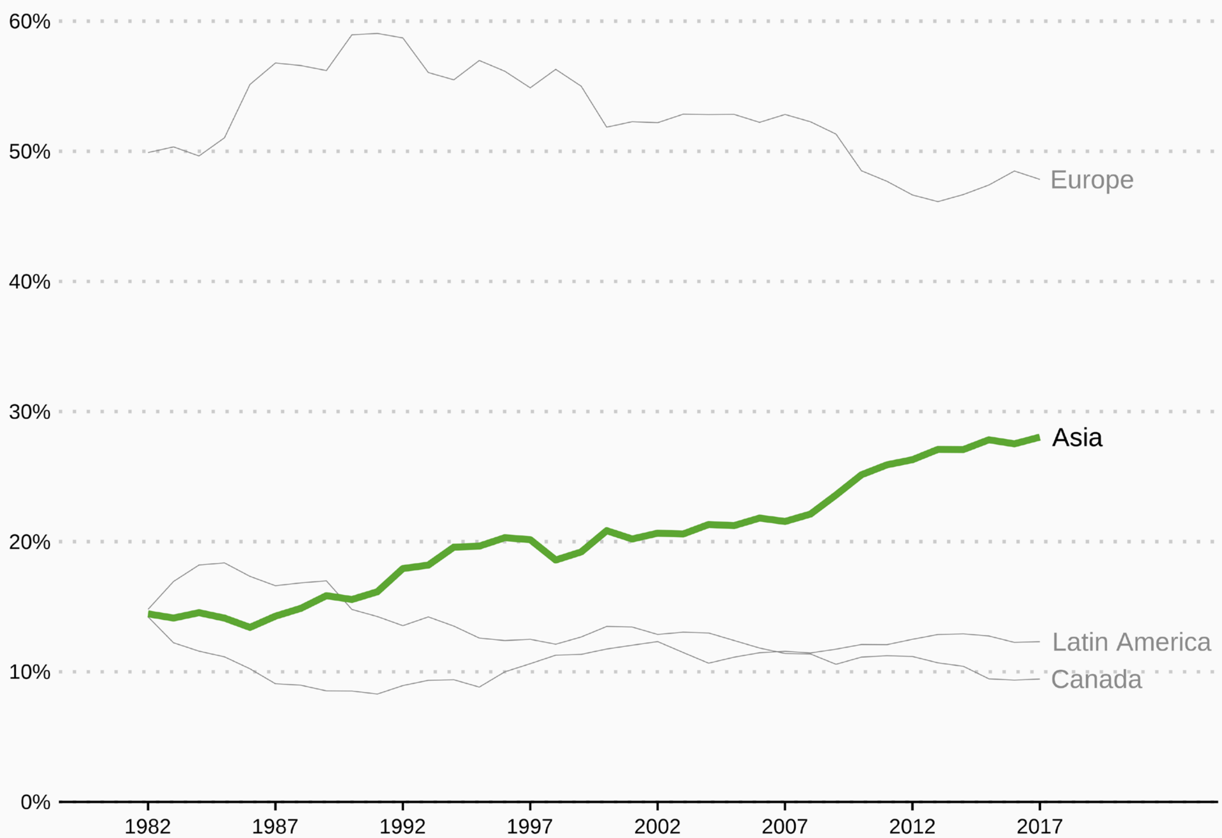


Note: The original figure appears in *Global Goliaths*, Brookings Institution Press, 2021.
Source: Bureau of Economic Analysis.

Rather than locating production strictly in the lowest-wage countries, multinational firms tend to perform similar activities in different locations, so they can be close to their customers. Nearly half of the foreign employees of U.S.-headquartered MNCs were in high-income countries in 2017, a significant decline from three-quarters in the 1980s. A rising share of U.S.-based MNC employees in upper-middle-income countries (such as Brazil and China) portends further change. If U.S. multinational firms were motivated primarily by a quest for low-wage, lightly regulated locations, one would have expected an even sharper decline in high-income employment, and at least some growth in the employment share of affiliates in low-income countries. Looking at the top ten offshoring destinations of U.S.-based firms by value-added, only two, Mexico and China, are developing countries, and combined they account for only 14 percent of aggregate value-added in those ten locations.

Multinationals' markets have shifted toward Asia

Share of U.S. multinational foreign affiliate sales, by affiliate location

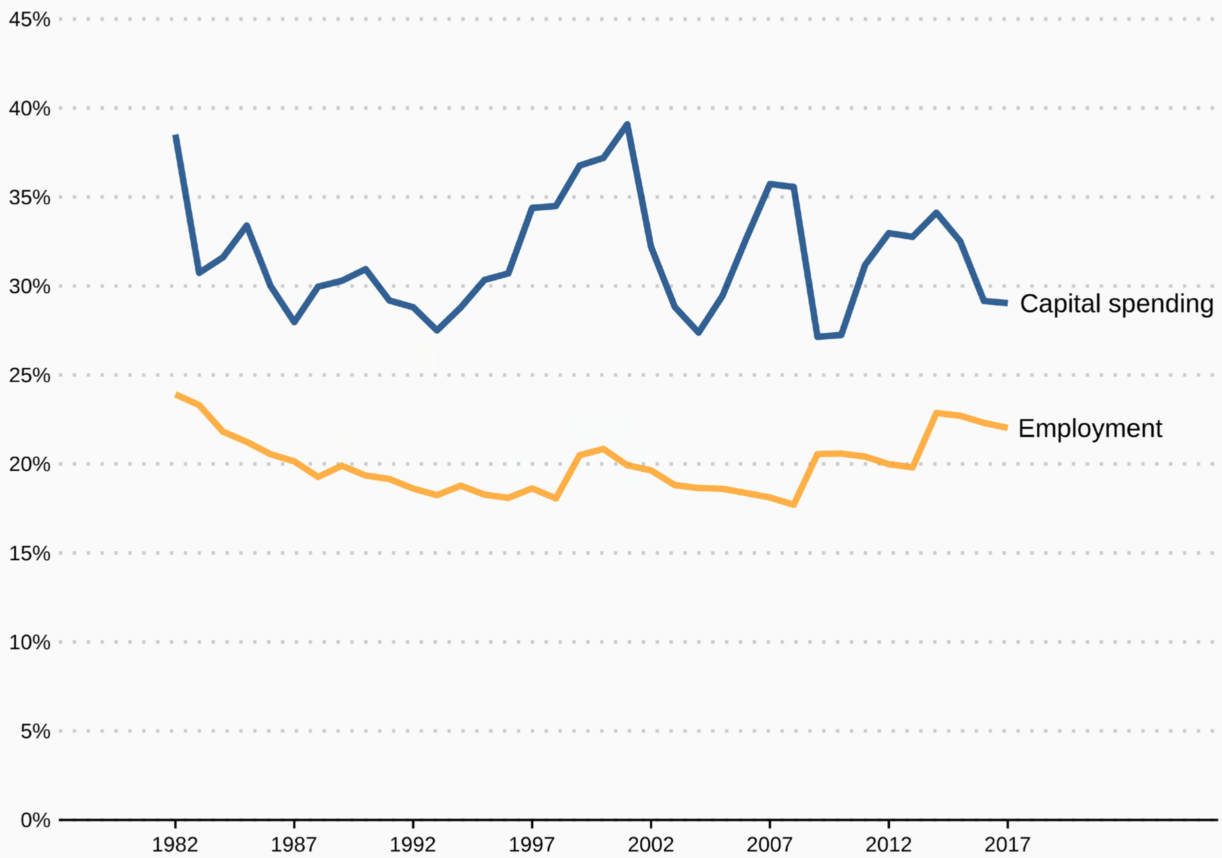


Note: The original figure appears in *Global Goliaths*, Brookings Institution Press, 2021.
Source: Bureau of Economic Analysis.

As Asian economies have grown, so too has the presence of MNCs in Asia. The share of worldwide sales of U.S. multinationals' foreign affiliates in Asia rose from 14 percent in 1982 to 28 percent in 2017, as the shares in Europe and Canada declined.

U.S. operations of U.S. multinationals have grown at the same pace as the economy

U.S. multinational parent share of U.S. private sector activity

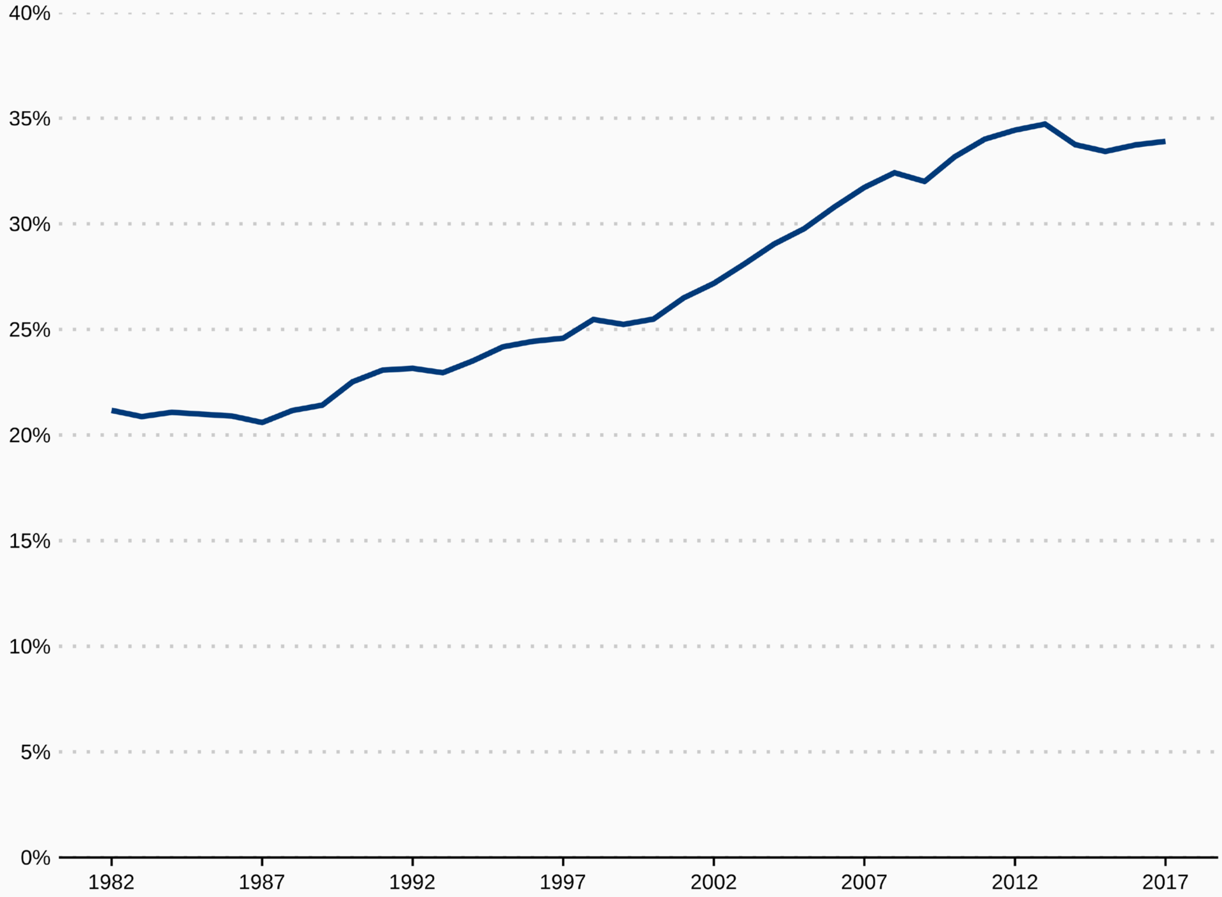


Note: The original figure appears in *Global Goliaths*, Brookings Institution Press, 2021.
Source: Bureau of Economic Analysis.

Despite the much-discussed forces of globalization, the U.S. operations of U.S. multinational parent firms have grown at roughly the same pace as the rest of the U.S. economy, as measured by their shares of total U.S. private sector employment and capital expenditures. U.S.-headquartered multinationals have not come to dominate the U.S. economy, nor have they abandoned it. U.S. multinational parent companies employed 24 percent of the U.S. private sector workforce in 1982 and 22 percent in 2017. (In between, the fraction of U.S. workers they employed fluctuated, declining during the economic expansions of the 1990s and 2000s as other firms expanded, and rising during the Great Recession as multinational firms proved to be more stable than other employers.) The U.S. multinational parent company share of U.S. private capital expenditures fluctuated between 30 and 40 percent over the years 1982 to 2017 with no obvious trend.

A growing share of U.S. multinationals' workers are overseas

Share of employees of U.S. multinationals who work abroad



Note: The original figure appears in *Global Goliaths*, Brookings Institution Press, 2021.
Source: Bureau of Economic Analysis.

Both the U.S. and foreign workforces of U.S-based multinational corporations have grown in the past three decades, but their foreign workforces have grown much faster—and represented 34 percent of the total workforces in 2017, up from 21 percent in 1982. One question that this immediately raises is the extent to which this expansion of foreign employment may have come at the cost of jobs in the United States.

Multinationals that expand overseas tend to expand at home

Changes in the domestic and foreign employment of U.S. multinationals by number of firms between 2004 and 2014

	Decrease in foreign employment	Increase in foreign employment
Increase in U.S. employment	**293**	**704**
Decrease in U.S. employment	**336**	**354**

Note: The original figure appears in *Global Goliaths,* Brookings Institution Press, 2021.
Source: Bureau of Economic Analysis.

Between 1982 and 2017, U.S. MNCs added almost exactly the same number of workers (9.4 million) to their payrolls in the United States as they added abroad. While this does not reveal what would have happened to U.S. employment had they not expanded overseas, it does suggest that foreign expansion did not entirely supplant U.S. job creation. Between 2004 and 2014, 1,058 U.S. multinational firms for which the Bureau of Economic Analysis has data expanded their foreign workforces; of these, roughly two-thirds (704) contemporaneously expanded their U.S. employment. Over the same time period, 629 U.S. multinational firms reduced their foreign workforces; of these, about half (336) also reduced employment in the United States. Greater foreign employment need not be accompanied by reduced U.S. employment in the same firms; indeed, foreign expansions usually are accompanied by domestic expansions. This pattern does not establish that foreign operations of U.S. MNCs contribute to the total demand for U.S. labor, and the aggregates mask considerable heterogeneity among firms and labor markets. There is evidence that offshoring by MNCs creates significant hardships for some workers in high-wage countries, with lower-skilled workers and those who perform routine tasks most at risk.

U.S. multinationals still do the bulk of U.S. private sector R&D spending

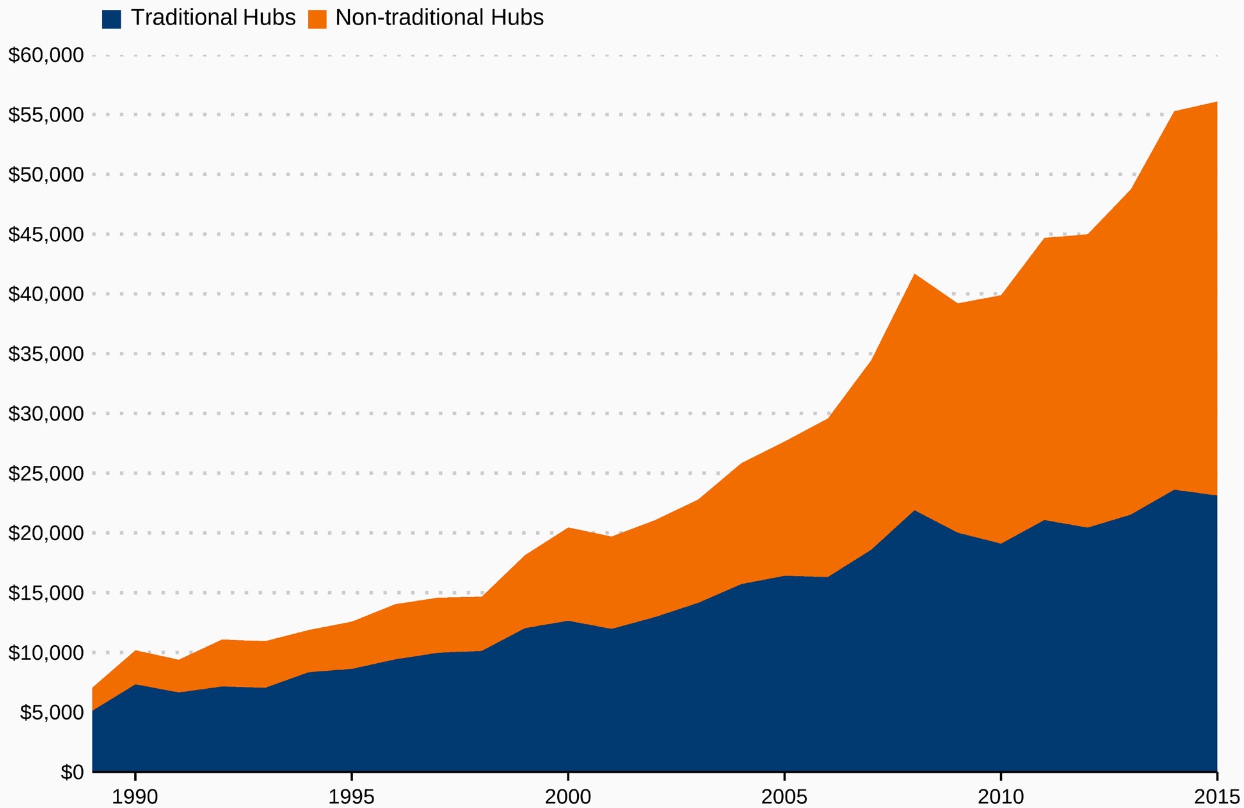
U.S. parent share of U.S. business R&D

Note: The original figure appears in *Global Goliaths*, Brookings Institution Press, 2021. This figure also previously appeared in "The Rise of Global Innovation by U.S. Multinationals Poses Risks and Opportunities", Peterson Institute for International Economics, 2019.
Source: Bureau of Economic Analysis.

U.S.-based multinationals have accounted for about 70 percent of the total R&D performed by all U.S. businesses for the past three decades. Over the same time span, the share of the total R&D spending done by these U.S.-based firms *outside* the U.S. grew from 9 percent to 16 percent, by 2017. This is not the product of any decline in total research expenditures by U.S. parent companies: aggregate R&D spending by MNCs in the U.S. increased at a compound nominal annual growth rate of 4.8 percent, while R&D spending by their foreign affiliates grew at a faster rate of 7.8 percent. Almost all of this growth of foreign R&D activity occurred in relatively novel locations, including China, India, and Israel.

U.S. multinationals' foreign R&D spending increasingly done in non-traditional hubs

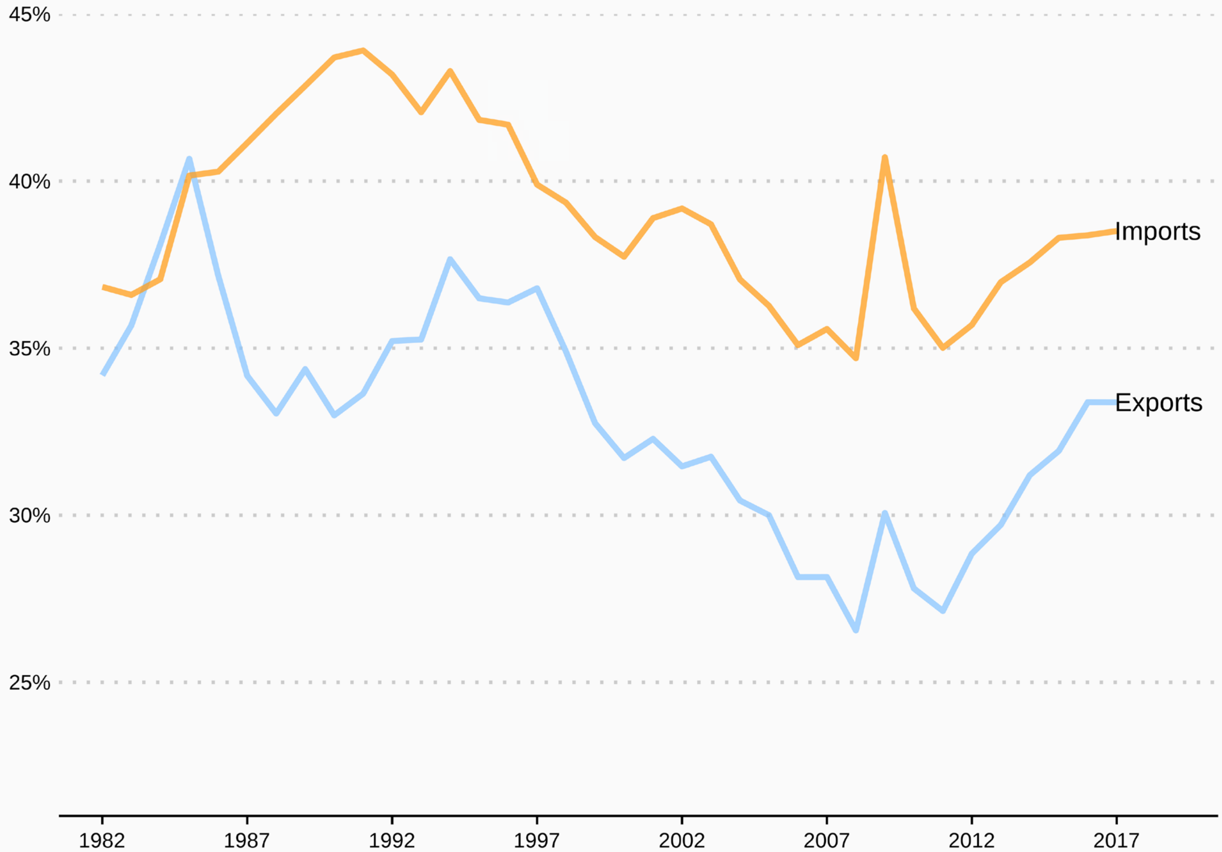
Total R&D spending by U.S. multinationals' foreign affiliates, not adjusted for inflation (millions of US $)



Note: Traditional hubs are the United Kingdom, Germany, France, Canada, and Japan. Non-traditional hubs are all other countries (mainly Israel, China, and India). The original figure appears in *Global Goliaths*, Brookings Institution Press, 2021.
Source: Bureau of Economic Analaysis.

Intra-company trade has grown at the same pace as overall international trade

Related party share of U.S. imports and exports



Note: The original figure appears in *Global Goliaths*, Brookings Institution Press, 2021.
Source: Bureau of Economic Analysis.

Firms often prefer trade with their own affiliates as opposed to arms-length transactions with other companies. Trade in goods between the affiliates of multinational firms is significant—accounting for 37 percent of U.S. exports and 39 percent of U.S imports in 2017. It has grown at roughly the same pace as the growth in overall international trade. In other words, globalization and the expansion of multinational firms have not led to a rising share of intrafirm trade, nor has intrafirm trade been supplanted by trade between unrelated parties. Unfortunately there are no comprehensive data that capture the widely reported arrangements—common in apparel and electronics, among other industries—in which multinational firms hire foreign firms in which they have no equity stakes to make and assemble products, so it is difficult to know to what extent such transactions now supplement related party trade.

A growing share of multinationals' profits come from abroad

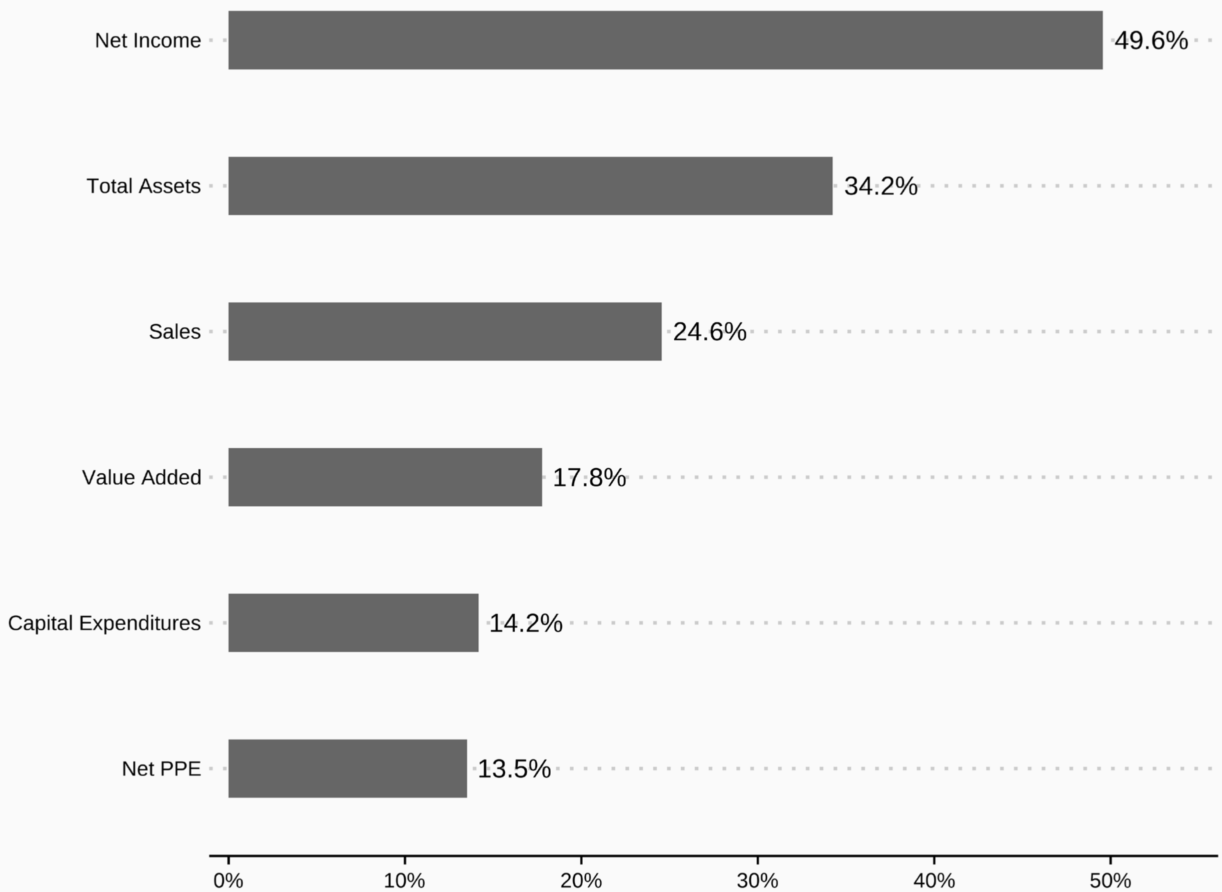
U.S. firms' income on equity investment abroad as share of worldwide profits

Note: The original figure appears in *Global Goliaths*, Brookings Institution Press, 2021.
Source: Bureau of Economic Analysis.

There is ample reason to believe that U.S. multinational firms derive ever-greater shares of their profitability from their foreign operations, though given the available data and inherent ambiguity in the origin of profits, precisely measuring the profitability of U.S. multinationals' foreign operations is difficult. Data from national income accounts on U.S. firms' direct investment income on equity investments abroad indicate that the overseas share of profits grew from 14 percent in 1982 to 23 percent in 2017. The foreign share of profits tends to rise during U.S. recessions, a pattern particularly evident in 2008, because of the relative decline of profitability in the United States.

Another approach to measuring the contribution of foreign profits uses data compiled by Compustat on total and foreign pretax income reported by U.S.-based publicly listed firms. These data show that foreign profits rose from 23 percent of the total in 1989 to 34 percent in 2017. These data likewise show that the foreign share of profits rises when the U.S. economy is weak; indeed, the measure exceeds 100 percent in 2008, when many large listed financial services firms reported significant losses. These data must be interpreted carefully, since the total number of publicly listed firms has declined precipitously over time, so those that remain listed tend to be larger on average than previously. Still, it is noteworthy that 19 percent of listed firms reported earning pretax foreign income in 1989, whereas 38 percent did so in 2017.

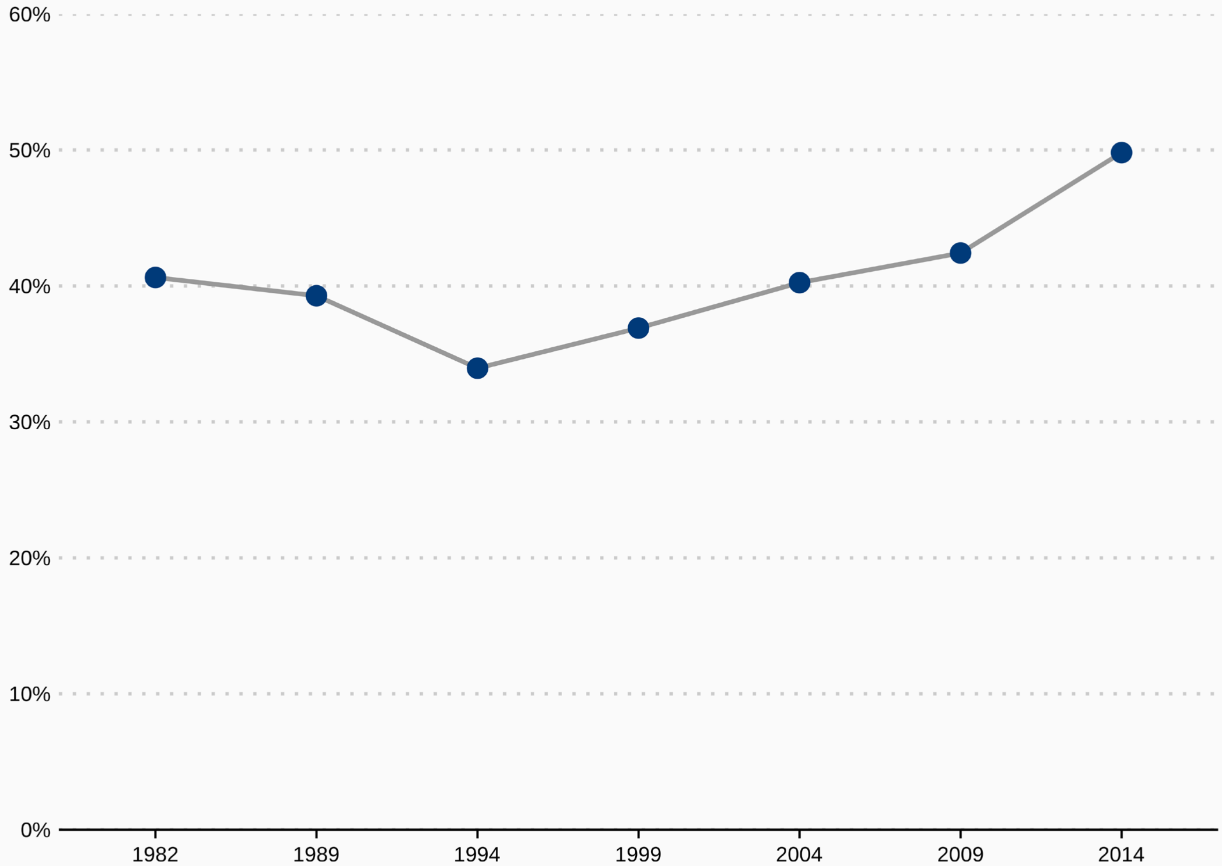
Percentage of U.S. multinationals' foreign activity in tax havens



Note: The original figure appears in *Global Goliaths*, Brookings Institution Press, 2021.
Source: Bureau of Economic Analysis and Dhammika Dharmapala.

Multinationals' use of tax havens has increased

Share of U.S. multinational parent firms with affiliates in tax havens



Note: The original figure appears in *Global Goliaths*, Brookings Institution Press, 2021. Tax Haven countries are those identified in James R. Hines Jr. "Treasure islands." Journal of Economic Perspectives 24.4 (2010): 103-26, with the exception of the Cook Islands, the UK Channel Islands, and Niue, which cannot be separately identified in the BEA data.
Source: Bureau of Economic Analysis.

A common concern about the reported growth and rising share of foreign profits among MNCs is that this growth reflects behavior aimed at avoiding home-country tax obligations, as firms report that income was earned in low-tax foreign countries. Widely publicized examples of companies using complicated financial transactions to avoid tax obligations, together with rising fractions of reported profitability in low-tax foreign locations, suggests to many that high-tax countries are increasingly unable—or unwilling—to prevent multinational firms from shifting significant portions of their profits away from the places in which those profits were actually earned.

Tax haven countries are those with very low tax rates, business-friendly regulations, and other features intended to attract foreign business investment. Tax havens had just 0.9 percent of the non-U.S. world population in 2016 and 3.2 percent of non-U.S. world GDP, but 13.5 percent of the foreign property, plant, and equipment of U.S. MNCs, and 9.1 percent of their foreign employee compensation. Firms reported large portions of their total foreign incomes were earned in tax havens—though the nature of accounting data and the use of tax haven holding companies make these income figures notoriously difficult to interpret.

In 1982, 41 percent of U.S. multinational firms had one or more affiliates in tax haven countries, whereas in 2014, 50 percent did. Since the small economic footprints of these jurisdictions make them very unlikely to attract so many multinational firms in the absence of tax incentives, this is consistent with other evidence of increasing tax avoidance.

Average tax rates paid by U.S. MNCs and those headquartered in other countries have declined over time, provoking concern for government finances and tax fairness, and political ire. At least in part, this reflects declines in overall corporate tax rates over the last 40 years. The tendency of multinational firms to seek locations with low tax rates accelerates this trend. Corporations can and do seek tax reductions without relocating, by appealing to governments for rate reductions or by engaging in tax reductions through financial maneuvers.

The 1978 volume noted that, at that time, answering policy-relevant questions about multinationals was frustrated by inadequate data, inappropriate theories and analytical methods, and complex interactions between the economics and politics of foreign investment. Since that time, the expanded availability of data on multinational companies from surveys conducted by the U.S. Bureau of Economic Analysis and other national statistical agencies, access to the underlying microdata, and the resulting academic research has brought to light many important findings, including many of those summarized in our volume.

Multinational firms are large, and they are important contributors to modern economies. The same was true in 1978, and it is instructive to consider why it is that over the course of the intervening years multinational firms neither expanded to occupy all of the space in the economy nor shrank under the weight of their own costs. It seems that the costs and benefits of multinational operations make them properly suited for certain types of business activities and not others. These activities are focused in manufacturing, mining, and trade-related industries, and in those that rely heavily on intellectual property produced by research and development. While the scale and profitability of multinational firms makes them ferocious potential competitors in factor markets, for other firms, and even for national governments, the history of recent decades is that dire predictions of unwanted consequences of their actions largely have not come true.

Other chapters in *Global Goliaths* focus on specific aspects of multinationals. Here's a brief summary of each.

CHAPTER 2:

The structure of multinational firms' international activities

This chapter identifies factors such as labor market conditions, the availability of capital, and tax considerations that explain the use of different organizational forms—finding that firms tend to undertake similar activities in multiple locations, in order to serve local customers, rather than perform different steps of production processes in different locations.

Ronald B. Davies *(University College Dublin)*

James R. Markusen *(University of Colorado, Boulder)*

CHAPTER 3:

Multinational firms' market entry and expansion with evidence from Eastern Europe

This chapter explores motivations for corporations to expand across borders and their choices between acquisitions and greenfield investments, with particular attention to decisions that Western European companies made after the fall of the Berlin Wall opened up Eastern Europe.

Andrew Bernard *(Dartmouth College)*

Catherine Thomas *(London School of Economics)*

CHAPTER 4:

The international market for corporate control

Cross-border mergers and acquisitions (M&As) account for nearly half of foreign direct investment since the global financial crisis of 2008–09. Observing that M&A activities are concentrated in the United States and a small number of European countries, this chapter examines the incentives for foreign acquisitions and considers post-acquisition outcomes.

Anusha Chari *(University of North Carolina, Chapel Hill)*

CHAPTER 5:

The corporate finance of multinational firms

This chapter finds that U.S. multinationals hold larger percentages of their assets in cash than do other publicly held firms, possibly to facilitate tax planning. MNCs are less likely than other firms to borrow, and when they do, they rely less on banks and more on capital markets. Geographically diverse MNCs generally enjoy favorable borrowing rates.

Isil Erel *(Ohio State University)*

Yeejin Jang *(University of New South Wales)*

Michael Weisbach *(Ohio State University)*

CHAPTER 6:

Do multinational firms export jobs?

Do multinational firms export jobs? The answer is a definite yes, but this chapter finds that MNC foreign operations also create jobs at home, so the net effect of MNC offshoring on domestic jobs and wages is close to zero, or possibly a small positive. In general, less educated domestic workers and those who perform routine tasks are more likely to experience job losses and reduced wages as a result of offshoring, while more highly educated domestic workers gain.

Lindsay Oldenski *(Georgetown University)*

CHAPTER 7:

Do multinational corporations exploit foreign workers?

This chapter considers whether MNCs exploit workers in poor countries, based on three definitions of exploitation: paying below market wages, failing to compensate employees with a fair share of surplus, and violating human rights. The chapter finds almost no evidence of exploitation based on the first two definitions, but reports evidence that MNCs violate basic human rights in poor nations—including discrimination against women and migrant workers, suppression of the right to organize, and poor health and safety conditions.Emma Aisbett (Australian National University)

Ann Harrison *(University of California, Berkeley)*

David Levine, University of California, Berkeley)

Jason Scorse *(Middlebury Institute of International Studies at Monterey)*

Jed Silver *(University of California, Berkeley)*

CHAPTER 8:

The new global invention machine: A look inside the R&D networks of U.S. multinationals

U.S. MNCs have moved increasing amounts of R&D overseas—doing so for efficiency reasons, and thereby creating a division of labor akin to that more commonly documented in the production of goods. This chapter argues that combining MNCs' innovation experience with talent around the world, including from developing countries, may revive and sustain innovation and improve productivity growth—and that fears that U.S. expertise is being hollowed out may be overstated.

Lee Branstetter *(Carnegie Mellon University)*

Britta Glennon *(University of Pennsylvania)*

J. Bradford Jensen *(Georgetown University)*

CHAPTER 9:

Multinationals in the digital economy

This chapter observes that the digital economy is more centralized than might have been expected. Successful firms, such as Facebook, evolved quickly into multinationals that provide global services from a centralized location. They have benefited from software standardization, which disproportionately emanates from the U.S. As a result, software is cost-effective, and easily scalable for free, instant, and reliably deployed around the world. This allows firms to grow rapidly. Digital MNCs that have become behemoths have the scale and resources to withstand pressure from local competitors and national governments. MNCs increase local employment in response to competition, nuances in knowledge, and privacy concerns, but they face increasing questions relating to regulation and taxes. Governments invoke traditional law enforcement and have developed new strategies to regulate digital MNCs.

Benjamin Edelman *(Microsoft)*

CHAPTER 10:

Tax Avoidance and Multinational Firm Behavior

This chapter reports that MNCs pay substantial taxes, not only in the aggregate but also relative to comparable firms that are not multinational. The chapter also reports evidence of rising tax avoidance, including cross-jurisdictional income shifting and tax-sensitive location of investment, debt, and employment.

Scott Dyreng *(Duke University)*

Michelle Hanlon *(MIT)*

CHAPTER 11:

Do multinational firms use tax havens to the detriment of non-haven countries?

This chapter considers evidence of tax haven use by multinational firms and documents the extent to which many MNCs do not route any investments or transactions through tax havens. Challenging the common view that tax havens are parasitical on other countries, the chapter argues that tax havens may in some circumstances benefit high-tax countries, and notes that MNCs' use of tax havens relies crucially on forbearance or active facilitation by these non-havens.

Dhammika Dharmapala
(University of Chicago)

CHAPTER 12:

Multinational corporations and their influence through lobbying on foreign policy

This chapter uses novel data encompassing lobbying activities of all U.S. public firms from 1999 to 2019 to estimate the effect of MNC status on lobbying. It finds strong evidence that lobbying expenditures increase when firms become multinationals, and that MNCs tend to lobby on more diverse sets of foreign policy issues than do other firms.

In Song Kim *(MIT)*

Helen Milner *(Princeton University)*

CHAPTER 13:

Principles for policymakers

This chapter draws on the facts presented in each of the previous, and outlines six principles for public policy toward multinational corporations. The objective is to encourage policymakers to protect and encourage those activities of MNCs which contribute to rising living standards globally, while restraining those activities that thwart competition or exacerbate social ills. You can read a summary of these policy principles here.

C. Fritz Foley *(Harvard Business School)*

James R. Hines, Jr. *(University of Michigan)*

David Wessel *(Brookings Institution)*

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