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EMERGING MARKET MULTINATIONALS REPORT (EMR) 2021

BUILDING THE FUTURE ON ESG EXCELLENCE

Lourdes Casanova
Anne Miroux
& contributors

EMI
Emerging Markets Institute

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Authors

Lourdes Casanova Senior Lecturer and Gail and Rob Cañizares Director Emerging Markets Institute, S.C. Johnson School of Management, Cornell University. Named one of 50 most influential Iberoamerican intellectuals and one of 30 most influential Iberoamerican women intellectuals by Esglobal. Fulbright Scholar, masters University of Southern California, PhD University of Barcelona.

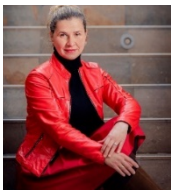
Co-editor with F. Cahen A. Miroux: *From copycats to Leaders: Innovation from Emerging Markets*. Cambridge University Press. ISBN 978-1-108-48686-6. 2021 Co-author with A. Miroux: The Era of Chinese Multinationals. Academic Press. Elsevier 2019. *Emerging Market Multinationals Report 2020, 2019, 2018, 2017 and 2016*. With P. Cornelius, S. Dutta: *Entrepreneurship and the Finance of Innovation in Emerging Markets.* Academic Press. Elsevier. With J. Kassum: *The Political Economy of an Emerging Global Power: In search of the Brazilian Dream*, Palgrave Macmillan 2014, author *Global Latinas: Latin America's emerging multinationals* Palgrave Macmillan 2009. Former member Global Agenda Council, Competitiveness in Latin America World Economic Forum for Mexico, Brazil and Colombia, B20 Task Force in G20 summit, Los Cabos (2012). Board member Boyce Tompson Institute. Co-founder Ithaca Hub of Global Shapers. Op-ed writer Latin Trade, Agenda Publica contributor to CNN en español, El País and Voice of America.

Anne Miroux is a Faculty Fellow at the Emerging Markets Institute, Johnson School of Management at Cornell University. She has over 30 years of experience in international trade and finance. She began her career in the United Nations Centre on Transnational Corporations in New-York, and later joined the United Nations Conference on Trade and Development (UNCTAD) where she specialized on developing country debt, foreign direct investment and transnational corporations, and technology and innovation policies. For several years she headed the Investment Analysis Branch in UNCTAD and directed the World Investment Reports (WIR), the United Nations flagship report on FDI and transnational corporations and served as the Editor of the UN Transnational Corporations Journal. She published a number of papers and articles and led research projects and technical assistance activities in developing countries on debt, FDI and development.

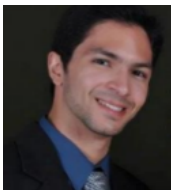
Until late 2015 Anne Miroux was the Director of the Division on Technology and Logistics in UNCTAD, and Head of the Secretariat of the UN Commission on Science and Technology for Development (CSTD).

She is a member of the Advisory Board of the Technology and Management Center of the Department of International Development at Oxford University. She is also a Board member of NetExplo and of the Foundation for Future Supply Chains, and a senior editor of the Transnational Corporations Review. Anne Miroux has an MBA from HEC, Ecole des Hautes Etudes Commerciales, and graduated from IEP (Institut d'Etudes Politiques – Paris). She holds a PHD in Economics from University of Paris I - Sorbonne.

Contributors



Veneta Andonova is Associate Professor and since 1st November 2019 Dean of Universidad de los Andes School of Management in Colombia. She got her Ph.D. degree in Management from Universitat Pompeu Fabra, Spain. She had been a full-time faculty at top business schools in Latin America and at the American University in Bulgaria. Her interests are at the intersection of business strategy and institutional analysis with a focus on Latin American multinationals, non-market resources and entrepreneurial ecosystems in emerging markets. Her research was published in Entrepreneurship Theory and Practice, Journal of Business Research, Journal of Development Economics, Journal of Development Studies, Journal of Socio-economics, Telecommunications Policy, Review of Law and Economics among others. She is a regular presenter at international conferences. Her latest book is titled Entrepreneurial Ecosystems in Unexpected Places and was published in 2019 by Palgrave Macmillan.



Daniel dos Anjos holds a bachelor's degree in Economics Science from Universidade Federal de Viçosa, Brazil. Daniel has worked on data analysis since 2012, and on Finance Planning strategies and Risk Management reports for multinational companies. He joined the Research Team at EMI in 2019 and has helping with the coordination of research activities, being part of the EMI Report 2019, 2020, and 2021.

Juan Pablo Borda is Associate at BCG (Boston Consulting Group) in Bogota, Colombia. He holds two bachelor's degrees from Universidad de los Andes in Mechanical Engineering and Business with a Minor in Asian studies. He has also worked as a research intern for the Emerging Markets Institute in 2021. His research interests are focused on international business, sustainability, and technology and is active in several global initiatives.

Xuelin Bu is currently a PhD candidate in the School of Economics & Management at Wuhan University. She received her Master's degree from the University of Sussex in the UK. She is a member of Centre for Global Strategy Research at Wuhan University. Her research interests are global strategy and corporate social responsibility, especially for Chinese multinationals.

Tony Carranza serves as Operations Associate at the IDB's Office of Outreach and Partnerships (ORP). He leads the expansion of new products and developments related to IndexAmericas, IDB's corporate sustainability index, encouraging resource mobilization, better sustainability practices, and its adoption with diverse stakeholders in Latin America and the Caribbean. Prior to this role, he worked as B2B Commercial Specialist at Telefónica Central America, leading business intelligence initiatives and project implementation within the corporate and government segments. Tony co-authored Por el jardín de Luisito, the first book that explains childhood cancer in a Salvadoran context, promoting treatment non-abandonment and awareness. He has a Master of Business Administrations from Universidad Miguel de Cervantes (UEMC) and a Bachelors in Economics and Business from Escuela Superior de Economía y Negocios (ESEN).

Limin Chen is Full professor in the School of Economics & Management at Wuhan University. She is also the director of the Centre for Global Strategy Research at Wuhan University. She received her PhD from Wuhan University in China, and was once a visiting scholar at the Stern Business School of New York University in 2008. Her research interests are global strategy and institutional complexity, especially for Chinese multinationals.

Erica Chicola is an Operations Senior Analyst at the IDB's Office of Outreach and Partnerships (ORP). In this role, she leads the development of knowledge products and knowledge-based partnerships dedicated to advancing sustainable development in Latin America and the Caribbean (LAC). She also leads strategic communications efforts for IDB leadership on the topics of partnerships and development finance, and helps to forge partnerships between the IDB and external organizations in areas including climate change, innovation, and sustainable development more broadly. She has a Master of Global Policy from the Johns Hopkins University School of Advanced International Studies (SAIS), where her research focused on strengthening pension systems to prepare for aging populations in the LAC region. She also has a Bachelors in International Relations and Communications from Florida State University (FSU), with concentrations in Economics and Political Science.

Juana García is Associate Professor at the Business School from Universidad de los Andes, Colombia. Her research activity in international development includes: (i) the role of international cooperation and private sector in peacebuilding process and the study of (ii) internationalization and emerging economies. She is part of the MOC Microeconomics of Competitiveness leading by Harvard Business School and the EMRN Emerging Markets Research Network.

Gautam Jain has over 20 years of experience covering global emerging fixed income markets, both as a strategist and a portfolio manager. He has worked in buy-side and sell-side firms, including The Rohatyn Group (TRG Management), Barclays Capital, and Millennium Partners. He has helped manage emerging markets local-currency and hard-currency debt funds. The assets that he covers include currencies, interest rates, sovereign credits, and related derivatives. He specializes in portfolio construction, smart-beta index creation, and asset allocation. Mr. Jain holds a Ph.D. in Operations Research from Columbia University and is a CFA charter holder.

Piotr Mazurkiewicz is an economist specialized in environmental and social sustainability and corporate self-regulation with almost 30 years of experience in the development community (UN, World Bank, and IFC) and the private sector. Currently, he is a Principal E&S Risk Officer in IFC's E&S Policy and Risk Department. He has the experience that combines the E&S expertise necessary for making direct investments and investments through financial institutions, including universal banks, institutional investors, fixed income asset managers, or PE funds. He was one of the architects of the current IFC Sustainability Policy and the revised Performance Standards. Piotr holds an MA and a Ph.D. in developmental economics from Warsaw University.

Lorenzo Pavone oversees the Emerging Markets Network (EMnet), a network of multinational companies promoting policy dialogue and analysis on business in emerging markets, hosted by the OECD Development Centre. He has experience in emerging markets, private sector development, competitiveness, investment promotion and business climate assessment. He holds an MBA from HEC in Paris and a Master's Degree in Economics from the University of Rome La Sapienza and is member of the Faculty Advisory Council of the Emerging Markets Institute (EMI) at Cornell SC Johnson College of Business.

James Zhan is senior director at UNCTAD. He leads the UN World Investment Report and is editor-in-chief of the Transnational Corporations Journal. He chairs the Governing Board of the UN Sustainable Stock Exchanges Initiative (with members of all major stock exchanges worldwide). He has directed extensive research on key issues and facilitated the formulation of outcomes at various international summits. He has also provided policy advice to governments (including heads of states and cabinets) and parliaments in numerous countries. He led the formulation of global guidelines for a new generation of investment policies and the establishment of the UNCTAD World Investment Forum. He is chief strategist for the World Association of Investment Promotion Agencies. He has held several advisory positions in academic institutions (including Cambridge University, Columbia University, Cornell University, Oxford University and the University of Geneva), and professor at Nankai University (Ph.D supervisor). He was research fellow at Oxford University and Global Agenda Council member of the World Economic Forum. He has published extensively on trade, investment and technology-related economic and legal issues. He appears frequently in international media outlets.

EMI Research Team, Cornell University

Mihika Badjate is a junior studying economics in the College of Arts & Sciences. Other than emerging markets, her interests include reading, hiking, traveling, and learning new languages.

Vineetha Pachava is Senior at Cornell University, studying Applied Economics and Management, concentrating in international trade and development, and finance. Her research interests include emerging markets, macroeconomics, finance, and public policy.

Preface

Andrew Karolyi, Dean and Professor of Finance and Harold Bierman Jr. Distinguished Professor of Management
Founding Co-Academic Director, Emerging Markets Institute
Cornell S.C. Johnson College of Business, Cornell University

These days, many are asking whether financial globalization is in reverse. The open question is motivated in part by the massive economic disruptions and ravaging human costs in terms of infections, illness, and death that has so tragically befallen our world during the past two years. Indeed, world economic growth projections have tempered from pre-pandemic days. In part, however, the downshift in global cross-border direct and portfolio capital flows, in trade flows, foreign bank lending and deposit activity can be traced back to the aftermath of the 2007-2008 global financial crisis (GFC). Scholars are actively debating what are the forces at work that have weakened financial globalization after nearly six decades of sustained expansion that preceded the GFC. Can it be attributed to the growing importance of emerging markets as a fraction of the overall global economy or its participation in capital markets and the associated vulnerabilities of those markets to large economic shocks like a GFC? Could it be that there has been a fundamental shift in the sectorial composition of firms engaging with public markets toward those from more globally-competitive sectors, like multinationals (MNCs) in consumer goods, technology, or resources, rather than those in more locally-competitive sectors, like real estate, utilities, or transportation? Perhaps we are seeing a shift in the composition of the assets that comprise those of global firms toward intangibles the valuations for which are more complex? Finally, and no less importantly, it is quite possible that we are witnessing a dramatic shift over this past decade in the tastes and preferences of global investors towards attributes of firms that have historically not been on their radar, like a firm's environmental footprint, its social impact, and its governance responsibilities (ESG).

What I really enjoyed in reading the 2021 edition of The Emerging Market Multinational Report is that it does not shy away from this Pandora's Box of open questions about what seems to be a paradigm shift in the world of global capital markets. Drs. Lourdes Casanova and Anne Miroux have delivered a volume that is rich with questions and answers. There is the important focus on how MNCs from emerging markets (EMNCs), always on the rise in influence and importance, are responding to what they call a "new phase of globalization." Watch for their hint in Chapter 1 at a causal link between the rise of EMNCs and the opening up of this new phase. I found eye-opening the analysis around the 500 EMNCs that they track each year now with the importance of brand recognition, about research & development, both critical elements of the role of intangible assets for firms around the world.

Equally provocative is Chapter 2 on the rising importance of ESG as factors in the world of global investing – what Drs. Casanova and Miroux declare as "ESG taking center stage in a Post-COVID World" – with a fascinating deep-dive on the ESG-related performance of EMNCs, in particular. This chapter is absolutely worthy of a careful read as you learn about the spaghetti-mess of commercially-driven ESG ratings systems, the challenges they present to firms in general, but for emerging market firms, in particular. This focus for the Report – and the 2021 Emerging Markets Institute conference - could not be more timely with Glasgow's COP26 just concluding. Consider the eye-catching USD150tr commitment of the Glasgow Financial Alliance for Net Zero among the hundreds of global banks and asset managers and owners as signatories that former Bank of England Governor Mark Carney assembled will put pressure on business to hasten the discipline on GHGs with the goal of meeting the 1.5 degrees Celsius warming target of the Paris Accord. No doubt the capital market pressures will be felt disproportionately by businesses in EMs seeking to source capital to fund their growth opportunities.

This important ESG chapter is buttressed by several special contributions from other scholars, and students affiliated with the Emerging Markets Institute, for which Dr. Casanova serves as the Gail and Roberto Canizares Executive Director. There are contributions focused on green bonds in emerging markets, on the resource constraints that EMNCs face in meeting the demands of ESG reporting, and there is a special analysis of challenges in Latin America that should not be missed.

I want to close with some exciting news that complements all the importance of this Emerging Markets Multinational Report's launch. This year, the Cornell SC Johnson College of Business received a USD1.8 million gift from the Cañizares, which will provide substantial support to the Emerging Markets Institute at the Cornell SC Johnson College of Business. This gift augments the Cañizares Directorship for the Emerging Markets Institute fund, which Gail and Rob established with a USD1.5 million gift in 2018. Their new gift will establish the Emerging Market Institute Fellows Case Writing Program Pilot Fund and the Cañizares Award for Distinguished Alumni in International Business and Emerging Markets. I encourage you to be inspired by Rob and Gail's visionary support, hard work and generosity to add your contributions to further develop a world class Cornell Emerging Market's Institute.

And let me thank Drs. Casanova and Miroux with their many collaborators for another timely Emerging Multinationals Report. Happy reading to you all!

Acknowledgements

The Emerging Market Multinationals Report (EMR) 2021 has been authored by Lourdes Casanova, Senior Lecturer, Gail and Rob Cañizares Director, and Anne Miroux, EMI Faculty Fellow, at the Emerging Markets Institute (EMI), Cornell S.C. Johnson College of Business, Cornell University.

The authors are grateful to Daniel dos Anjos, the leading Researcher, and to Vineetha Pachava, Researcher. Our thanks also go to Theresa Alando Oduol, Mauricio Aragon, Surita Basu, Manuela Bautista, Juan Pablo Borda, Juan Figueroa, Chris Goranov, Allegra Hiebert, Olin Marman, Natalia Jaramillo, Victor Jimenez, Andrew Lim, Maria Alejandra Perez, Juan Jaime Rojas, Felipe Andres Saenz, Vritika Patni, Konner Robison, Laura Venegas, Arif Yardimci, and Eunbin Kim for their contribution to the Report. The authors would also like to thank Rhea Chandrachud as well as Mihika Badjate and Sara Alex for their excellent copyediting work.

The report benefited from comments and discussions with Andrew Karolyi, Dean of the Cornell S.C. Johnson College of Business and College Dean for Academic Affairs; Mark Milstein, Director of the Center for Sustainable Global Enterprise and Clinical Professor of Management and Organizations at the S.C. Johnson College of Business; Subramanian Rangan, Professor of Strategy and Management, INSEAD; Astrit Sulstarova, Chief, Investment Trends and Data Section, UNCTAD; and Members of the EMI Academic Advisory Board.

Members of the Emerging Market Research Network (Veneta Andonova, Limin Chen, and Juana García) also participated in the preparation of the Report, as well as experts from academia and business and international organizations: Momina Aijazuddin (IFC), Tony Carranza (IDB), Erica Chicola (IDB), Joseph Clements (UNCTAD), Piotr Mazurkiewicz (IFC), Yongfu Ouyang (UNCTAD), Lorenzo Pavone (OECD), James Zhan (UNCTAD), Gautam Jain, Tatania Krylova and Lyndsey Zhang. Many thanks to the team at Wind's database for allowing EMI to access their database, as well as to Lakshmi R. Bhojraj, Breazzano Family Executive Director of the Parker Center for Investment Research at Cornell University, for allowing EMI access to their data and for interesting exchanges.

Finally, our special thanks go to the EMnet team at the OECD Development Center, a close partner of EMI and contributor to the EMR for several years now, IFC at the World Bank, and UNCTAD. We also welcome our new partner this year, the Inter-American Development Bank.

As always, our monthly discussions with the Emerging Multinationals Research Network partners - Veneta Andonova and Juana García at Universidad de los Andes, Anabella Dávila at Tec de Monterrey, Fernanda Cahen at FEI, Diego Finchelstein at Universidad de San Andrés, and Moacir de Miranda Oliveira Jr. at Universidad de São Paulo. - inspired the content of the Report.

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Abbreviations and Acronyms

AACSB Association to Advance Collegiate Schools of Business
AMBA Association of MBAs
BPM Business Process Management
BRI Belt and Road Initiative
BRICS Brazil, Russia, India, China and South Africa
CARI China-Africa Research Initiative
CDB China Development Bank
CDEEE Dominican Republic State Electric Utility
Chaebol Korean family-run conglomerate
CNCPC National Petroleum Corporation
DOI Degree of Internationalization
DRAM Dynamic Random Access Memor
EBITDA Earnings Before Interest, Taxes, Depreciation, and Amortization
ECLAC United Nations Economic Commission for Latin America and the Caribbean
EQUIS European Quality Improvement System
EMI Emerging Markets Institute
EMNC Emerging Multinationals
EMNET OECD Development Centre's Emerging Markets Network
EMR Emerging Markets Report
ESG Environmental, Social and Governance requirements
FATA Foreign Assets to Total Assets
FDI Foreign Direct Investment
FDI RRI Foreign Direct Investment Regulatory Restrictiveness Investment
FERE Foreign Employees to Total Employees
FSTS Foreign Sales to Total Sales
FTAs Free Trade Agreements
GDP Gross Domestic Product
GDPR General Data Protection Regulation
GEIDCO Global Energy Interconnection Development and Cooperation Organization
GEGI Global Economic Governance Initiative
GFC Global Financial Crisis
GII Global Innovation Index
GICS Global Industry Classification Standard
GSM Global System for Mobile Communications
GVCs Global Value Chains
HACCP Hazard Analysis and Critical Control Points
HCBM Human-Centered Business Model
HMETC Hyundai Motor Europe Technical Center
IB International Business
ICT Information & Communication Technology
IDB Inter-American Development Bank
IEA International Energy Agency
IMF International Monetary Fund
INST-OUT Outer institutions
KEPCO Korea Electric Power Corporation
LAC Latin America and the Caribbean
M&As Mergers and Acquisitions
MDGs Millennium Development Goals
MNE Multinational Enterprise
NAFTA North American Free Trade Agreement
NOC Number of countries hosting overseas subsidiaries
NOS Number of overseas subsidiaries
OECD Organisation for the Economic Cooperation and Development
OFDI Outward Foreign Direct Investment
OSTS Overseas Subsidiaries to Total Subsidiaries
PBX Private Branch Exchanges
PPP Purchasing Power Parity
RBC Responsible Business Conduct
RES-IN Inner Resources
RES-OUT Outer Resources
RES-OUT-RAW Raw material-seeking
RES-OUT-TECH Technology-seeking outer resources
ROA Return on Assets
ROE Return on Equity
ROS Return on Sales
S&T Science and Technology
SAIS Johns Hopkins University School of Advanced International Studies
SDGs (United Nations) Sustainable Development Goals
SKMS SK Management System
SOE State-Owned Enterprise
SMEs Small and Medium-size Enterprises
STEM Science, Technology, Engineering & Mathematics
TPA Trade Promotion Authority
UN United Nations
UNCTAD United Nations Conference on Trade and Development
USMCA United States-Mexico-Canada trade agreement
VCR Video Cassette Recorders
WB World Bank
WCDMA Wide-Band Code Division Multiple Access
WEF World Economic Forum
WTO World Trade Organization

Executive Summary

Chapter 1 - Market Multinationals in a New Phase of Globalization

The global business landscape has changed drastically over the last 10 years and has been challenged by the rapid growth of Chinese companies. This chapter aims to explore the continued growth of emerging market multinationals (EMNCs), especially in the aftermath of the COVID-19 pandemic and global lockdowns. With the pandemic receding and economies beginning to recover, we believe that EMNCs will play a key role in reviving economic growth and rebuilding the middle class, especially in the emerging markets world. EMNCs will continue competing and expanding at the global stage. In this chapter, we will launch the "EMNCs 500" list — our latest ranking of the top emerging multinationals in Asia, Latin America, and Africa according to three categories: revenues, market capitalization, and the best on environmental, sustainability and governance (ESG, Chapter 2).

Chapter 2 – ESG and Emerging Markets Multinationals

Over the past ten years ESG—which stands for Environment, Social, and Governance—has come into the limelight. ESG is rooted in corporate social responsibility (CSR), a construct that emerged about 70 years ago and marked the starting point for businesses taking ownership of their impact on society. Following a brief discussion of the historical context surrounding the emergence of ESG, this chapter examines ESG's growing influence in emerging markets and dives into the ESG performance of emerging market firms. We highlight the specificities of the emerging market environment and the need to ensure that emerging market firms are fully integrated in the ESG movement. Also, we present the top ESG EMNCs performers.

Chapter 3 – The E20 and China: A New Definition for a New Decade

Towards the end of 2020, prospects of a vaccine against the COVID-19 virus began to materialize. As industries reopen and workforces return, the global economy has started to recover. However, not all economies are recovering at the same pace. In light of this, the following chapter examines how emerging markets have fared. However, this chapter will first revisit the concept of the E20 that was created five years ago to examine the emerging markets phenomenon.

Chapter 4 - Path to Progress for Business and Sustainability in Emerging Markets

The importance of sustainable business has grown considerably since 2010, as companies have come to understand the importance of putting sustainability at the core of their corporate strategies and of including Environmental, Social and Governance (ESG) criteria when screening potential investments.

Across emerging markets, multinational enterprises have created sustainability initiatives that are locally relevant and embedded sustainability in their operations, leveraging collaborations for greater impact. Initiatives to measure progress and impact in this space have garnered interest in emerging markets and have the potential to further attract investment, access new markets and opportunities, improve talent retention and increase global competitiveness.

However, the Coronavirus pandemic has the potential to affect sustainable business negatively, although it is not yet clear how permanently or how profoundly. This chapter looks at the role businesses can play in supporting sustainable recovery in developing economies. It addresses the mainstreaming of sustainability concepts in emerging markets and the associated challenges, including measurement. It then highlights the impact of COVID-19 on sustainability, including sustainable investment. Finally, this chapter focuses on the key drivers of the post-pandemic recovery for business in a range of areas that are considered as enablers of sustainable and inclusive growth, such as promotion of government support for sustainable business models, digital transformation, and the green economy.

Chapter 5- Five Critical Challenges of ESG Investing in Emerging Markets

Since the late 1980s, considering ESG risks has been used as part of an investment approach, initially by development financial institutions and gradually adopted by a broader universe of financiers such as many universal banks or institutional investors. In contrast to developed markets, investors operating in emerging markets have been slower to integrate sustainability into their investment processes. Several factors contribute to the lingering challenges of ESG integration in emerging market investing. This paper focuses on five critical challenges of ESG investing in emerging markets: 1) Regulatory frameworks and enforcement of ESG laws and regulations; 2) Underdeveloped capital markets and policy instability; 3) Cost and capacity to manage ESG requirements; 4) ESG data integration; and 5) Limited selectivity. Various new avenues to overcome the above challenges are emerging, with the strengthening of local frameworks and capital markets, the multiplication of investment options in emerging markets and the rise of regulations qualifying profit maximization and fostering of ESG integration. Those avenues need continuing exploration and reinforcement in order to create consistent, sound, and impactful ESG investing in emerging markets.

Chapter 6 – From Efficiency to Legitimacy: The Changing Logic of EMNCs in Corporate Social Performance

The influence of the degree of internationalization (DOI) on corporate social performance (CSP) remains debated in both research and practice. This study outlines three types of constraints on CSP and proposes a U-shaped model for the DOI-CSP relationship in Emerging Market Multinationals (EMNCs). With the deepening of internationalization, the strategic focus of EMNCs is shifting from efficiency to legitimacy. The large capital requirements, poor financial performance, inadequate resources, and capabilities at the first stage of internationalization constitute severe resource constraints on firms, which cause the neglect of CSP in Chinese MNCs rather than substantially improving them. As the resource constraints relaxed at the second stage of internationalization, CSP started to increase. In addition, government subsidies exerted a double-edged sword effect on this relationship, easing the downward trend of CSP at the first stage of internationalization and weakening the upward trend in CSP at the second stage. These findings extend our understanding of EMNCs' concerns and behaviors related to social responsibility and offer implications for business managers and policymakers in the global market.

Chapter 7 - Green Bonds: A path to Greener Pastures for Emerging Economies

Following a lull of a few years after the first issuance in 2008, the green bond market has expanded rapidly since 2013. Issuance has been rising at a pace of 30% per annum over the past decade, reaching USD 400 bn in 2021 with 3 months to go. The issuance, however, has been concentrated among a few developed countries and China, which together account for USD 1.3 trillion or 87% of the total. Although entities based out of almost 50 emerging countries have already sold green bonds, the amounts are small, and many countries have been left out. Given that many of these countries face the worst of climate change and need the most financial and technological support in dealing with it, more needs to be done to find ways for these sovereigns and corporates to be able to tap the booming market. Green bonds, in other words, are a blessing for emerging countries, albeit one that is not yet being utilized to its fullest extent.

This chapter starts by explaining why the problem of climate change is acute in emerging countries. The following goes over how green bonds can be an excellent mechanism to provide funding to support climate action. The third section demonstrates the rapid growth of the green bond market. It also breaks down the supply of green bonds by issuer, country, and currency. It shows that, except for China, emerging countries are a small part of the market. The fourth section discusses the potential reasons why emerging countries have not issued as many green bonds and suggests possible solutions to address some of the problems they face, including the high cost of meeting requirements and the lack of functioning domestic debt markets. The chapter concludes with a summary of the findings.

Chapter 8 - Analysis on Latin American ESG Implementation

Since the advent of Corporate Social Responsibility (CSR), companies have implemented multiple approaches towards achieving a new balance between their financial, environmental, and social objectives with mixed results. Emerging markets are no exception. In Latin America, companies have further responsibility in this domain; given the enormous biodiversity richness, they need to protect the wellbeing of the entire world and the burning social needs across the region. A new framework named Environmental Social Governance (ESG) evolved from the need to solve problems that CSR could not resolve. This framework aims to quantify '' impact in the ecological, social, and corporate governance domains to change the way businesses behave.

Arguably, implementing ESG philosophy and practices allows companies to improve their operations and have higher stock performance, while making substantial contributions to address burning societal and environmental issues. Latin American companies have an opportunity to leapfrog to the highest international standards using ESG, potentially becoming posterchildren of effective implementation of this strategy. The opportunity is mainly because of the demands of preserving biodiversity, adapting to climate change, and resolving the burning issue of inequality that requires urgent innovations and adaptations to business strategy. In this chapter, we provide data on the adoption of ESG standards across Latin America and highlight several cases of mutilations (multinationals from Latin America) leading and paving the way for successful integration of the ESG dimensions into their strategies.

Chapter 9 – Sustainable Finance and Developing Economies: latest developments and lessons learned

Accurate mapping of the sustainable finance market, standardization, and harmonization of benchmarks as well as transparent disclosure are essential for the success of the sustainable finance market in terms of its credibility and, by extension, its future growth. Addressing the factors that have limited the exposure of the sustainable finance market to developing and emerging economies will also be critical for the expansion of the market and its impact, including the enhancement of the productive capacity and the achievement of the SDGs. Building upon the work undertaken by the United Nations Conference on Trade and Development, this chapter maps the sustainable finance market - its products, policies and regulations – and assesses its impact on sustainable development as well as its contribution the SDGs. It also offers policy recommendations for further leveraging capital markets for sustainable development.

OPINION PIECES

PART I
EMERGING MARKETS INSTITUTE

Authors:

Lourdes Casanova - Gail and Rob Cañizares Director

Anne Miroux - Faculty Fellow

Emerging Markets Institute, Cornell University, United States

Chapter 1
Emerging Market Multinationals in a New Phase of Globalization

Lourdes Casanova, Senior Lecturer and Gail and Rob Cañizares Director
Anne Miroux, Faculty Fellow
Emerging Markets Institute, Cornell University, United States

Executive Summary

The global business landscape has changed drastically over the last 10 years and has been challenged by the rapid growth of Chinese companies. This chapter aims to explore the continued growth of emerging market multinationals (EMNCs), especially in the aftermath of the COVID-19 pandemic and global lockdowns. With the pandemic receding and economies beginning to recover, we believe that EMNCs will play a key role in reviving economic growth and rebuilding the middle class, especially in the emerging markets world. EMNCs will continue competing and expanding at the global stage. In this chapter, we will launch the "EMNCs 500" list — our latest ranking of the top emerging multinationals in Asia, Latin America, and Africa according to three categories: revenues, market capitalization, and the best on environmental, sustainability and governance (ESG, Chapter 2).

1.1. EMNCs inaugurate a new phase of globalization

Since its launch five years ago, the Emerging Markets Institute (EMI) Report (Casanova & Miroux 2016, 2017, 2018, 2019, 2020) has focused on the rise of EMNCs and the challenges and opportunities they represent for global business. The EMI reports have detailed how these firms collectively represent a new paradigm of competition:

1. EMNCs' success is directly and significantly impacted by their country's governments
    a. Firm ownership. State owned enterprises (SOEs) are common in emerging markets with examples including Codelco (copper mining, Chile), INVAP (defense technology, Argentina), and the State Grid Corporation of China (SGCC) electricity, China). In many cases, mixed ownership (public and state-owned) is prevalent, seen in firms such as Petrobras (oil, Brazil), Ecopetrol (oil, Colombia), and the Industrial and Commercial Bank of China (ICBC) (finance, China).
    b. Trade agreements through which governments guide and help the internationalization of their firms.
    c. Regulations: Governments manage industry and country rules and also try to control currency volatility.
    d. Taxes.
    e. Industry policies which favor some industries and not others.
2. EMNCs don't follow the business school "rule book"
    a. EMNCs favor growth in revenues over profit and market capitalization. Stock markets are smaller and volatile in the emerging world, and therefore firms must often finance themselves through debt and bonds. Hence, medium-term goals are more important because the short term is often unpredictable.
    b. EMNCs compete by offering products and services at prices lower than the industry average (Casanova & Miroux, 2018, 2019, 2020). This has caused disruption in industries as diverse as white goods (Haier), smartphones (Oppo and Xiaomi), laptops (Lenovo), and TVs (Hisense) and has forced established developed global firms to lower their prices as well.
3. EMNCs are drivers of internationalization. Increased efficiency has primarily driven the internationalization of American and European companies; for example, the "maquilas" in Mexico for American automotive manufacturers. Since EMNCs already benefit from low costs (see Figure 1.1) in their home markets, they internationalize for the following reasons:
    a. To acquire new markets and increase in size.
    b. To acquire knowledge of advanced technologies.
    c. To secure access to commodities.

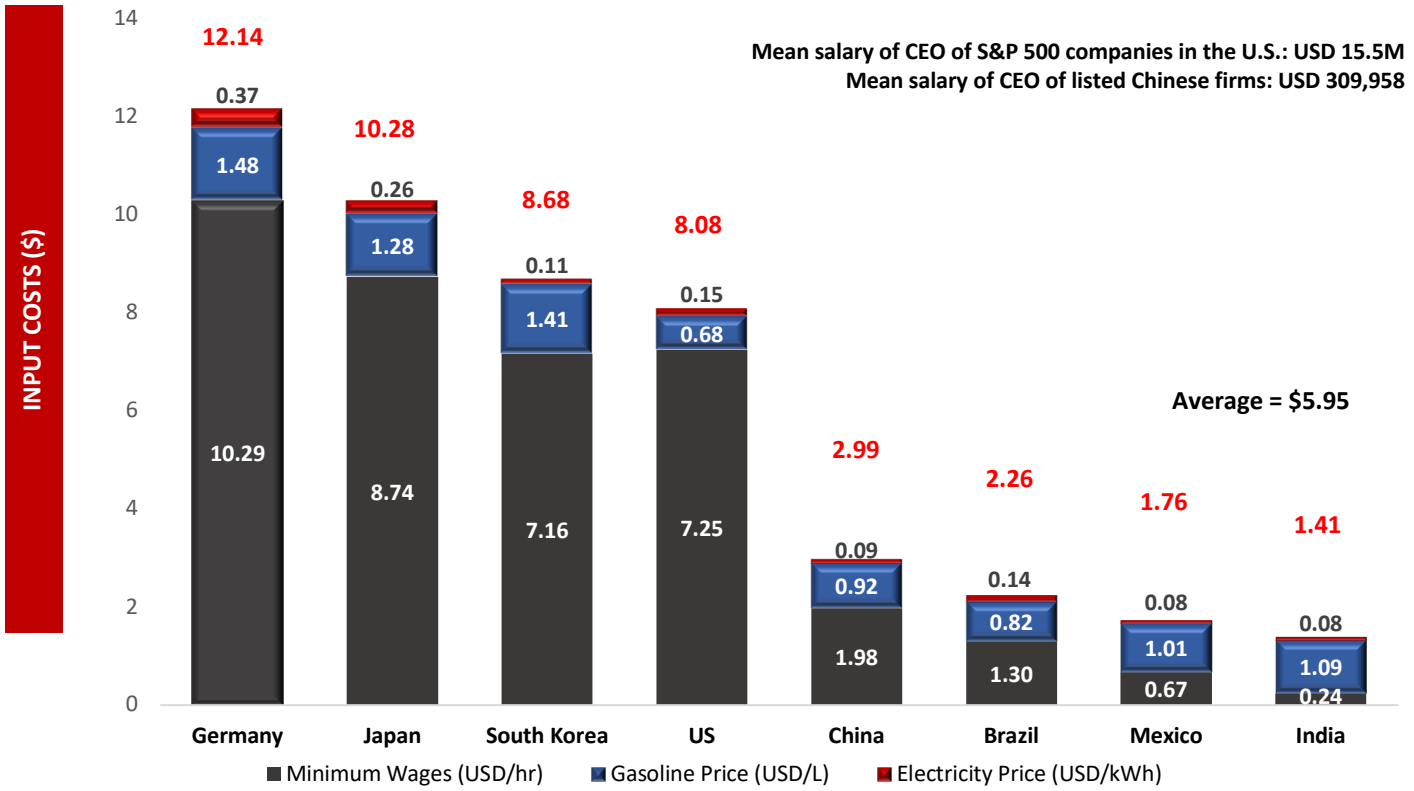
4. Traditional MNCs have chosen new markets that present the greatest potential for growth and profit. Since internationalization is challenging, EMNCs need to minimize risks. Consequently, EMNCs first internationalize in their natural markets as determined by geographical proximity and/or trade agreements.

The recent successes and growth patterns of EMNCs are evidence of the new phase of globalization, where new business rules and economic models are being established. The voyage has begun, but within a volatile, uncertain, complex, and ambiguous (VUCA) world. The final contours in terms of power, rules, and negotiations are not yet been determined. As explained below, every globalization phase has had its own principles and roadmaps. We discuss three waves of internationalization dominated by different world powers from the mid-20th century to the present.

- 1860–1914: the **British East India Company expanded its colonies.** The first phase of globalization began around the time of the Industrial Revolution and the rise of the United Kingdom, and it ended with World War I. This phase resulted from the symbiotic relationship between the British East India Company and the U.K. government, which was organized more like a nation-state with a trade organization than an independent company. The company's success was driven by a complete monopoly of trade and investments in India and other parts of the British empire, along with the nation's massive army. The East India Company has also been considered the first multinational corporation, and it was integral to building and sustaining an empire.
- 1944–2007: **The expansion of U.S. companies dominated the second phase of globalization,** beginning towards the end of World War II and continuing until the 2008 Global Financial Crisis. During this period, major business schools became prominent thought-leaders, developing ideas that shaped the business world. Although the economist Keynes ideas—such as industrial policies and active government intervention—were initially considered necessary to rebuild both the U.S. and Europe after the war, this view fell out of favor in the 1980s. In the following decades, the economist Friedman focus on increasing shareholder value became prominent along with the ideas of the Washington Consensus: liberalization, privatization, and free trade. After the fall of the Berlin Wall in 1989, U.S. companies reestablished their unique power in the world by expanding to countries not previously accessible; further, the ideas of the Washington Consensus, launched during the years of President Reagan, dominated the world. With increased wealth creation, new multinationals from middle powers such as Spain and Korea rose rapidly.
- 2007–present: **Chinese firms rose rapidly, challenging the dominance of U.S. companies**. The Global Financial Crisis (GFC) marked the beginning of the retrenchment of some U.S. companies and the rise of EMNCs, mainly from China. Through its power over firms, the Chinese government has been central to promoting the rise of many Chinese EMNCs. Its focus on building China and projecting Chinese influence has prevailed over corporate profits. The 2020–21 global COVID-19 pandemic raised important questions about globalization and refocused global supply chains, from efficiency to resiliency. It also accelerated tendencies already at play since the GFC: regionalization versus globalization, questioning of current global value chains (GVCs), and the role of governments in solving health and economic crises. Since the peak of the pandemic, many countries have launched the following:
    - Social and fiscal packages to restart their economies, including.
        - Direct help through loans to protect their own companies.
        - Protection against hostile takeovers by recovering "golden shares" lost during the privatization process and reinforcing committees that supervise foreign investments, such as the Committee of Foreign Investment in the U.S. (CFIUS).
    - Central Bank Digital Currencies (CBDCs) to increase the power of national currencies.
    - Regional trade agreements to secure their natural markets and regionalize GVCs: the United States–Mexico–Canada Agreement (USMCA), the Regional Comprehensive Economic Partnership (RCEP), and the African Continental Free Trade Area (AfCFTA) agreement.
    - Adding more industries such as healthcare and pharmaceutical to those considered essential for the country, thereby protecting and supporting companies in these industries.

Large, profitable, and innovative firms greatly contribute to the development of their respective home countries. Therefore, the EMI reports (Casanova & Miroux, 2016, 2017, 2018, 2019b, 2020) explored the growth of EMNCs alongside their home economies and their internationalization and strategy, not in isolation but as a set of micro and macro relations. The next sections explore the rise of emerging market multinationals.

Figure 1.1. Comparison of cost prices, minimum wages, gasoline, and electricity, among selected countries



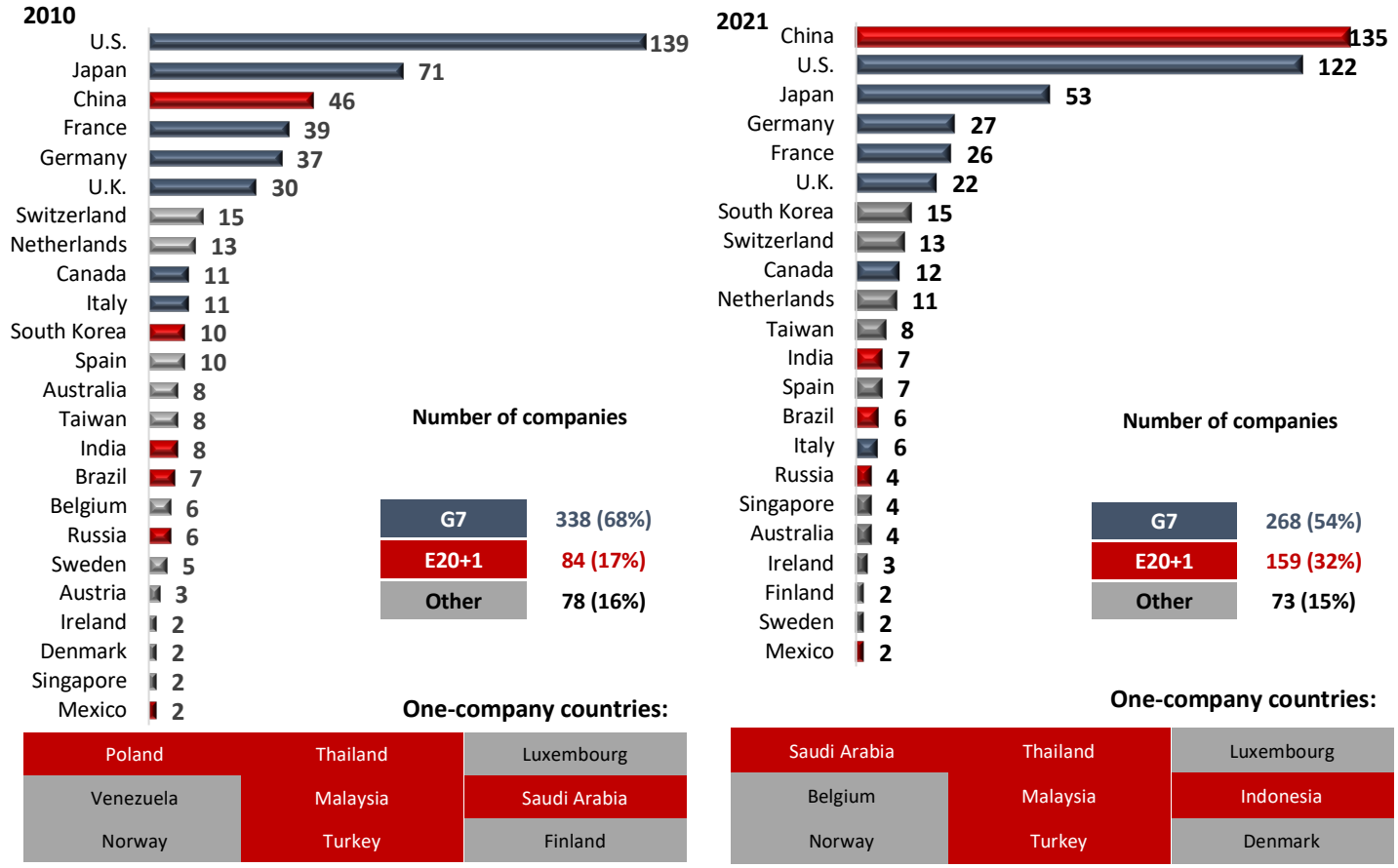
Source: EMI research team based on OECD (https://stats.oecd.org/); Trading Economics (Japan, India, China -> using exchange rate on Dec 31 2020, and for China, divided by average hours worked monthly), Exchange Rates (https://www.exchangerates.org.uk/), CEIC (https://www.ceicdata.com/), Business Standard (https://www.business-standard.com/article/current-affairs/working-hours-in-india-one-of-the-highest-in-the-world-shows-nsso-report-119022700826_1.html), International Energy Agency (https://www.iea.org/), Global Petrol Prices (https://www.globalpetrolprices.com), CNN (https://www.cnn.com/2021/07/14/investing/ceo-employee-pay-afl-cio-report/index.html), American Federation of Labor and Congress of Industrial Organizations (https://aflcio.org/), Economic Research Institute (https://www.erieri.com/), Exchange-Rates (https://www.exchange-rates.org/), all accessed in October 2021.

1.2. Chinese firms widen the gap

Building on Casanova and Miroux's (2020) research, we examine the winners and losers of this surge of Chinese firms using longitudinal data from sources such as Fortune Global 500, Standard & Poor's Capital IQ, and Securities Data Company (SDC). 2010, the year following the GFC, has been used as the benchmark by which changes are evaluated and emerging trends are shown.

As displayed in (Figure 1.2), the largest economies and/or those with a high GDP per capita dominate the Fortune Global 500 ranking. Since fewer countries were present in the Fortune Global 500 ranking in 2021 with respect to 2010, the concentration of power towards the U.S. and China (which has edged out Japan) has increased. As of 2021, both countries together had 257 firms on the list compared to 210 in 2010. Finally, the richest countries (G7) continue to dominate and China and the E20 countries combined account for 32% of Fortune Global 500 companies. Despite the economic growth of the E20+1, the number of E20 firms (without China) on the Fortune 500 list has remained constant.

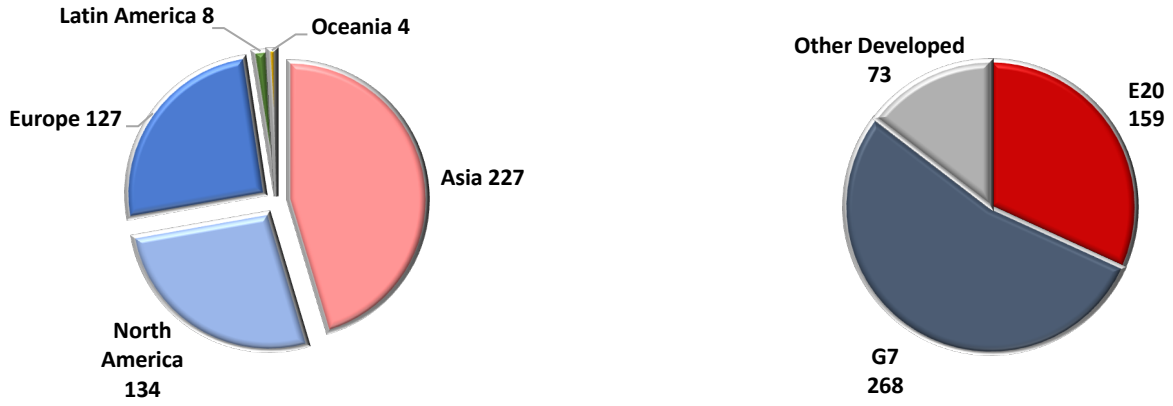
Figure 1.2. Countries represented in Fortune Global 500: 2010 versus 2021



Source: EMI research team based on Fortune (https://fortune.com/), accessed August 2020 (for 2010 data), and August 2021.

Figure 1.3. Number of companies in 2021 Fortune Global 500 per region (A) and E20+1 countries versus G7 (B)

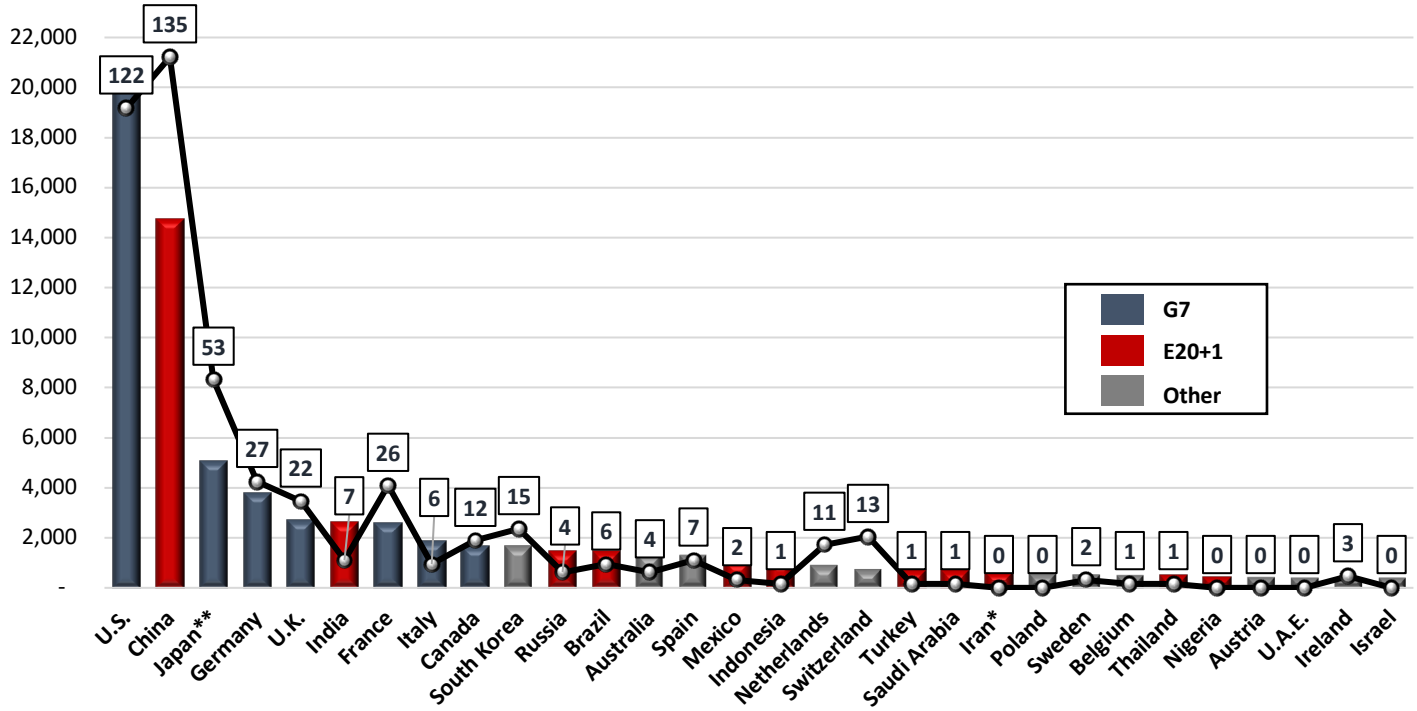
(A) (B)



Source: EMI research team based on Fortune (https://fortune.com/), accessed August 2021.

Figure 1.4 explores a possible correlation between a country's GDP per capita with the number of the country's companies featured on the Fortune 500 list. A regression with the 2021 data brought an adjusted R2 of 91.6%, while the correlation matrix brought a correlation of 95.8%; the p-value indicated that GDP is statistically significant to the number of companies on the Fortune 500 list. The analysis needs to be replicated for data from previous years. The results also present outliers like the Netherlands, Switzerland, and Ireland. The preliminary analysis indicates that big companies are correlated with big countries.

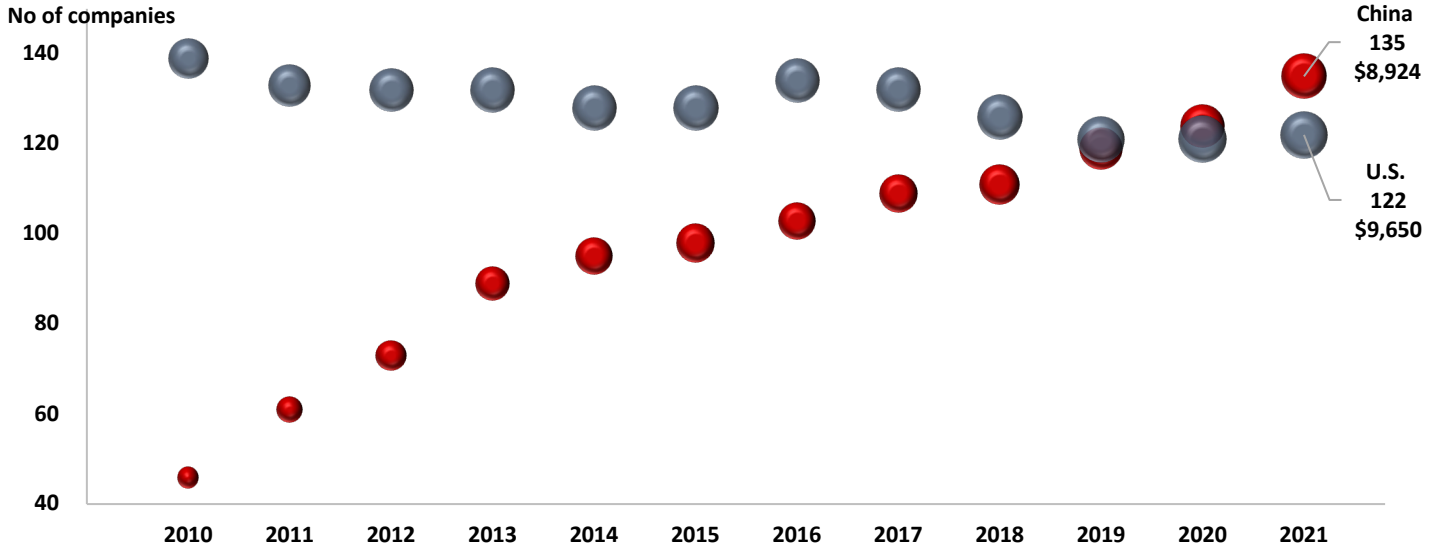
Figure 1.4. 30 biggest countries by nominal GDP (USD billion) and number of companies on 2021 Fortune Global 500



Source: EMI research team based on Fortune (https://fortune.com/), and World Bank (https://data.worldbank.org/), data accessed August 2021.

Despite maintaining the top place in revenues since the launch of the ranking in 1989, the U.S. lost to China in terms of the number of firms featured. Though this gap is narrowing, U.S. companies are still bigger than Chinese ones. Figure 1.5 displays the astonishing growth in the number of Chinese companies on the list since the GFC. In the following sections, we will discuss the countries that have benefited from and lost out due to China's tremendous growth.

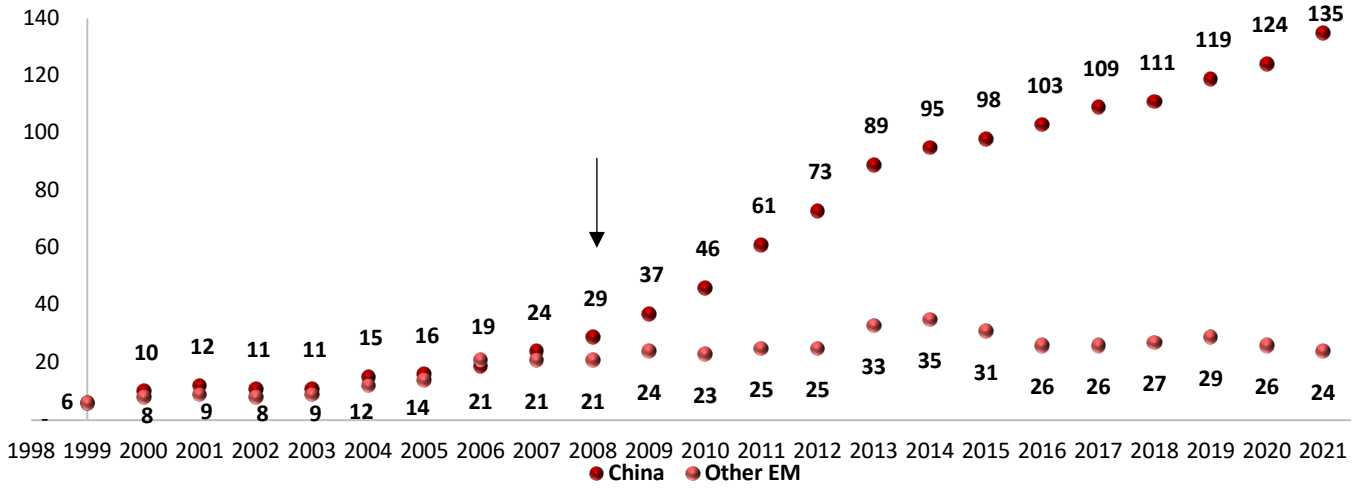
Figure 1.5. Number and total revenues of U.S. and Chinese companies on Fortune Global 500, 2010-2021



Source: EMI research team based on Fortune (https://fortune.com/), and World Bank (https://data.worldbank.org/), data accessed August 2021.

But for China, the economic growth of emerging markets in the last twenty years (Chapter 3; Casanova & Miroux, 2020) has not translated into an increasing number of big firms from emerging markets that make the list. The number of Chinese firms and other emerging markets firms featured were similar until the GFC, after which the number of Chinese firms tripled while those from other emerging markets like Brazil, India, Russia, and Mexico increased until 2014, but have dropped afterwards with the fall of commodity prices and are back to 2008 numbers.

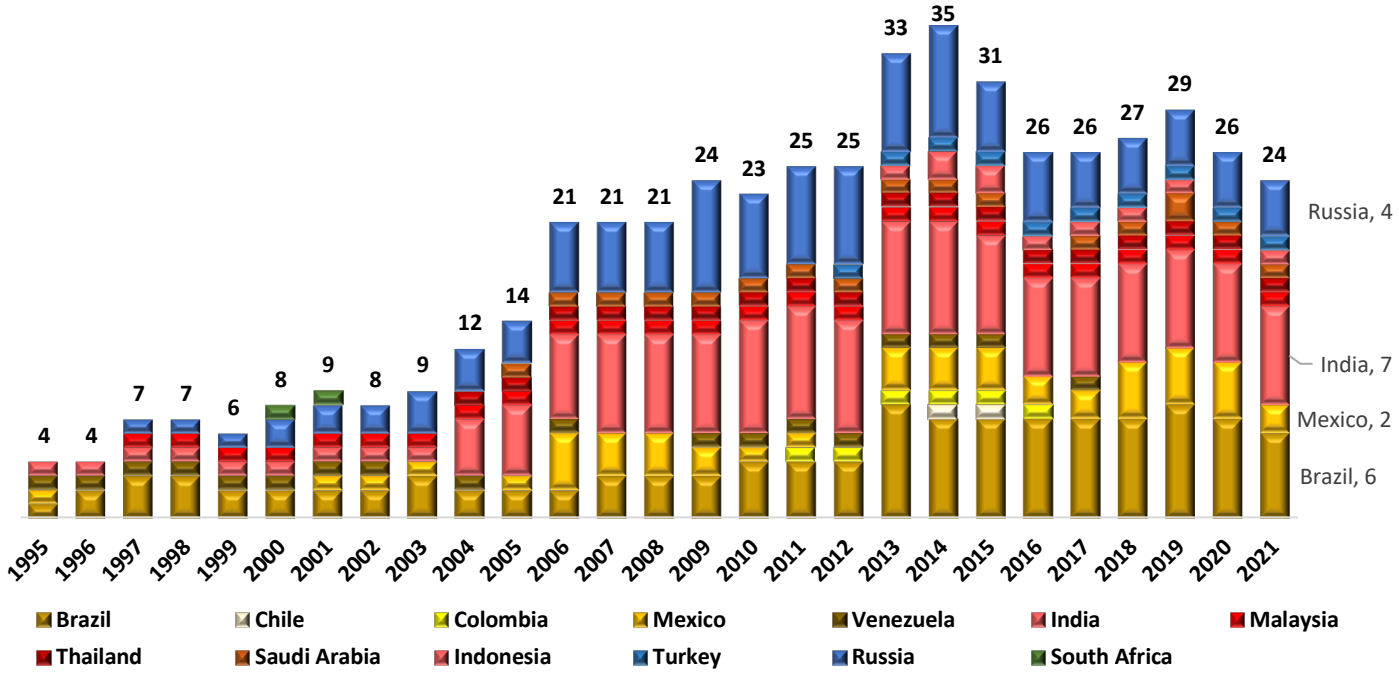
Figure 1.6. Number of companies on Fortune Global 500 from China and emerging countries 1999-2021



Source: EMI research team based on Fortune (https://fortune.com/), and World Bank (https://data.worldbank.org/), data accessed August 2021.

A similar trend is observed in each individual emerging country represented on the Fortune 500 list: the numbers rise slightly till 2014 and then fall to 2008 or 2009 levels (Figure 1.6). Since 1995, Brazil had eight companies represented on the list twice but is down to six in 2021; India had eight companies a few times but is down to seven. Russia and Mexico are also among the emerging countries that have two or more firms on the Fortune 500 but are now below its top numbers. Latin America, represented by the yellowish bars, is losing some participants such as Chile and Colombia.

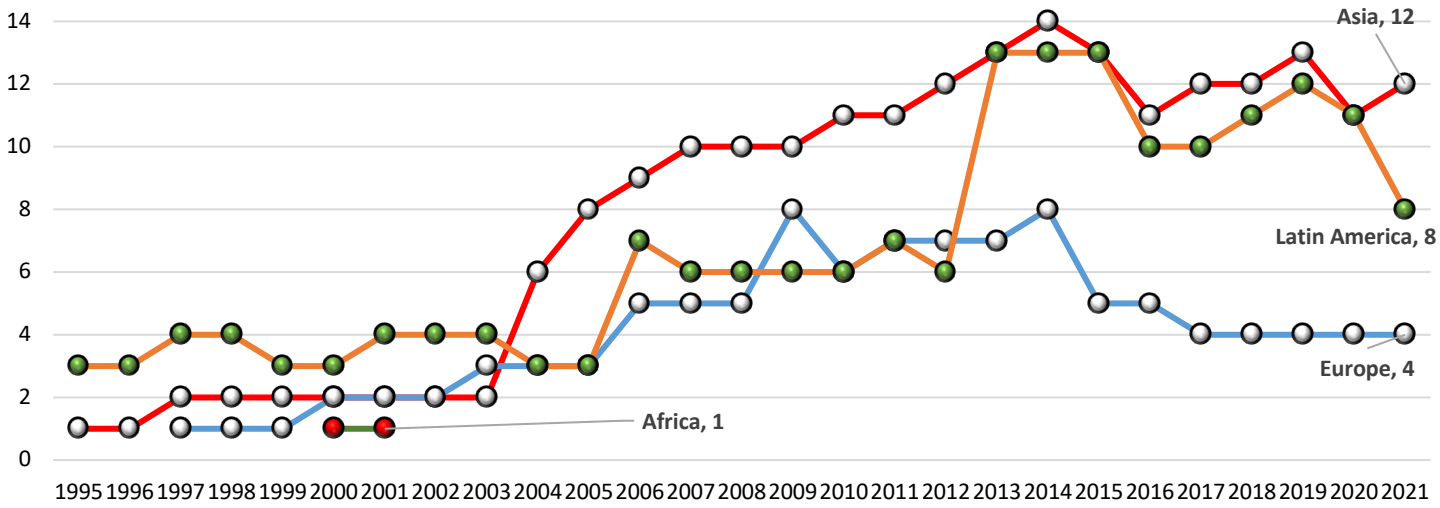
Figure 1.7. Number of companies from emerging countries (excluding China) on Fortune Global 500 per country since 1995



Source: EMI research team based on Fortune (https://fortune.com/), and World Bank (https://data.worldbank.org/), data accessed August 2021.

If we aggregate the data per region, Latin America lost the most companies in the ranking, in parallel with its disappointing economic performance since 2014. Latin America had 13 companies on the list in 2014; as of 2021, it only has eight. Europe and Asia have also lost companies from the ranking, but less than Latin America's (Figure 1.8).

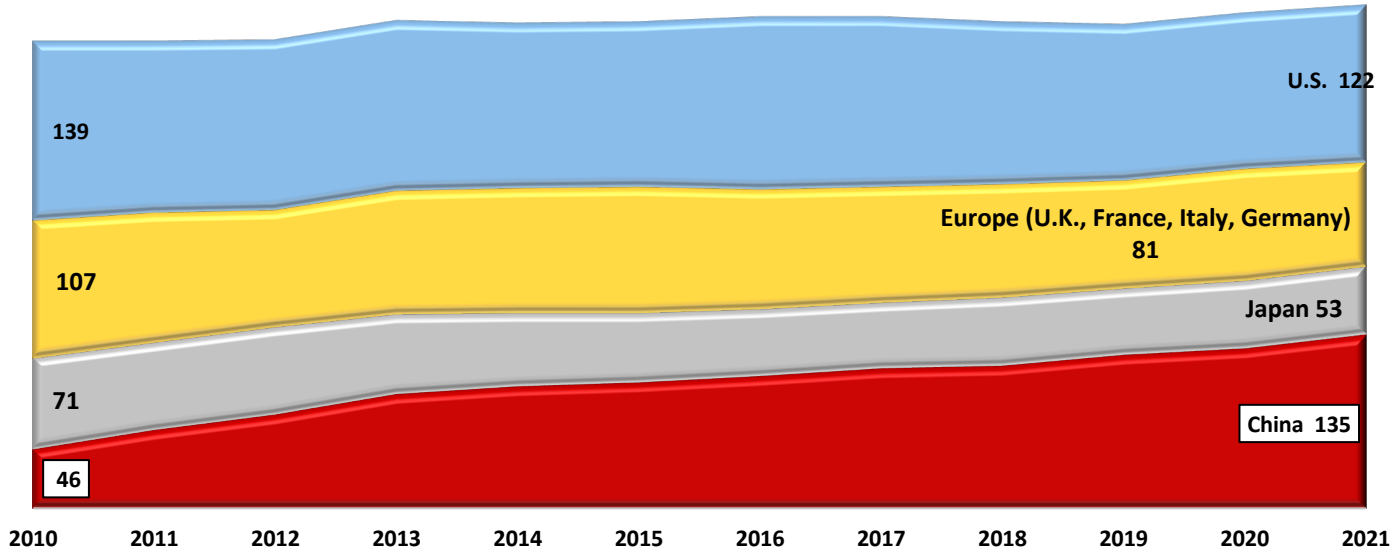
Figure 1.8. Number of companies from emerging countries (excluding China) per region on Fortune Global 500, 1995-2021



Source: EMI research team based on Fortune (https://fortune.com/), and World Bank (https://data.worldbank.org/), data accessed August 2021.

These numbers can also be benchmarked with other high-income countries. Europe and Japan have both lost more firms than the U.S.—while the U.S. has lost 17 companies (dropping from 139 in 2010 to 122 in 2021), Europe lost 26 and Japan 18. Notably, the U.S. had 200 companies on the list in 2002, the highest ever for one country.

Figure 1.9. Number of companies on Fortune Global 500 from selected countries 2010-2021



Source: EMI research team based on Fortune (https://fortune.com/), and World Bank (https://data.worldbank.org/), data accessed August 2021.

1.3. The U.S dominates outbound mergers and acquisitions (M&A)[1]

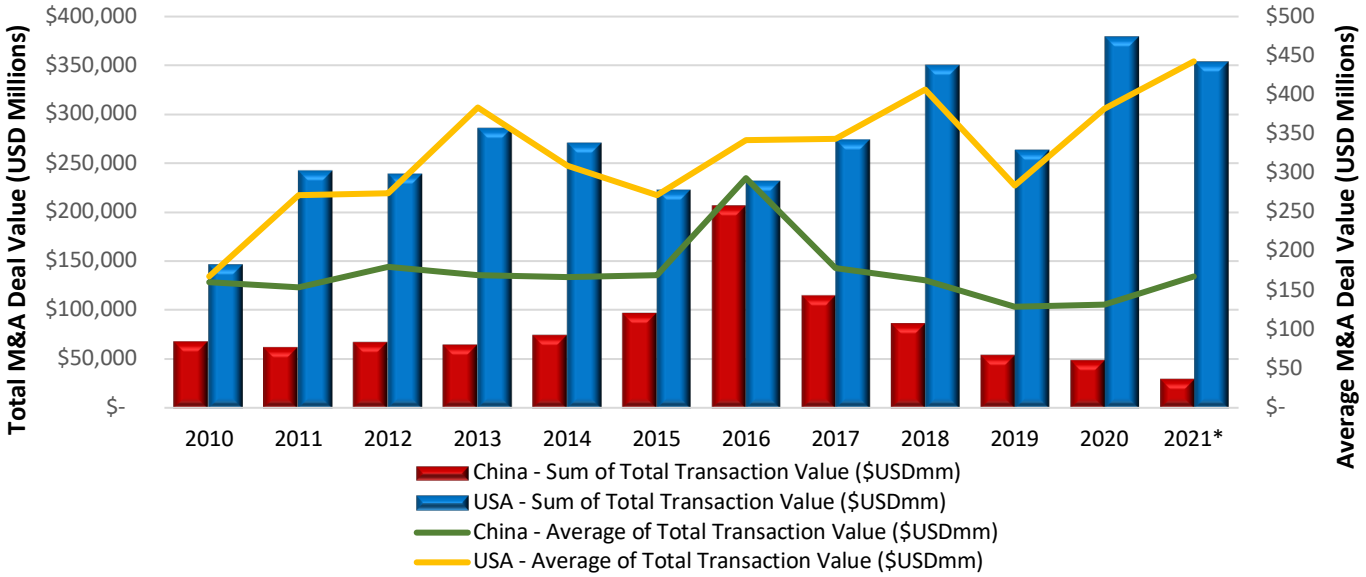
The U.S. has remained the world leader in international mergers and acquisitions (M&A) activity, and both the U.S. and China had relatively constant levels of total M&As from 2010 to 2015. In 2016, the extent of Chinese and U.S. M&As was similar, differing only in the USD26M value of outbound M&As. However, China's international acquisitions have since gone down while the U.S.'s has taken off (Figure 1.10).

Since 2016, China's total outbound cross-border M&A deal value and average deal value has declined. China's 2020 outbound M&As stood at approximately USD50BN, only a quarter of its 2016 value. This decline can be attributed to the pandemic along with the country's unfavorable regulatory environment, increased scrutiny of Chinese acquisitions in Western countries, and increased focus on domestic M&As. At the same time, the U.S. has seen a continuous increase in outbound cross-border M&As and average deal value (except for in 2019). U.S. domestic M&As rose—especially in Telecommunications, Media, and Technology (TMT) and life sciences companies. Increased capital availability in the markets in 2020 and 2021 has led to larger deals on average. It is important to note

[1] Vineetha Pachava, researcher at EMI and senior at Dyson School at Cornell University is the main contributor of this section

the high M&A activity in the first six months of 2021, which is nearly identical to 2020's total M&A. This is driven by increasing availability of capital and low cost of acquisition due to the low interest rates resulting from the U.S. Treasury's monetary policy.

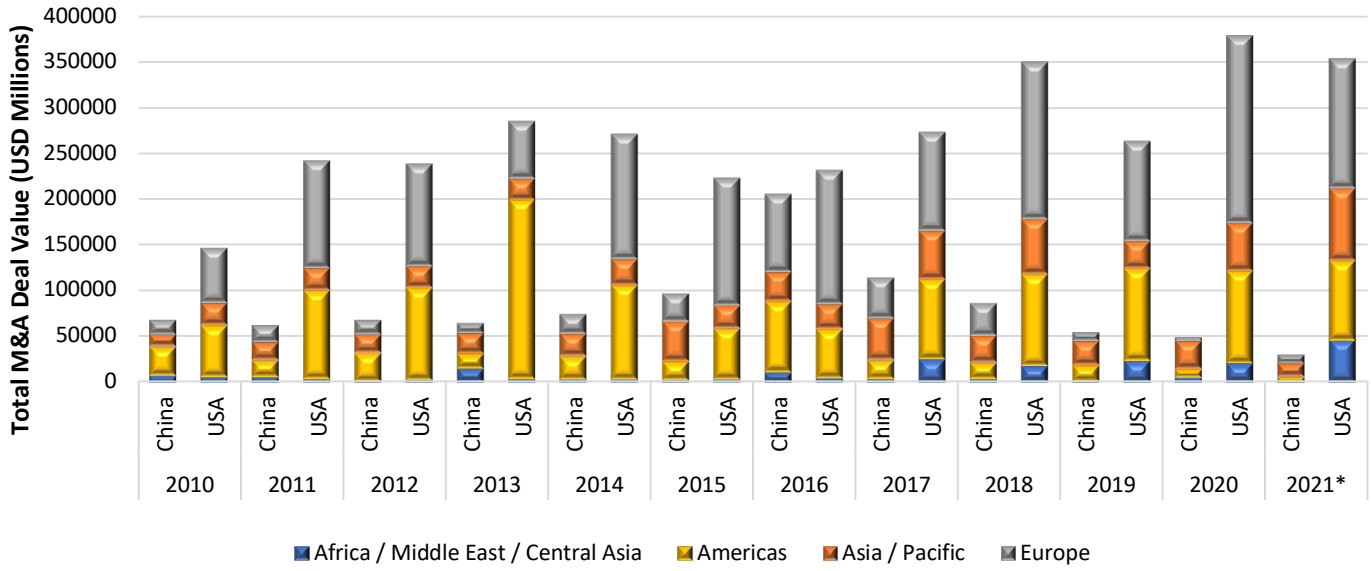
Figure 1.10. China and U.S. Outbound Cross-Border M&A Activity (2010-2021)[2]



* Data for 2021 only includes the first two quarters (1/1/2021 – 6/30/2021)
Source: EMI research team based on data from SDC Platinum, accessed on 29 July 2021. The figure displays total outbound M&A deal value and average outbound M&A deal value for the U.S. and China from 2010 to 2021. The graph excludes cancelled deals. Data for China includes data for Macau and Hong Kong to account for Chinese-owned firms headquartered in these regions for tax/business purposes.

Europe was the target of most of the M&A activity from both China and the U.S. However, China has seen an increasing portion of its M&A targeted to the Asia-Pacific region, rising from 45% in 2015 to 62% in 2020 with declining shares going towards the Americas and marginal changes in M&A towards Africa/Middle East/Central Asia. In contrast, the U.S. share of M&A for each of the four regions has remained relatively stable throughout the decade.

Figure 1.11. China and U.S. outbound Cross-Border M&A by Region (2010-2021)

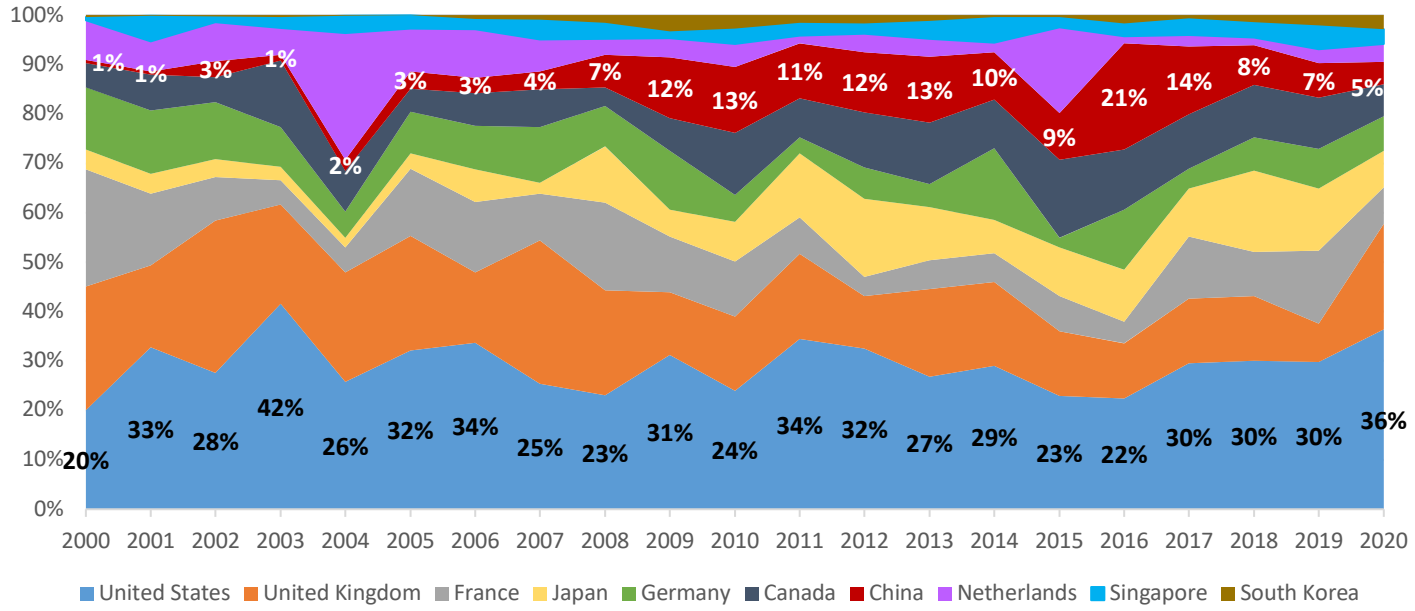


* Data for 2021 only includes the first two quarters (1/1/2021 – 6/30/2021)
Source: EMI research team based on data from SDC Platinum, accessed on 29 July 2021. The figure displays total outbound M&A for the U.S. and China by region from 2010 to 2021. The graph excludes cancelled deals. Data for China includes data for Macau and Hong Kong to account for Chinese-owned firms headquartered in these regions for tax/business purposes.

[2] Data in previous reports, has shown China to have USD45M more M&A than the U.S. in 2016 (Figure 1.11). This year's data source, SDC, shows that the value of U.S. outbound M&A was USD26M more than China's in that year.

Since 2003, after surpassing the U.K. and France, the U.S. has been a leader in outbound M&As (Figure 1.12). The U.S.'s share fluctuated between 25% and 35% from 2003 to 2019, with a low of 22% in 2016 when China's share reached 21%. Notably, China is the only E20+1 country in the top 10 M&A acquiror nations based on 2020 activity. In 2020, despite the economic crisis due to the pandemic, the U.S. peaked with 36% of total M&As by the top 10 acquirer nations. China saw a gradual increase in the share of worldwide outbound M&A share from 2000 to 2013. Following its peak (21% of the total) in 2016, China's M&A share shrank to 14% in 2017 and has since been significantly declining, reaching a low of 5% in 2020–the lowest the country has had in 12 years.

Figure 1.12. Market share of the ten biggest countries in outbound M&A



Source: EMI research team based on data from SDC Platinum, accessed 12 August 2021. *The figure displays outbound announced M&A deals from China and the U.S. as a percentage of the total value of outbound cross-border M&A deals by the top 10 acquiror nations as of 2020. The graph excludes cancelled deals. Data for China includes data for Macau and Hong Kong to account for Chinese-owned firms headquartered in these regions for tax/business purposes*

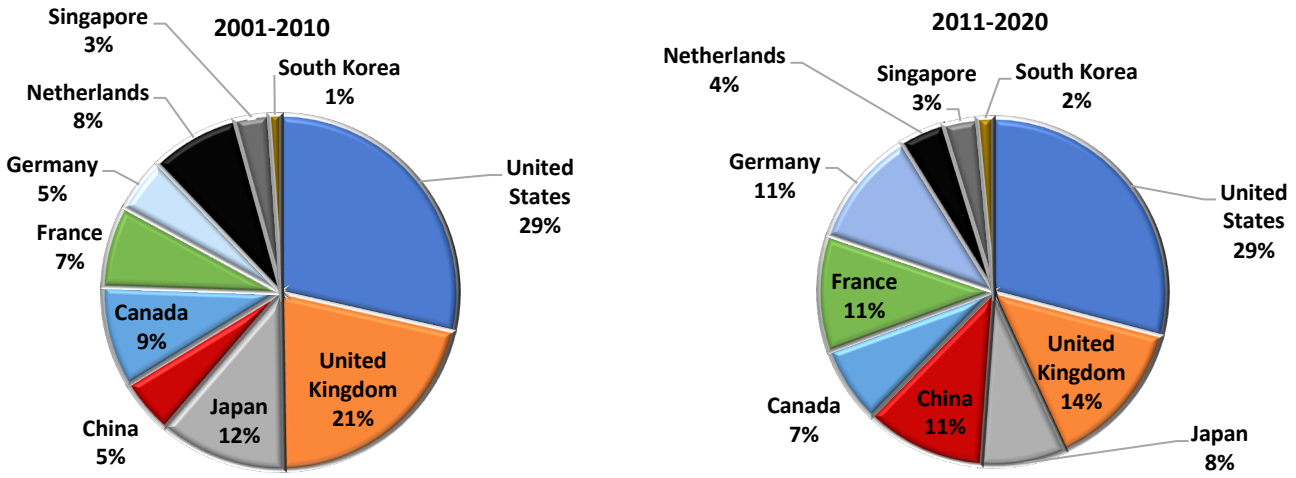
Table 1.1. Top 10 outbound cross-border M&A acquiror countries 2020

	Country
1	United States
2	United Kingdom
3	France
4	Japan
5	Germany
6	Canada
7	China
8	Netherlands
9	Singapore
10	South Korea

Source: EMI research team

Figure 1.13 paints a broader picture of M&A shares by country, analyzing data on a decade basis rather than individual years. G7 countries appear to have mixed trends: the U.S. has maintained the same share of the total M&A value (29%) among the top 10 acquirors, whereas Japan, Canada, and the U.K. shrunk by a third, and France and Germany's increased. The M&A's shares of other countries, such as the Netherlands, fell by half affected by the rise of China. Singapore and South Korea have maintained relatively the same shares between both decades. China, the only E20+1 country amongst the top 10 acquirors, had a 120% increase in M&A share from 2001–2010 to 2011–2020.

Figure 1.13. Outbound cross-border M&A of top 10 countries 2001-2010 and 2011-2020



Source: Data from SDC Platinum, accessed on 12 August 2021. The charts display outbound announced M&A deals for each country as a percentage of the total value of outbound cross-border M&A deals by the top 10 acquiror nations as of 2020. The breakdown is compared between two decades: 2001–2010 and 2011–2020 (see Appendix for more on technology and leading outbound M&A deals in 2020). The charts exclude cancelled deals. Data for China includes data for Macau and Hong Kong to account for Chinese-owned firms headquartered in these regions for tax/business purposes.

1.4. The EMI 500 EMNCs by revenues (EMNC 500R)

This year's report marks the launch of the EMNCs 500 list. Building on the five-year research of the Fortune Global 500 rankings, we aimed to expand the sample of firms researched and create a list—the "EMNCs 500"—categorized by revenue and market cap. In this section, we analyze the largest EMNCS according to revenue. Based on previous years' studies, we chose Standard & Poor's Capital IQ database due to its extensive coverage of types of firms—private, state-owned, and public/private—its coverage of countries, and its accuracy. We proceeded as follows

- We downloaded on July 1, 2021, all companies with revenues greater than USD1 billion. After filtering the data, the sample included 7,141 global companies.
- From that sample 2,429 firms were headquartered in E20+1 countries were considered and this is the target sample.
    - The study considers ultimate parent companies only, as defined by Capital IQ[3].
    - Some subsidiaries may have higher revenue than the parent, especially when the subsidiary is a public company, while the parent is not. In this study, we considered the highest revenue reported by either the parent or the subsidiary in Capital IQ.

As in the case in the Fortune Global 500 list, China tops the ranking with 23% followed closely by the U.S. with 20% and then Japan with 11% followed by South Korea and the U.K. (Table 1.2).

[3]Some considerations:

- Three companies classified as subsidiaries in Capital IQ are classified as the ultimate parent in Fortune: 1) State Grid and Sinochem, for both of which SASAC is the parent company in Capital IQ. For both of them, we followed the Fortune criteria; 2) China Resources and China Resources Land, respectively 69th and 470th on the Fortune 500 list, as both are part of the same conglomerate, we considered as one: China Resources; and 3) Shandong Energy, which we considered to be China National Nuclear as classified in Capital IQ. Also,
- Companies with different names—such as CCCC Real Estate, China Railway, and Xiamen C&D—were cleaned manually.
- Companies with last known revenue before July 2020 were excluded.

Table 1.2. Number of companies with revenues (last announced since July 2020) greater than USD1 billion per country (top 20)

#	Country	Number of billionaire companies	%
1	China	1,676	23.5%
2	U.S.	1,440	20.2%
3	Japan	831	11.6%
4	South Korea	336	4.7%
5	U.K.	277	3.9%
6	Germany	184	2.6%
7	Canada	169	2.4%
8	India	163	2.3%
9	Taiwan	160	2.2%
10	France	149	2.1%
11	Australia	131	1.8%
12	Sweden	105	1.5%
13	Switzerland	101	1.4%
14	Brazil	98	1.4%
15	Netherlands	78	1.1%
16	Italy	74	1.0%
17	Russia	58	0.8%
18	Spain	55	0.8%
19	Thailand	55	0.8%
20	South Africa	54	0.8%
Total of 39 countries:		**7,141**	

Source: EMI research team based on Capita IQ (https://www.capitaliq.com/), data accessed in July 2021.

Companies from China make up 69% of the total number of EMNCs with more than USD1 billion in revenues (Table 1.3). All E20+1 countries (see Chapter 3), except for Iran, are represented. In the top four countries (China, India, Brazil, and Russia), the number of firms correlates with their economy size. Three countries from Africa were represented. Notably, although no South African company has been listed in the Fortune Global 500 list for a decade, South Africa lies ahead of Mexico and Saudi Arabia in this ranking. This can be explained by the fact that while Mexico and Saudi Arabia have very large companies on the list (Pemex, America Móvil, and Saudi Aramco), South Africa has more medium-sized companies.

Asia reigns with 2,099 firms (1,676 of which are Chinese), followed by Latin America with 204, Africa with 68, and E20 Europe with 58. Eighty companies are from other emerging countries like Qatar, Peru, and Kuwait which do not make the cut on our E20+1 country list.

Table 1.3. Total number of EMNCs with revenues (last announced since July 2020) larger than USD1 billion in E20+1 countries. (A) per country, (B) per region, (C) per sector.

(A)

Country	Region	No of companies	Share
China	Asia	1,676	69.0%
India	Asia	163	6.7%
Brazil	Latin America	98	4.0%
Russia	Europe	58	2.4%
Thailand	Asia	55	2.3%
South Africa	Africa	54	2.2%
Mexico	Latin America	46	1.9%
Malaysia	Asia	44	1.8%
Turkey	Asia	42	1.7%
Indonesia	Asia	34	1.4%
Chile	Latin America	33	1.4%
Philippines	Asia	31	1.3%
Saudi Arabia	Asia	30	1.2%
Vietnam	Asia	17	0.7%
Argentina	Latin America	14	0.6%
Colombia	Latin America	13	0.5%
Egypt	Africa	9	0.4%
Pakistan	Asia	6	0.2%
Nigeria	Africa	5	0.2%
Bangladesh	Asia	1	0.04%

(B)

Region	Number of billionaire companies	%
Asia	2,099	86%
Latin America	204	8%
Africa	68	3%
Europe	58	2%

(C)

Sector	Number of billionaire companies	%
Industrials	583	24.0%
Materials	326	13.4%
Financials	297	12.2%
Consumer Discretionary	257	10.6%
Consumer Staples	202	8.3%
Real Estate	175	7.2%
Utilities	139	5.7%
Information Technology	132	5.4%
Energy	122	5.0%
Health Care	107	4.4%
Communication Services	86	3.5%
-	3	0.1%

Source: EMI research team based on Capita IQ (https://www.capitaliq.com/), data accessed in July 2021.

When we consider only the 500 biggest EMNCs, 75% of them are Chinese, which correlates well with Fortune's data. Further, South Africa has more companies than Thailand, Indonesia, Turkey, Saudi Arabia, and Malaysia, countries that are consistently represented on Fortune's list by one or two companies. The list also includes countries from Latin America, a region whose presence on Fortune 500 has been limited to Brazil and Mexico, with some occasional exceptions. Argentina has never before had a company on Fortune's list and is the last E20+1 (Chapter 3). Six E20+1 countries are not represented on EMI list of the top 500 EMNCs: Bangladesh, Iran, Nigeria, Egypt, Pakistan, and Vietnam (which was ahead of Argentina in the initial list (Table 1.4). With the exception of the Saudi Arabian oil company Saudi Aramco, China dominates the top 20, with all other 19 entries (Table 1.5).

Table 1.4. The 500 largest EMNCs by revenues (EMNC 500R) per country

	Country	Number of EMNCs	Share among EMI 500
1.	China	378	75.6%
2.	India	30	6%
3.	Russia	18	3.6%
4.	Brazil	18	3.6%
5.	Mexico	13	2.6%
6.	South Africa	10	2%
7.	Thailand	8	1.6%
8.	Indonesia	5	1%
9.	Chile	4	0.8%
10.	Turkey	4	0.8%
11.	Saudi Arabia	4	0.8%
12.	Malaysia	3	0.6%
13.	Colombia	2	0.4%
14.	Philippines	2	0.4%
15.	Argentina	1	0.2%

Source: EMI research team based on Capita IQ (https://www.capitaliq.com/), data accessed in July 2021.

Table 1.5. Top 20 companies on EMNC 500R (by revenues)

#	Company	Sector	Country	Region	Revenue (US$ mm)
1	State Grid	Utilities	China	Asia	408,613
2	Sinopec Group	Energy	China	Asia	327,808
3	China National Petroleum	Energy	China	Asia	319,693
4	China State Construction Engineering	Industrials	China	Asia	247,377
5	Saudi Aramco	Energy	Saudi Arabia	Asia	229,799
6	Ping An Insurance	Financials	China	Asia	190,604
7	BSCOMC	Financials	China	Asia	174,719
8	China Railway Engineering Group	Industrials	China	Asia	149,304
9	China Railway Construction	Industrials	China	Asia	139,436
10	Huawei Investment & Holding	Information Technology	China	Asia	136,533
11	China Life Insurance	Financials	China	Asia	124,396
12	China Mobile Communications	Communication Services	China	Asia	117,647
13	JD.com	Consumer Discretionary	China	Asia	114,236
14	SAIC Motor	Consumer Discretionary	China	Asia	113,674
15	China Communications Construction	Industrials	China	Asia	112,948
16	Alibaba Group Holding	Consumer Discretionary	China	Asia	109,466
17	China Minmetals	Materials	China	Asia	107,818
18	China FAW Group	Consumer Discretionary	China	Asia	106,826
19	China Resources	Industrials	China	Asia	105,097
20	China National Nuclear	Energy	China	Asia	103,394

Source: EMI research team based on Capita IQ (https://www.capitaliq.com/), data accessed in July 2021.

As evident in Table 1.6, Brazil and Mexico dominate the 20 biggest by revenue in Latin America, but Chilean and Colombian companies are also featured. The top position is occupied by the packaged foods and meat company JBS. Petrobras, the largest Brazilian company

on Fortune's list, is only the second on the EMNC 500. This can be explained by the fact that, according to S&P Capital IQ, BR Distribuidora was not part of Petrobras even before the privatization of the company bought by Vibra in October 2021. This may impact the next Fortune 500 edition in 2022.

Table 1.6. Top 20 Latin American companies on EMNC 500R

#	Company	Sector	Country	Region	Revenue (US$ mm)
63	JBS	Consumer Staples	Brazil	Latin America	52,030
66	América Móvil	Communication Services	Mexico	Latin America	51,104
73	Pemex	Energy	Mexico	Latin America	47,927
75	Petrobras	Energy	Brazil	Latin America	46,628
86	Vale	Materials	Brazil	Latin America	40,154
144	Comisión Federal de Electricidad	Utilities	Mexico	Latin America	25,271
145	Fomento Económico Mexicano	Consumer Staples	Mexico	Latin America	24,774
197	AntarChile	Energy	Chile	Latin America	18,059
222	Grupo Bimbo	Consumer Staples	Mexico	Latin America	16,637
235	BR Distribuidora	Consumer Discretionary	Brazil	Latin America	15,694
236	Ultrapar Participações	Energy	Brazil	Latin America	15,644
252	Ecopetrol	Energy	Colombia	Latin America	14,687
257	Itaú Unibanco Holding	Financials	Brazil	Latin America	14,292
261	Codelco	Materials	Chile	Latin America	14,173
268	Cencosud	Consumer Staples	Chile	Latin America	13,844

Source: EMI research team based on Capita IQ (https://www.capitaliq.com/), data accessed in July 2021.

Future EMI reports will continue to build on this list of the 500 largest EMNCs. In the next section we explore the biggest EMNCs by market capitalization.

1.5. The EMI 500 EMNCs by market capitalization (EMNC 500MC)

To complement the previous discussion on EMNC 500R, the 500 most valuable publicly listed companies from emerging markets (EMNC 500MC) have been explored using data from Capital IQ.

- We studied the 500 largest EMNCs by market capitalization at the end of August 31, 2021.
- The company's home country was defined as the ultimate parent company[4].
- As in the previous sections, we consider not only parent companies, but also subsidiaries.

Although China continues to dominate the ranking, it is less so than when we rank the companies by revenues (see previous section). Instead, India more than doubled the number of companies it had in the top 500 EMNCs by revenues because of the relative prevalence of public companies in the country. The same was observed for Saudi Arabia, Malaysia, and Thailand. Coincidently, both the revenue and stock market lists include 15 E20 countries, but these 15 countries are not the same: in the market value list, Vietnam and Nigeria replace Turkey and Mexico (Table 1.7). However, Saudi Aramco has the largest market capitalization, and some other companies on the list, like Prosus, owned by South African Naspers, and the Indian Tata Consultancy Services are among the top twenty as well (Table 1.8).

[4] Although Prosus is based in the Netherlands, it is owned by South African Naspers, and will thus be considered South African. Similarly, Brazilian Ambev, owned by Belgian AB InBev has been excluded because it is considered a Belgian company. Companies in the same had to have at least 100 shares daily traded (average of period from September 1, 2020 to August 31, 2021). Hence, Mexican Siefores from Banorte, Coppel, Inbursa and Sure were excluded.

Table 1.7. 500 most valuable EMNCs (EMNC 500MC) per country

	Country	Number of EMNCs	Share among EMI 500
1.	China	334	66.8%
2.	India	64	12.8%
3.	Brazil	21	4.2%
4.	Saudi Arabia	15	3%
5.	Russia	14	2.8%
6.	Thailand	12	2.4%
7.	Mexico	10	2%
8.	South Africa	8	1.6%
9.	Malaysia	7	1.4%
10.	Indonesia	5	1%
11.	Vietnam	3	0.6%
12.	Chile	2	0.4%
13.	Philippines	2	0.4%
14.	Nigeria	1	0.2%
15.	Colombia	1	0.2%
16.	Argentina	1	0.2%

Source: EMI research team based on Capita IQ (https://www.capitaliq.com/), data accessed in July 2021.

Table 1.8. Top 20 companies on EMNC 500MC

#	Company	Country	Ticker	Ultimate Parent	Dec/20	Apr/21	Aug/21	YTD Growth...
1	Saudi Aramco	Saudi Arabia	2222	-	1,864,826.7	1,886,896.1	1,873,170.1	0.45
2	Tencent Holdings	China	700	-	692,741	763,107.4	589,503.2	-14.9
3	Alibaba Group Holding	China	BABA	-	630,958.6	626,132.8	452,695.5	-28.25
4	Kweichow Moutai	China	600519	-	384,443.8	389,324.7	302,932.5	-21.2
5	Prosus	South Africa	PRX	Naspers	175,585.6	175,040.7	282,075.7	60.65
6	Industrial & Commercial Bank of China	China	1398	-	262,380.5	270,148.7	241,228.8	-8.06
7	Reliance Industries	India	RELIANCE	-	172,614.9	171,097.5	196,541.3	13.86
8	Meituan	China	3690	-	223,570.8	233,116.6	196,238.3	-12.23
9	China Merchants Bank	China	600036	-	167,886.1	204,928.4	194,252.7	15.71
10	Tata Consultancy Services	India	TCS	Tata Sons	147,102.9	151,715.4	191,928	30.47
11	China Construction Bank	China	939	-	191,867.3	200,339.7	182,404.9	-4.93
12	Contemporary Amperex Technology	China	300750	-	125,279.6	139,647.8	178,394.9	42.4
13	Agricultural Bank of China	China	1288	-	164,803.4	169,722.3	156,578.4	-4.99
14	AIA Group	China	1299	-	147,836.6	153,646.2	144,197.3	-2.46
15	Ping An Insurance	China	2318	-	234,643.8	201,963.9	140,706.2	-40.03
16	PetroChina	China	857	China National Petroleum	109,459.2	113,966.6	133,059.8	21.56
17	Bank of China	China	3988	-	131,241.6	139,054.8	128,197	-2.32
18	Pinduoduo Inc	China	PDD	-	217,881.4	167,806.3	125,353.9	-42.47
19	China Mobile Communications	China	941	-	116,726.3	137,085.5	124,124.9	6.34
20	JD.com	China	JD	-	136,234.2	119,439.3	121,937.4	-10.49

Source: EMI research team based on Capita IQ (https://www.capitaliq.com/), data accessed in July 2021.

Brazilian companies with Vale, Petrobras followed by the banks and other financial institutions lead the pack of Latin American most valuable companies. Argentine's ecommerce Mercado Libre has become the leading technology company in the region and ranks second (Table 1.9).

Table 1.9. Top 20 Latin American companies on EMNC 500MC

#	Company	Country	Ticker	Ultimate Parent	Dec/20	Apr/21	Aug/21	YTD Growth...
29	Vale	Brazil	VALE3	-	86,384.5	103,008.4	96,965	12.25
30	MercadoLibre	Argentina	MELI	-	83,542.8	78,317	92,834	11.12
43	Petrobras	Brazil	PETR4	-	71,915	56,025.3	70,239.5	-2.33
51	América Móvil	Mexico	AMX L	-	48,713.2	46,538.5	64,714.5	32.85
62	Itaú Unibanco Holding	Brazil	ITUB4	Itaúsa - Investimentos Itaú	55,927.3	46,690.7	56,787	1.54
73	Southern Copper	Mexico	SCCO	Grupo México	50,342.5	53,659	48,387.2	-3.88
90	Banco Bradesco	Brazil	BBDC4	-	43,668.5	39,834.2	40,798.3	-6.57
102	Grupo México	Mexico	GMEXICO B	-	32,910.7	35,313.6	36,285.4	10.25
122	Banco BTG Pactual	Brazil	BPAC3	-	21,199.8	24,723.3	33,211.1	56.66
143	Banco Santander Brasil	Brazil	SANB4	-	32,408.2	26,574.4	30,290.8	-6.53
151	WEG	Brazil	WEGE3	-	30,594.5	27,051.8	29,103.3	-4.87
154	Ecopetrol	Colombia	ECOPETROL	-	26,953.6	24,261.7	28,797.9	6.84
156	Fomento Económico Mexicano	Mexico	FEMSA UBD	-	25,087.7	25,290.1	28,219.4	12.48
164	XP Inc	Brazil	XP	-	22,172.8	22,138.7	27,198.2	22.66
171	Rede D'Or São Luiz	Brazil	RDOR3	-	25,545.7	25,720.1	26,463.9	3.59
201	Magazine Luiza	Brazil	MGLU3	-	31,112.6	23,840.6	23,583.2	-24.2
248	PagSeguro Digital	Brazil	PAGS	Universo Online	18,703.5	15,048.7	19,578.3	4.68
255	Grupo Financiero Banorte	Mexico	GFNORTE O	-	15,929.7	16,253	19,046.8	19.57
256	Itaúsa - Investimentos Itaú	Brazil	ITSA4	-	19,337.2	16,108.5	18,987.4	-1.81
270	Grupo Elektra	Mexico	ELEKTRA *	-	15,095.3	17,166.5	18,164.2	20.33

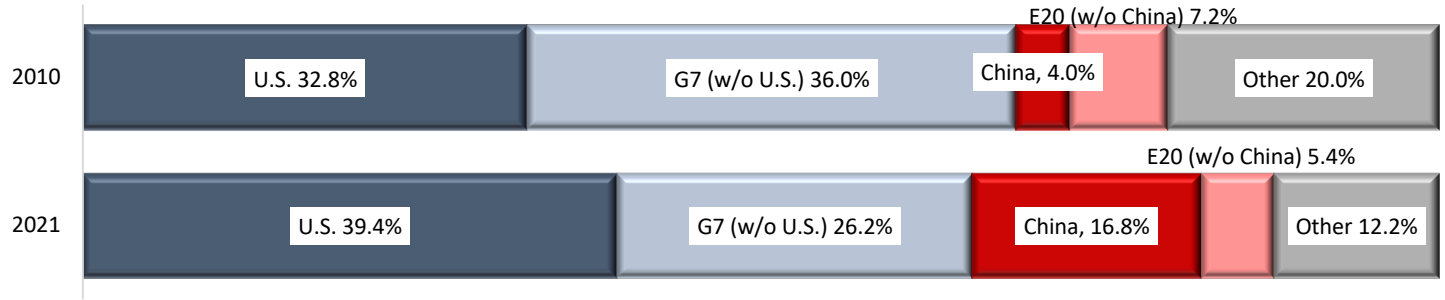
Source: EMI research team based on Capita IQ (https://www.capitaliq.com/), data accessed in July 2021.

The following sections discuss brand recognition and investments in research and development (R&D) by EMNCs as a manifestation of the growing soft power and investments in intangibles by EMNCs.

1.6. U.S. dominates brand recognition[5]

As in the previous reports (Casanova & Miroux 2020) this section reviews EMNCs brand recognition compared to the U.S. and Europe by reviewing various rankings. According to Brand Finance 2021, U.S. brands dominate the world and have gained in recognition, from 32.8% in 2010 to 39.4% in 2021. China has also gained brand recognition (4% to 16.8%). However, the U.S. and China's brand recognition gains have been at the expense of Europe, E20 countries, and "other" countries' own brand recognition.

Figure 1.14. Top 500 Brands by country, G7 and E20+1 (%)

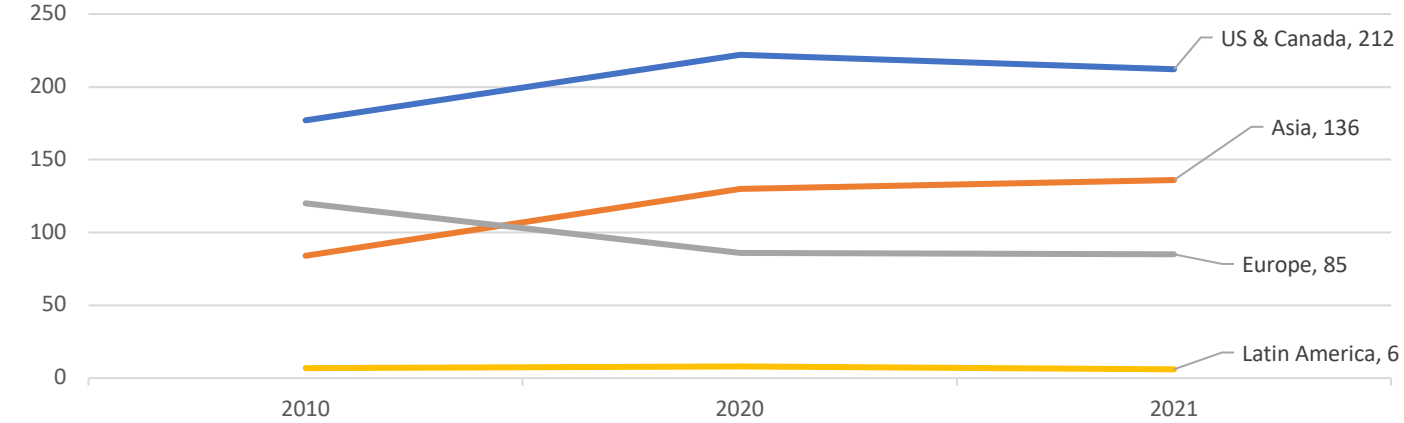


Source: EMI research team based on Brand Finance. "Global 500 2021" (https://brandirectory.com/rankings/global/table), accessed September 2021.

According to Brand Finance 2021, Latin America's brand recognition has remained relatively flat, with only six brands featured among the best 500 in the world. On the other hand, the number of brands from the U.S. and Canada have increased from 170 to 212 over the last decade, albeit slightly decreasing in the last year. Further, Asian brands have increased from 84 to 136 and European ones have decreased from approximately 125 to 85.

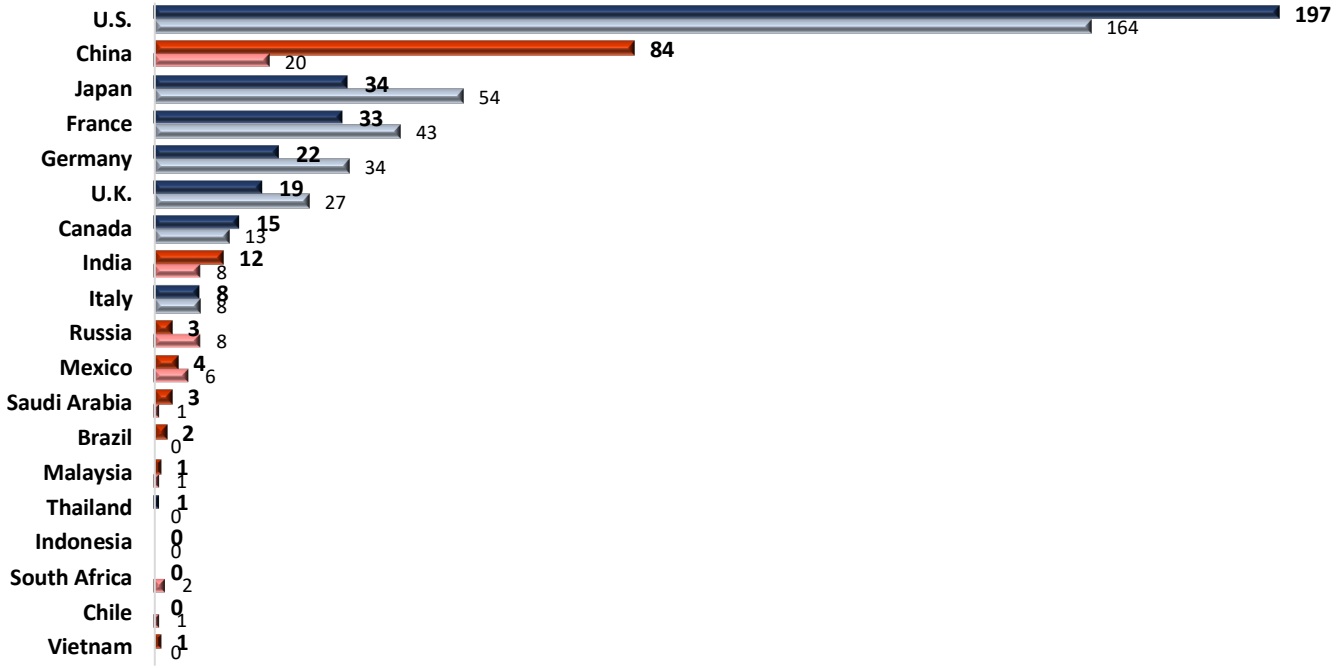
[5] The contribution of Eunbin Kim is gratefully acknowledged for this section.

Figure 1.15. Number of companies on Top 500 Brands by regions



Source: EMI research team based on Brand Finance. "Global 500 2021" (https://brandirectory.com/rankings/global/table), accessed September 2021.

Figure 1.16. E20+1 (red), G7 (blue) countries, Top 500 Brands, 2021 (darker), 2010 (lighter)[67]



Source: EMI research team based on Brand Finance. "Global 500 2021" (https://brandirectory.com/rankings/global/table), accessed September 2021.

1.7. The 2500 firms by investments in research and development

The following section will highlight the most important insights from analyzing the Eurostat database of the 2500 biggest companies based on Research and Development (R&D) expenditure. Investments in innovation were the priority of multinationals but have become more prevalent in emerging markets since the GFC (Cahen, Casanova & Miroux 2021).

Among the countries listed, only nine were from the E20+1. The U.S. heads the list with almost a third of the total companies, followed by China that has more than a fifth, and Japan that has 12%. The rest of the countries hold 5% or less of the total number of companies in the ranking. In terms of number of companies, Asia-Pacific is at the top of the list, by clustering China, Japan, and Taiwan which account for 42% of the total companies. The next region is North America, boosted by the U.S.'s number of companies, followed by Europe (Table 1.10). Notably, G7 companies represent more than half of the companies listed in the ranking; whereas, E20 companies represent less than a fourth with 583 (Figure 1.17). Within the E20+1 countries (Chapter 3), China accounts for 92% followed by India at 5%. The participation of firms from the rest of the E20 countries is insignificant.

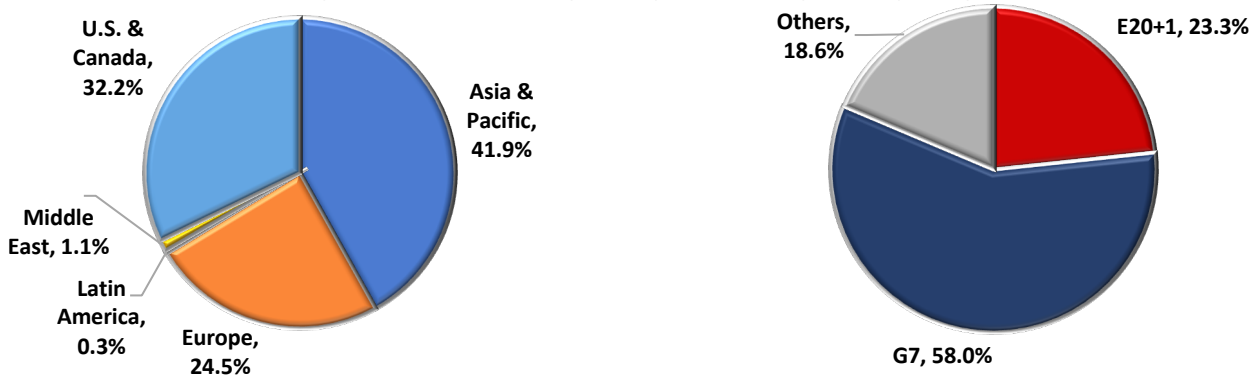
[6] Argentina, Chile, Colombia, Egypt, Pakistan, Iran, Nigeria, Philippines, South Africa, and Turkey had no brands listed in the Global Top 500 2020
[7] Argentina, Colombia, Egypt, Pakistan, Iran, Nigeria, Philippines, and Turkey had no brands listed in the Global Top 500 2010

Table 1.10. 2500 largest corporate spenders in Research and Development (R&D) per country (2020)

	Country	Group	No of companies	Share of total
1	US	G-7	775	31.0%
2	China	E20+1	536	21.4%
3	Japan	G-7	309	12.4%
4	Germany	G-7	124	5.0%
5	UK	G-7	121	4.8%
6	Taiwan	Others	88	3.5%
7	France	G-7	68	2.7%
8	South Korea	Others	59	2.4%
9	Switzerland	Others	58	2.3%
10	Netherlands	Others	38	1.5%
11	Denmark	Others	32	1.3%
12	Sweden	Others	32	1.3%
13	Canada	G-7	30	1.2%
14	India	E20+1	29	1.2%
15	Ireland	Others	28	1.1%
26	Turkey	E20+1	6	0.2%
27	Brazil	E20+1	5	0.2%
30	South Africa	E20+1	2	0.1%
31	Saudi Arabia	E20+1	2	0.1%
33	Mexico	E20+1	1	0.0%
34	Argentina	E20+1	1	0.0%
41	Russia	E20+1	1	0.0%

Source: EMI research team based on Eurostat data, EU Industrial R&D scoreboard (https://ec.europa.eu/eurostat/), data accessed in August 2021.

Figure 1.17. Total number of companies in the 2,500 largest corporate R&D spenders per region (2020)



Source: EMI research team based on Eurostat data, EU Industrial R&D scoreboard (https://ec.europa.eu/eurostat/), data accessed in August 2021.

1.8. The great divide China and E20

Over the last five years, the Emerging Markets Institute (EMI) Report (Casanova & Miroux, 2016, 2017, 2018, 2019, 2020) has focused on documenting the rise of EMNCs and the challenges and opportunities they represent for global business. This longitudinal analysis has shown how EMNCs represent a new paradigm of globalization and competition. In particular, EMNCs from China have led the way in not just growing at a phenomenal rate but also by competing with a different rule book that has favored growth over profits and market capitalization. Previous editions of the EMI report have also shown how governments in emerging markets have played a key role in supporting the successful globalization efforts of the EMNCs. This is true not just for the government of China, but also for many other emerging markets in Latin America and Asia.

As shown in this year's analysis, Chinese companies are widening their lead in numbers in the Global Fortune 500, not only as compared with the U.S. but also with respect to European firms and other companies from the E20. This increase in the number of large Chinese EMNCs has mirrored the growth in the size of the Chinse economy. However, we have not seen a similar phenomenon in most other emerging markets where the economy has also grown over the last couple of decades but there has been no corresponding rise in the number of large EMNCs from the country. We believe that this is because Chinese EMNCs have benefited from consistent government policies supporting Chinese national champions, an encouragement to invest aggressively in R&D and active support for their international expansion. Thus, an important lesson from the EMI reports is that EMNCs need active policy support to strengthen their global ambitions.

This chapter has described how the rise of Chinese EMNCs after the Global Financial Crisis represents a new third wave of globalization. Chinese firms have become formidable competitors and are world leaders in industries as diverse as insurance, smartphones or banks.

Although internationals M&As are dominated by U.S. firms, the international presence of Chinese firms continue to grow through greenfield investments (Casanova and Miroux 2020). Regarding brand recognition, European firms are losing ground to U.S. and Chinese firms. Brand is a powerful intangible asset, difficult to gain and easy to lose and more difficult to regain. U.S. companies lead in R&D investments, but Chinese companies are catching up rapidly in second position and two Chinese firms: Huawei and Alibaba are amongst the 20 biggest global corporate R&D investors. Indeed, many leading Chinese EMNCs are seen at the forefront of innovation in their respective industry sectors.

These trends of the third wave of globalization are expected to continue and Chinese firms will continue to present important challenges to global competitors. Thus, another key message from this year's EMI report is that all global firms need to understand better their Chinese competitors and their business strengths in order to succeed in this new phase of globalization. This new competitive landscape moves Chinese EMNCs from a position of learning (about new markets and technologies) to teaching (by showcasing industry leading innovations and new practices). The perspective for western companies also changes. From knowing it all before going abroad, U.S. and European companies need to be humble and to be open to learning from EMNCs.

Though Chinese EMNCs have been the most successful, there are other examples of successful EMNCs emerging from other emerging markets in Latin America and Asia. The future intent of the EMI report series is to dive deeper into the special dynamics of EMNCs from these other markets. There is a need to understand the necessary ecosystems and policies that can support these EMNCs to mirror some of the successes of Chinese EMNCs. This fourth wave of globalization needs to become more inclusive. Making this happen will require determined leadership from governments and the private and public sectors.

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Appendix I The winner takes all

In this appendix, we look at two measures of success within the Fortune Global 500. The first one is how EMNCs fare in terms of the number of companies per industry, and the second is the progress of EMNCs and whether they have reached the top in key industries.

First, EMNCs have become leaders in several industries, shown in red in Table 1.14. We review the 56 industries represented by the Fortune Global 500. EMNCs have more companies than G7 countries in 14 of these industries, including metals, petroleum, refining, trading, mining, engineering, and energy, and all companies in real estate are Chinese companies, including three newcomers to the list. Chinese companies also have a prominent place in banking, motor vehicles, even pharmaceuticals.

Second, we compare the ten largest companies per selected industry in 2010 and 2021. China dominates the metals industry with seven out of the ten biggest companies and one of them, Minmetal, at the top; banking with four out of the ten biggest banks by revenues with ICBC at the top; engineering and construction with seven of the 10 and China State Construction Engineering (CSCE) at the top; petroleum and refining with two of the 10 biggest and China National Petroleum at the top; insurance with Ping An at the top and two of the ten biggest; and finally, pharmaceuticals with two of the ten and China Resources at the top. In other industries, Chinese companies do not hold the highest numbers but have an important presence: two out of ten in motor vehicles and parts, four out of ten in trading, six out of ten in mining and crude-oil production, and four out of ten in chemicals.

Table 1.11. Biggest 20 EMNCs from China on Fortune Global 500 2021

Company	Industry	Rank	Change in Rank	Revenue (USD M)	Profits (USD M)	Employees	Assets (USD M)
State Grid	Utilities	2	1	386,618	5,580	896,360	666,089
China National Petroleum	Petroleum Refining	4	0	283,958	4,575	1,242,245	626,617
Sinopec Group	Petroleum Refining	5	-3	283,728	6,205	553,833	343,289
China State Construction Engineering	Engineering, Construction	13	5	234,425	3,578	356,864	338,033
Ping An Insurance	Insurance: Life, Health (stock)	16	5	191,509	20,739	362,035	1,460,210
Industrial & Commercial Bank of China	Banks: Commercial and Savings	20	4	182,794	45,783	439,787	5,110,354
China Construction Bank	Banks: Commercial and Savings	25	5	172,000	39,283	373,814	4,311,457
Agricultural Bank of China	Banks: Commercial and Savings	29	6	153,885	31,293	462,592	4,169,356
China Life Insurance	Insurance: Life, Health (stock)	32	13	144,589	4,648	183,417	776,309
China Railway Engineering Group	Engineering, Construction	35	15	141,384	1,639	308,483	185,316
Bank of China	Banks: Commercial and Savings	39	4	134,046	27,952	309,084	3,739,871
China Railway Construction	Engineering, Construction	42	12	131,992	1,486	364,632	190,916
Huawei Investment & Holding	Network & Communications	44	5	129,184	9,362	197,000	134,384
China Mobile Communications	Telecommunications	56	9	111,826	12,920	455,721	304,528
JD.com	Internet Services and Retailing	59	43	108,087	7,160	314,906	64,718
SAIC Motor	Motor Vehicles and Parts	60	-8	107,555	2,961	143,261	140,907
China Communications Construction	Engineering, Construction	61	17	106,868	1,165	213,438	306,555
Alibaba Group Holding	Internet Services and Retailing	63	69	105,866	22,224	251,462	257,978
China Minmetals	Metals	65	27	102,015	491	205,015	150,652
China FAW Group	Motor Vehicles and Parts	66	23	101,076	2,867	121,002	74,933

Source: EMI research team based on Fortune (https://fortune.com/), data accessed in August 2021.

Table 1.12. EMNCs (excluding China) on Fortune Global 500 2021

Company	**Industry**	**Country**	**Rank**	**Change in Rank**	**Revenue (USD M)**	**Profits (USD M)**	**Employees**	**Assets (USD M)**
Saudi Aramco	Mining, Crude-Oil Production	Saudi Arabia	14	-8	229,766	49,287	79,800	510,266
Gazprom	Energy	Russia	84	-29	87,870	1,872	467,000	315,933
Lukoil	Petroleum Refining	Russia	125	-68	71,856	210	100,769	81,061
Reliance Industries	Petroleum Refining	India	155	-59	62,912	6,619	236,334	180,649
Petrobras	Petroleum Refining	Brazil	181	-61	56,683	1,141	49,050	190,010
Rosneft Oil	Petroleum Refining	Russia	195	-119	53,376	2,033	356,000	207,671
JBS	Food Production	Brazil	202	11	52,429	892	250,000	31,539
State Bank of India	Banks: Commercial and Savings	India	205	16	51,919	3,019	245,652	662,540
PTT	Petroleum Refining	Thailand	206	-66	51,648	1,207	29,421	84,834
Indian Oil	Petroleum Refining	India	212	-61	50,433	2,916	33,439	48,528
América Móvil	Telecommunications	Mexico	237	-28	47,326	2,181	186,851	81,591
Oil & Natural Gas	Mining, Crude-Oil Production	India	243	-53	46,597	2,189	30,105	74,280
Pemex	Mining, Crude-Oil Production	Mexico	257	-124	44,384	-23,683	123,899	96,826
Sberbank	Banks: Commercial and Savings	Russia	269	-29	43,264	10,527	285,555	487,263
Petronas	Petroleum Refining	Malaysia	277	-91	42,563	-5,680	48,679	142,804
Pertamina	Petroleum Refining	Indonesia	287	0	41,470	1,051	34,564	69,144
Vale	Mining, Crude-Oil Production	Brazil	294	39	40,018	4,881	74,316	92,007
Itaú Unibanco Holding	Banks: Commercial and Savings	Brazil	322	-106	37,280	3,667	96,540	388,789

Rajesh Exports	Trading	India	348	114	34,805	114	377	3,209
Tata Motors	Motor Vehicles and Parts	India	357	-20	34,013	-1,812	75,278	46,916
Bharat Petroleum	Petroleum Refining	India	394	-85	31,315	2,178	9,257	22,012
Banco Bradesco	Banks: Commercial and Savings	Brazil	426	-158	28,539	3,073	80,170	308,962
Koç Holding	Energy	Turkey	467	4	26,179	1,321	100,641	84,826
Banco do Brasil	Banks: Commercial and Savings	Brazil	482	-194	25,150	2,300	91,673	326,125

Source: EMI research team based on Fortune (https://fortune.com/), data accessed in August 2021.

Table 1.13. Latin American companies on Fortune Global 500 2021

Company	Industry	Rank	Change in Rank	Revenue (USD M)	Profits (USD M)	Employees	Assets (USD M)
Petrobras	Petroleum Refining	181	-61	56,683	1,141	49,050	190,010
JBS	Food Production	202	11	52,429	892	250,000	31,539
América Móvil	Telecommunications	237	-28	47,326	2,181	186,851	81,591
Pemex	Mining, Crude-Oil Production	257	-124	44,384	-23,683	123,899	96,826
Vale	Mining, Crude-Oil Production	294	39	40,018	4,881	74,316	92,007
Itaú Unibanco Holding	Banks: Commercial and Savings	322	-106	37,280	3,667	96,540	388,789
Banco Bradesco	Banks: Commercial and Savings	426	-158	28,539	3,073	80,170	308,962
Banco do Brasil	Banks: Commercial and Savings	482	-194	25,150	2,300	91,673	326,125

Source: EMI research team based on Fortune (https://fortune.com/), data accessed in August 2021.

Table 1.14. Share of companies E20+1/G7 in selected industries on Fortune Global 500 2021

*	Industry	Companies	Average of Revenue (USD Million)	E20	G7	Other
1	Banks: Commercial and Savings	49	57,984	31%	**55%**	14%
2	Motor Vehicles and Parts	33	75,372	24%	**64%**	12%
3	Petroleum Refining	25	92,136	**44%**	40%	16%
4	Insurance: Life, Health (stock)	25	69,172	20%	**60%**	20%
5	Metals	22	47,013	**73%**	18%	9%
6	Pharmaceuticals	19	45,816	16%	**74%**	11%
7	Trading	18	62,820	**56%**	33%	11%
8	Insurance: Property and Casualty (Stock)	18	56,401	11%	**67%**	22%
9	Mining, Crude-Oil Production	17	66,503	**76%**	12%	12%
10	Telecommunications	16	77,284	25%	**69%**	6%
11	Electronics, Electrical Equip.	16	62,530	25%	**44%**	31%
13	Engineering, Construction	14	75,285	**71%**	21%	7%
14	Utilities	13	72,781	23%	**62%**	15%
15	Aerospace and Defense	13	47,665	46%	46%	8%
16	Specialty Retailers	11	48,773	18%	**64%**	18%
17	Diversified Financials	11	59,965	45%	45%	9%
18	Energy	10	48,119	**60%**	30%	10%
19	Chemicals	10	40,260	40%	40%	20%
20	Computers, Office Equipment	9	71,562	11%	**56%**	33%
21	Insurance: Life, Health (Mutual)	9	40,896	22%	**67%**	11%
22	Real estate	8	51,462	**100%**	0%	0%
23	Food Production	8	43,184	25%	**50%**	25%
24	Industrial Machinery	7	44,816	43%	43%	14%
25	Wholesalers: Health Care	7	99,442	14%	**86%**	0%
26	Internet Services and Retailing	7	139,144	**57%**	43%	0%
27	Mail, Package, and Freight Delivery	7	70,746	29%	**71%**	0%
28	Food Consumer Products	6	44,249	17%	**67%**	17%
30	Building Materials, Glass	5	38,146	**40%**	20%	40%
35	Network and Other Communications Equipment	4	57,155	25%	25%	50%
37	Shipping	4	41,507	**50%**	25%	25%
50	Textiles	2	71,326	**100%**	0%	0%
54	Transportation and Logistics	1	28,168	**100%**	0%	0%

*Industry rank by number of companies on Fortune Global 500 2021.

Source: EMI research team based on Fortune (https://fortune.com/), data accessed in August 2021.

Appendix II Notes on Methodology Regarding Mergers and Acquisitions

CIQ vs SDC:

- A comparison of two databases – Capital IQ (CIQ) and SDC Platinum – was done to identify the database that provided EMI with the most accurate M&A and other data for potential analysis.
- The table below compares M&A results from SDC and CIQ for the year 2020.

Comparison of SDC vs Cap IQ			
	Number of Deals	Number of Deals with Values	Total Value of Deals (USDmm)
SDC (w/o cross border check)			
Total (G7, E20+1, Other)	16258	7378 (45%)	1,249,368.55
G7	6314	2096 (33%)	801,549.20
E20+1	1584	883 (56%)	113,736.97
Cap IQ			
Total (G7, E20+1, Other)	10730	4574 (43%)	898,117.33
G7	1731	584 (34%)	352,852.80
E20+1	467	233 (50%)	23,258.57

- Under the assumption that other years follow similar patterns to the data above, SDC provides more data points than Capital IQ. SDC reported 52% more deals than CapitalIQ. Although both CIQ and SDC only report transaction values for around 43-45% of the deals, SDC has reported more transaction values for deals involving E20+1 acquirers (56%) compared to CIQ (50%). Given the report's focus on emerging markets, SDC provides more data points for analysis on E20+1 countries. Lastly, SDC reported a 39% higher total deal value for all cross-border M&A compared to CIQ.
- SDC provides information on the percentage of the target company acquired.
- SDC lists all deals with a single buyer and single target. Deals with multiple acquirers for a single target are automatically broken up into separate deals based on the percentage acquired by each acquirer. CIQ does not create this breakdown, making it difficult to assign deals to particular countries when doing the overall analysis.
- It is possible to find the top outbound M&A acquirer countries, companies, and deals worldwide with SDC. Query limitations make this much harder to do in CIQ.

Screening Methodology:

- Session details for general data collection:
  - Databases: Special Merger Sectors (AUS/NZ) (MA, OMA, IMA)
  - Date Announced: <time period needed>
  - Deal Status: NOT DR, IW, R, SW, S, T, UN, W
  - Cross Border Deal: Select All Cross Border Deals
- For queries for specific nations (e.g., all outbound M&A from China):
  - Include the previous session details EXCEPT for 'Cross Border Deal'
  - Add the additional queries:
    - Acquiror Ultimate Parent Nation: <country>
    - Target Ultimate Parent Nation: <NOT country>
- **NOTE** –SDC counts China-Macau, China-HK, and Macau-HK transactions as cross-border, while EMI considers those transactions local ones.

Values may differ from other sources and past EMI data as:

- Approximately 45-55% of deals listed in SDC (of our data set) do not have any transaction values recorded.
- SDC updates deal values of M&A daily, causing data to be different from past EMI analysis.
- Other research publications report total M&A deals announced, while EMI reports total M&A deals as announced-canceled. EMI includes closed, effective deals, and announced deals that have not reached any status (closed, effective, canceled) yet.
- EMI defines a cross-border transaction as one in which the ultimate parent nation of the acquirer and target company differs. The definition of "cross-border" used by other sources may differ.

Other Data Considerations

- Chinese data includes Hong Kong and Macau, as many Chinese companies are headquartered in Hong Kong and Macau for tax, accounting, and other business purposes. Thus, screening criteria considered these three locations in a bundle as 'China'.
- Any graphs displaying data for 2021 only reflect data during the first two CY quarters (1/1/2021 – 6/30/2021).
- On average, 45-55% of SDC's data points do not display deal values. This percentage may be higher in more recent years, or in countries with more state-ownership for companies (partial or full).
- SDC is updated daily with new transactions, newly canceled deals, or updated amounts for existing deals. Hence, graphs are based on data taken during a particular period (which will be specified).

Table 1.15. Top Outbound, Cross-Border M&A Deals of 2020

Rank	Date Announced	Target Name	Acquiror Name	Acquiror Nation	Value of Transaction (USDmil)	Acquiror Ultimate Parent Nation	Target Ultimate Parent Nation
1	06/11/20	Unilever NV	Unilever PLC	United Kingdom	81,056.459	United Kingdom	Netherlands
2	11/30/20	IHS Markit Ltd	S&P Global Inc	United States	43,478.099	United States	United Kingdom
3	09/13/20	Arm Ltd	Nvidia Corp	United States	40,000.00	United States	Japan
4	12/12/20	Alexion Pharmaceuticals Inc	AstraZeneca PLC	United Kingdom	39,306.765	United Kingdom	United States
5	08/02/20	Speedway LLC	7-Eleven Inc	United States	21,000.00	Japan	United States
6	02/27/20	Thyssenkrupp AG-Elevator Tech	Thyssenkrupp AG-Elevator SPV	United Kingdom	18,711.88	United States	Germany
7	08/02/20	Varian Medical Systems Inc	Siemens Healthineers AG	Germany	16,364.572	Germany	United States
8	06/23/20	ADNOC Gas Pipeline Assets LLC	Investor Group	United States	10,100.00	United States	United Arab Emirates
9	08/21/20	Nipsea Pte Ltd	Nippon Paint Holdings Co Ltd	Japan	9,922.006	Japan	Singapore
10	11/05/20	RSA Insurance Group PLC	Regent Bidco Ltd	United Kingdom	9,202.929	Canada	United Kingdom

Chapter 2
ESG and Emerging Market Multinationals

Lourdes Casanova, Senior Lecturer and Gail and Rob Cañizares Director
Anne Miroux, Faculty Fellow
Emerging Markets Institute, Cornell University, United States

Executive Summary

Over the past ten years ESG—which stands for Environment, Social, and Governance—has come into the limelight. ESG is rooted in corporate social responsibility (CSR), a construct that emerged about 70 years ago and marked the starting point for businesses taking ownership of their impact on society. Following a brief discussion of the historical context surrounding the emergence of ESG, this chapter examines ESG's growing influence in emerging markets and dives into the ESG performance of emerging market firms. We highlight the specificities of the emerging market environment and the need to ensure that emerging market firms are fully integrated in the ESG movement. Also, we present the top ESG EMNCs performers.

2.1. From CSR to ESG: A historical perspective

Although concerns about the impact of business on society are not new—consider, for instance, the development of corporate philanthropy in Europe and the US in the late 19th and early 20th centuries—it is the increasing power of corporations in the post-WWII era that brought the idea of socially responsible business practices to the forefront. The concept of corporate social responsibility first appeared in 1953 when Howard R. Bowen, in "Social Responsibilities of the Businessman", defined the social responsibilities of business executives as "the obligations of businessmen to pursue those policies, to make those decisions, or to follow those lines of action which are desirable in terms of the objectives and values of our society" (1953, p. 6). Bowen was ahead of his time[8]: in the following decades and through the 1980s, CSR remained mostly a theoretical concept, and support for corporate social responsibility was far from unanimous. Some actually dispelled the notion of CSR, including Milton Friedman, the 1976 Nobel Laureate in Economics, for whom the "The Social Responsibility of Business is to Increase its Profits" as the title of his famous 1970 article states (1970)[9].

CSR began to gain ground in the 1970s, particularly in the United States, and a significant body of literature on CSR and related concepts was published in the following decades[10]. The 1970s were also a decade of intense activity at the international policy level on matters related to corporate responsibility. In 1976, OECD members adopted the OECD Guidelines for Multinational Enterprises, a landmark development and the most comprehensive standards to date on responsible business conduct (OECD, n.d.)[11]. In 1977, the International Labour Organization (ILO) adopted the ILO Tripartite Declaration of Principles Concerning Multinational Enterprises and Social Policy. It is also during this period that the negotiations on a United Nations Code of Conduct on Transnational Corporations began.[12]

The liberalism wave of the 1980s gave a boost to CSR, and, as a result of the rapid globalization in the 1990s, this concept became popular and expanded globally. Significant advances towards CSR in business practices were made in this decade (Carroll, 2008), and many companies from advanced economies began publishing CSR reports. Business initiatives were launched, such as the 1997 Global

[8] See: Acquier, Gond, and Pasquero, 2011.
[9] See also: Friedman's Capitalism and Freedom (1962): «few trends could so thoroughly undermine the very foundations of our free society as the acceptance by corporate officials of a social responsibility other than to make as much money for their stockholders as possible' (1962: 133).
[10] There is an extensive literature on corporate social responsibility, its history and evolution. For a review, see among others, Agudelo, Johannsdottir and Davidsdottir (2019) and Caroll (2008).
[11] The OECD guidelines cover a wide variety of issues, such as human rights, labor rights, environment, bribery, consumer interests, as well as information disclosure, science and technology, competition, and taxation. They provide non-binding principles and standards for responsible business conduct, but governments have the obligation to put in place National Contact Points (NCPs) to promote the Guidelines and provide a platform for mediation and conciliation in cases of corporate non-observance. Today, all OECD governments have an NCP. (OECD, n.d.)
[12] The draft UN Code contained provisions on, among others, adherence by transnational corporations to development objectives, socio-cultural goals and values of the host countries, respect for human rights and fundamental freedom, abstention from corrupt practices, and consumer and environmental protection. The UN negotiations however never came to fruition, partly due to the wave of liberalism of the 1980s. They were officially dropped in 1993.

Reporting Initiative, an independent organization set up to create the first accountability mechanism on environmental conduct principles[13].

In 2000, the United Nations adopted the Millennium Development Goals (MDGs), that were aimed at tackling poverty and hunger, enhancing education and health, promoting gender equality, and ensuring environmental sustainability. That same year saw the launch of the UN Global Compact (UNGC), a corporate sustainability initiative that called upon companies to "align strategies and operations with universal principles on human rights, labor, environment, anti-corruption and take actions that advance societal goals" and defined 10 principles of corporate behavior that focused on human rights, labor, environment, and anti-corruption (UNGC, n.d.). In the early 2000s, one of the first initiatives in the area of sustainable finance was the Equator Principles (EP), a voluntary risk management framework. Adopted in 2003 by a group of financial institutions led by the International Finance Corporation (IFC) and the World Bank, the EP aimed to assess and manage environmental and social risk in investment projects[14]. With the launch of the MDGs, the UNGC, and initiatives such as the EP, corporate social responsibility gained greater recognition and broader acceptance.

Box 2.1: ESG in the "Who Cares Wins: Connecting Financial Markets to a Changing World" report

The ESG concept is mentioned for the first time in the 2004 report "Who Cares Wins: Connecting Financial Markets to a Changing World". Calling for ESG to be incorporated by financial analysts and institutions in their evaluation of firms, the report states for instance the following:

« Analysts are asked to better incorporate environmental, social and governance (ESG) factors in their research where appropriate and to further develop the necessary investment know-how, models and tools in a creative and thoughtful way ».

Source: Authors based on UN Global Compact et al. (2004)

By the early 2000s, the need for more concrete action —beyond concepts, principles, and informal CSR reporting — became increasingly pressing. ESG first emerged here, coined in the 2004 report titled "Who Cares Wins: Connecting Financial Markets to a Changing World" (UN Global Compact, 2004). The report was the result of joint efforts by financial institutions invited at the initiative of the United Nations Secretary General to develop recommendations to better integrate environmental, social, and governance (ESG) issues in analysis, asset management, and securities brokerage[15] (Box 2.1). ESG is at the core of the Principles for Responsible Investment (PRI), a set of six principles developed in 2006 by investors for investors and supported by the UN Environment Program Finance Initiative and the UN Global Compact. The PRI aims to encourage institutional investors and asset managers to incorporate ESG issues into investment decision-making and ownership policies and practices. As of August 2021, there were 2,700 PRI participants.

Covering various issues from environmental concerns (e.g., contribution to climate change and resource management), to labor practices, product safety, and data security, and governance, ESG offers a means of assessing enterprises beyond their market value and financial performance (Figure 2.1).

While CSR concerns accountability principles and strategy, ESG focuses on measurement and has been quickly adopted as a key concept in sustainable finance. Its prominence is largely due to investors and asset managers, as well as because of the demands of consumers and employees looking for factual information that would enable them to better gauge the commitment of businesses to sustainable development. With benchmarks and measurements at its core, ESG needs to be fully integrated into business strategy from the start — not as an afterthought — to be successful.

[13] The scope was later expanded to include social, economic, and governance issues. Further, in 2000 the GRI launched the first version of its guidelines for sustainability reporting

[14] The principles are based on the IFC's Environmental and Social Performance Standards. From 10 initially, the number of financial institutions that have joined the initiative has increased to 127. (IFC, Performance standards, n.d. and IFC, Equator Principles Financial Institutions, n.d.)

[15] Work on the recommendations included in the report continued in the following year. See the 2005 report "Who Cares Win: Investing in Long Term value", supported by the IFC, the Federal Department of the Foreign Affairs of Switzerland, and the Global Compact, IFC (https://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/sustainability-at-ifc/publications/publications_report_whocareswins2005__wci__1319576590784)

Figure 2.1. Main ESG Components

Source: Authors.

2.2. ESG at center stage in a post-COVID world

The business community's adoption of ESG took off during the 2010s when the number of S&P 500 Index companies publishing sustainability reports increased from 20% to 90% (Governance & Accountability Institute, 2020), and many international standards and reporting frameworks emerged. The drive for better business was also reflected in the international expansion of the B Corps movement during the period (Marquis, 2020)[16].

The 2015 UN Sustainable Development Goals (SDGs) were a landmark development, contributing significantly to the increasing awareness of the sustainability challenge and reflecting the growing involvement of states in sustainability matters. Replacing the Millennium Development Goals, the SDGs provided a roadmap for a sustainable future by addressing the global challenges of poverty, inequality, climate change, environmental degradation, peace, and justice. Based on governments' commitments to achieving sustainable development in its three dimensions – economic, social, and environmental – the SDGs have reinforced the role of the state as a key player in each of these dimensions. The SDGs have also informed ESG since many of the ESG standards and reporting frameworks rely on the SDGs on a foundational basis.

ESG also benefited from several government initiatives that increasingly demanded that investors ESG into account. In 2014, the European Union (EU) adopted a directive that required large companies of public interest to disclose non-financial and diversity information starting in 2018 (Non-Financial Reporting Directive (NFRD) Directive 2014/95/EU). The E.U.'s Action Plan on Sustainable Finance — a 2018 policy initiative aimed at reorienting capital flows towards sustainable investment, mainstreaming sustainability in risk management, and fostering transparency — has led to a package of new and enhanced regulations. Further, in December 2019, the president of the EU Commission announced the "European Green Deal" that aimed to achieve net zero emissions of greenhouse gases in the European Union by 2050.

Since early 2020, the COVID-19 pandemic has brought inequalities to the forefront, highlighting disparities in access to healthcare, while climatic events have reinforced the urgency regarding climate change. This combined has led to increased scrutiny of companies' sustainability performance, with ESG issues becoming strategic business imperatives.

[16] B Corp certification requires companies to demonstrate high social and environmental performance, accountability and transparency. Certification is conferred by B Lab, a global nonprofit organization. The first B Corps were certified in 2007; by 2021 there were 3700 companies across 74 countries with B Corp certification. For a study of the history, goals and struggles of the B Corp Movement see Marquis (2020)

The significant increase in funds flowing into ESG mandated assets illustrates the changes taking place. In 2020, global investment in ESG assets amounted to more than USD35 trillion, a 15% increase over two years, according to the Global Sustainable Investment Alliance (GSIA, 2021). It is expected to exceed USD50 trillion by 2025, or more than a third of the global assets under management (CRISIL, 2021). Green bonds, launched in 2007, are another example. After a slow start, demand for green bonds has risen sharply since 2016, as discussed in Chapter 7, exceeding USD 1 trillion by the end of 2020, twice the size of the market two years prior (CRISIL, 2021). In March 2021, 30 of the world's largest asset managers launched the Net Zero Asset Managers Initiative, aiming to achieve net-zero carbon emissions across their portfolios by 2050, with interim targets for 2030.

Over the past two years, policymakers have taken further steps to promote sustainability. In April 2021, the European Union put forward a proposal for a Corporate Sustainability Reporting Directive (CSRD) that would significantly enhance the existing reporting requirements of the EU's NFRD, broadening the range of companies required to report, providing more detailed reporting rules, and developing sustainability reporting standards. This ambitious package of measures aims to increase investments in truly sustainable activities. In April 2021, the EU also reached a deal among its members – all of whom pledged to a goal of 55% emission reduction by 2030 as the first step towards carbon neutrality by 2050. The U.S., the second-largest carbon emitter in the world after China, re-entered the Paris Agreement on Climate Change and pledged carbon neutrality by 2050. The U.S. Securities and Exchange Commission (SEC) has also proposed to enhance the ESG disclosure requirements. In March 2021, China committed to carbon neutrality by 2060 – a notable move for such a large economy, largely dependent upon coal and fossil energy and currently the largest carbon emitter. Further, its Securities Regulatory Commission (CSRC) published new Environmental and Social Disclosure Rules for listed companies in May 2021. To date, among the E20+1, Argentina, Brazil, Chile, South Africa, and Turkey have committed to reaching carbon neutrality by 2050, and Indonesia, Russia, and Saudi Arabia by 2060. India has pledged to achieve carbon neutrality by 2070.

In October 2021, an agreement was reached at the OECD among 130 countries and jurisdictions on a reform of the international tax system for a fairer distribution of profits and taxing rights among countries with a minimum corporate tax of 15% (OECD, 2021). Time will tell what the impact of such a deal on ESG practices will be, especially with regards to corporate governance.

2.3. ESG and emerging markets

Emerging markets are showing a growing interest in environmental, social, and governance (ESG) issues. Today, emerging market multinationals are becoming increasingly receptive to sustainability-related issues as well as the need to incorporate ESG into their business.

2.3.1. Trends and drivers

The interest in ESG in emerging markets manifests in several developments illustrated in this section. For instance, the number of PRI signatories from emerging economies has increased significantly, by 50% in 2020 alone (Saa, 2021), accounting for about 12% of all signatories today. Emerging market firms also account for about 23% of the Global Compact business signatories[17]; Brazil alone had 714 Global Compact signatories as of September 2021, Mexico 490, China 430, and Colombia 322. By comparison, other than France (1,342), and Germany (589), signatories from major advanced economies such as the U.S. (373), Japan (338), and the U.K. (426) reach, at best, a little more than 400. ESG take-up in emerging markets is also evident in the growing number of reporting provisions on sustainability issues in emerging countries. As of 2020, Argentina, Brazil, China, Colombia, India, and South Africa are among those with the largest number of ESG reporting provisions, with their number exceeding or getting close to the E.U average (Carrot & Sticks, 2020; see also Chapter 7 in this report).

Of the 108 partners of the Sustainable Stock Exchange (SSE) Initiative[18] in 2021, almost 50 belong to emerging and developing economies, and 25 of them are in the "E20+1" group alone. As of August 2021, 26 members of the Initiative had ESG reporting as a listing rule compared to 16 in 2018 and, of these, 13 were emerging economies (Table 2.1). Additionally, of the 75 SSE members that have published guidance on reporting, almost half are in emerging markets, mainly in Asia and Africa. Notably, out of the top 10 leaders in sustainability disclosure among SSE partners, two were from emerging markets in 2018: Thailand (the Stock Exchange of Thailand, ranked 7th) and South Africa (the Johannesburg Stock Exchange, ranked, 8th) (SSE, 2018). The growth of sustainability indexes — which track companies' performance based on ESG or sustainability-related indicators — further illustrates this trend: as of 2021, 44 stock exchange partners of the SSE Initiative offered sustainability indexes, about half of which were in emerging markets (with 17 of them in the "E20+1" group) (Table 2.1). Moreover, major agencies and financial organizations — such as Bloomberg, S&P, and FTSE — feature indexes that specifically target emerging markets, such as the MSCI Emerging Markets ESG Leaders Index, the Dow Jones Sustainability Emerging Markets Index, and the FTSE Emerging ESG Index.

[17] Includes companies and SMES

[18] The Sustainable Stock Exchange Initiative is a global platform, organized by UNCTAD, the UN Global Compact, UNEP, and the PRI for exploring how stock exchanges can enhance performance on ESG issues and encourage sustainable investment.

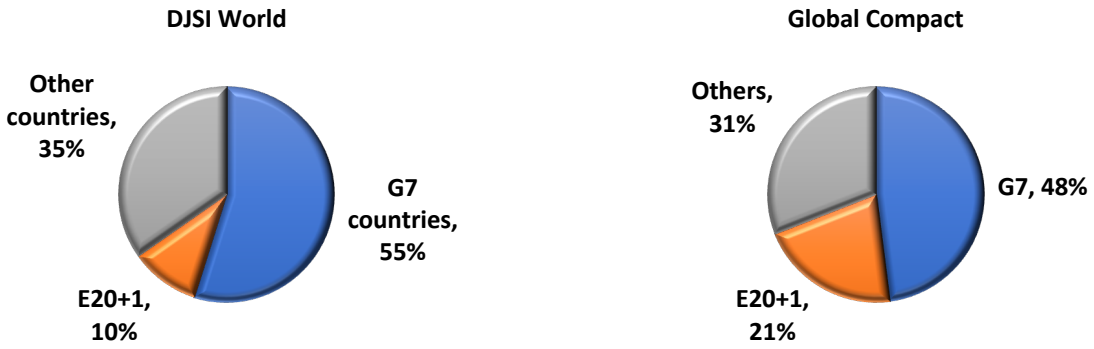
In global sustainability indexes, such as the Dow Jones Sustainability World Index (WDJSI)[19], companies from the "E20+1" countries make up about 10%; it reaches 21% on the Global Compact 100, a list of top 100 companies that are part of the United Nations Global Compact and are committed to implementing the 10 UN Global Compact Principles (Figure 2.2).). A few emerging economies stand out, such as Thailand with 12 firms in the World DJSI, the same as the Netherlands and just behind Switzerland, and not far from other major developed economies such as Germany, Italy, and Spain. Further, Brazil (7) and Colombia (6) are close to Sweden, Finland, and Canada (Table 2.2).

Table 2.1. Stock Exchanges partners of the Sustainable Stock Exchange Initiative

	All stock exchanges	Stock exchanges based in "China + E20" group
Total Sustainable Stock Exchange partners	108	25
with guidance on ESG reporting	75	33
with ESG reporting as a listing requirement	26	13
covered by a sustainability related index	44	21
Top 10 leaders in ESG disclosure	10	2

Source: Authors, based on data from SSE Stock Exchange Database (https://sseinitiative.org/exchanges-filter-search/, accessed September 2021)

Figure 2.2. Presence of "E20+1" in the World DJSI and the Global Compact 100



Source: EMI Research team, based on data from https://eu.spindices.com and https://www.unglobalcompact.org/, accessed by June, 2020

Table 2.2. Number of firms per country in DJSI World

#	Country	No of Firms
1	United States	59
2	Japan	33
3	France	25
4	United Kingdom	24
5	South Korea	19
6	Australia	18
7	Spain	16
8	Taiwan, ROC	15
9	Germany	14
	Italy	14
11	Switzerland	13
12	Netherlands	12
	Thailand	12
14	Brazil	7
15	Canada	6
	Finland	6
	Sweden	6
18	Colombia	5
19	India	3
20	Portugal	2
	Singapore	2
	Chile	2
	South Africa	2
24	Austria	1
	Hungary	1
	China	1
	Belgium	1

Source: EMI research team based on data based on data from https://eu.spindices.com, accessed in June 2020

Several forces drive the growing interest in ESG, including in emerging countries.

- **Public opinion**, especially in countries with a large middle class such as in China, India, Thailand, Brazil, and Mexico. Today's consumers are more environmentally conscious and socially aware of the products and services they consume. The global reach and increasing influence of emerging market multinationals put them under increasing scrutiny, and the force of social and other media vastly accentuates the risk of hurting their reputation if they fail. Similar to developed economies, in addition to shareholders, stakeholders in emerging economies are pushing corporates to emphasize and pursue ESG policies. With the advent of social media, corporates can no longer easily ignore public opinion as it would tarnish their brand names.
- **Access to finance**. ESG is becoming an important factor in investment decisions. Investors are increasingly demanding for investments that are aligned with their values and are considering the impact of such investments on society at large. Additionally, policy measures aimed at channeling finance into truly sustainable investment – such as the 2019 European Union Sustainable Finance Disclosure Regulation – push financial market participants and advisers to integrate sustainability risks in investment-decision making processes. Initiatives by stock exchanges that require ESG reporting from their listed

[19] The Dow Jones Sustainability World Index comprises a list of the world's leading sustainable companies in terms of their environmental, social, and economic criteria, established by S&P Dow Jones and the firm Robeco Sam. These firms are selected on the basis of their Total Sustainability scores. The information in this section is based on the list available as of June 2020 that included319 companies.

companies add to the pressure. Many companies in emerging countries also rely on external funding. Over time, these companies may have to comply with stricter guidelines than those required at home to have access to overseas asset managers who may be bound by their ESG domestic regulations. Emerging markets account for only about 4% of all ESG assets under management. However, the convergence between the interests of emerging market firms to access international capital markets and those of investors looking for investment opportunities in emerging economies will likely lead to further adoption of ESG standards by emerging market firms. According to the World Bank, emerging markets accounted for about one-sixth of the total thematic green, blue, social, and sustainable bonds issued in 2020 (Jae Ho Kim, 2021).

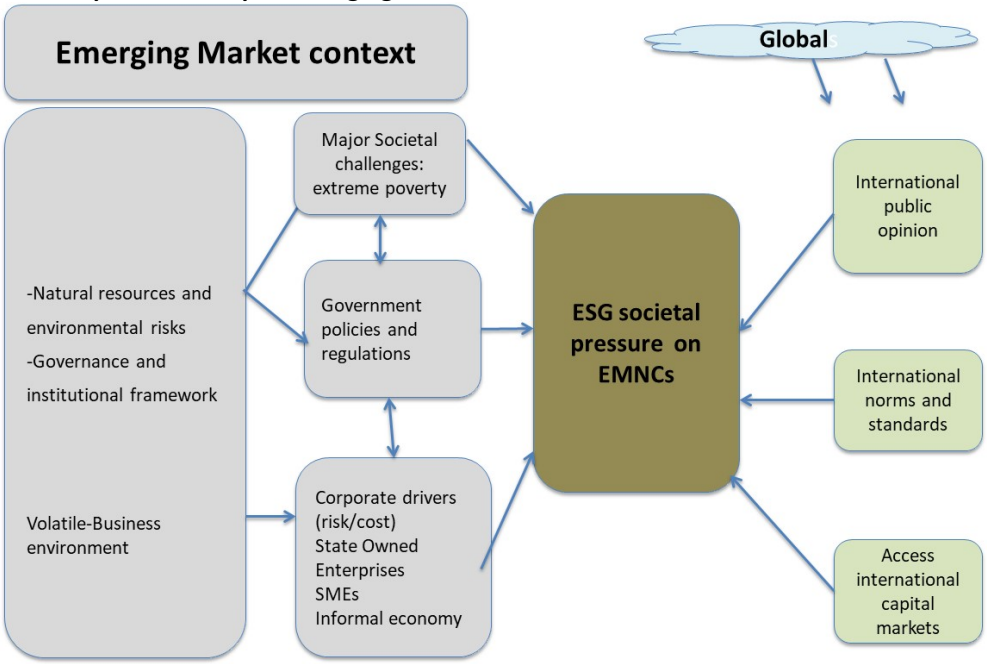
- **Domestic policies** aimed at encouraging firms to move forward on the ESG front. While a government may sometimes be altruistic and planning for the long term, at other times it may have a political motive. For example, if a country suffers from high levels of poverty or extreme inequality, politicians might benefit from addressing the issues important to voters, including via stricter ESG regulations on companies.

All the above add to corporate internal factors, such as risk and cost management, which are of prime importance in leading companies to incorporate ESG into their business strategy. Many studies show a strong correlation between ESG and corporate financial performance (Friede, Busch, and Bassen, 2015; Whelan, Atz, Vaholt, and Clark, 2021; Chapter 8 in this report). For instance, one of the most comprehensive empirical research on the issue found a positive correlation in almost 63% of meta-studies and 48% of vote-count studies[20] (Friede, Busch and Bassen, 2015). The research also found a very strong link in emerging markets with a positive correlation in 65% of the cases (on a vote-count basis).

2.3.2. ESG policies in emerging economies: Moving forward

Governments in many emerging economies have stepped up efforts to promote better integration of ESG factors in their companies' investment decisions by introducing new regulations and legal frameworks encompassing ESG issues. Chapter 9 in this Report illustrates this trend – in particular, in the case of sustainable finance – through a variety of examples. Country case studies annexed to this chapter (Annex I) also show the importance of ESG regulation in South Africa and the renewed efforts made by the country in this area, the policy drive in Thailand to promote ESG practices and reporting, the push in China over the past five years, and steps taken by India. In Brazil, the situation is more complex.

Figure 2.3. Drivers of ESG corporate take up in emerging markets



Source: Authors

2.4. Reviewing the ESG performance of EMNCs

This section aims to explore the ESG performance of emerging market multinationals by analyzing their rating scores from external data providers. We considered firms from emerging economies with at least USD 1 billion in revenue. The original sample included

[20] In this research, "Vote-count studies count the number of studies with significant positive, negative, and non-significant results and "votes" the category with the highest share as winner "(Friede et al. 2015, p.211).

2,256 emerging market firms (companies bigger than USD 1 billion of revenue, and with an ISIN), of which 1,132 met our selection criteria regarding the availability of three or more rating scores (see the methodology described in Annex II). Based on an average of the scores published by several of the most important ESG data providers, we established a list of the top 200 ESG performers (Annex II Table 5).

This exercise should be considered a work in progress for the following reasons:

- Several firms are not included in ESG ratings due to a lack of information. This is particularly the case for state-owned enterprises (SOEs) and private firms, less subject to public disclosure requirements.
- In other cases, the data provided may not fit the requirements of the rating agencies (see below).
- Most of the rating agencies considered for our exercise cover less than half of our initial data sample (see Annex II Table 2).

Hopefully, over time a consistent global framework for ESG performance assessment will be established.

In the meantime, a few remarks can be made based on the results of our research:

- China tops the list, based on the number of firms in the top 200 ESG emerging market performers. However, while China accounts for 58% of the original data sample (Annex II Annex II Table 1), its presence in the top 200 ESG EMNCs performers - at 26% — is less significant (Annex II Annex II Table 5). This reflects the fact that many Chinese firms either do not provide information, particularly SOEs, or the scope and quality of the information disclosed does not meet the requirements of major rating agencies. For instance, according to a study by Ping An, 85% of the companies in the Chinese Securities Index (CSI 300) release an ESG report, but only 12% have audited reports (Ping An, 2020). On average, the scope and quality of the ESG disclosure among the CSI 300 companies is the lowest among those included in the major stock market indexes, such as S&P 500 (U.S.), FTSE100 (U.K.), Nikkei 225 (Japan), ASX200 (Australia), Hang Seng (Hong Kong), and KOSPI200 (Korea) (Ping An, 2020).
- Particularly interesting are the cases of South Africa and Thailand. These countries account for barely 3% of the initial sample based on revenues (Annex II Annex II Table 1) but they are being ranked fourth and second, respectively, in the 200 best ESG EMNCs performers (Annex II Annex II Table 5). Both countries have a relatively well-developed ESG regulatory framework (see Annex I). Thailand also has a large number of firms in the world DJSI, as previously mentioned.
- Brazil ranks third, a result that also aligns with its presence in the Dow Jones Sustainability Index (DJSI) ranking (see above).

Looking more specifically at each of the ESG pillars, Chinese firms are ranked first with a 31% share in the environmental pillar, followed by Brazil (2nd) and Thailand (3rd) (Annex II Annex II Table 6). These 3 countries alone account for 60% of the first percentile (representing the 40 best performers) in the environmental pillar. The best performers under the social pillar are spread out across more countries. Chinese, Thai, Indian and Brazilian firms account for more than half of the list (Annex II Annex II Table 7). Finally, in the governance pillar, China dominates, accounting for more than 40% of the best 200 performers (Annex II Annex II Table 8).

As evident by the composition of the list by sector, the financial sector accounts for the largest share with 23% of the top 200; followed by consumer staples (12.5%), materials (11%), industrials (9.5%), consumer discretionary (8%), and energy (8%) (Annex II Figure 1).

With the same methodology used for our list of the top 200 Emerging Market ESG performers, we examined how firms from emerging markets fared globally. Source: EMI research team. Results can be found on EMI EMNC Rankings.

Annex II Table 10 in Annex II lists the number of firms by country in the top World 200 ESG Performers. EMNCs account for about 10% of all top World 200 ESG performers. Yet, here again, a few emerging economies – Brazil, China, India, South Africa, and Thailand, in particular – rank well in the environmental and social pillars, as do Chinese firms in the governance pillar. The presence of the "E20+1" group is more prominent in the social pillar (16.5% of the top World 200 ESG performers in the social pillar); its share in the governance pillar amount to 11.5% and 7.5% in the environment pillar, the latter possibly reflecting the importance of the energy sector in emerging economies. A few examples in this report (Bancolombia, Natura & Co., and Latam Airlines, in Chapter 8; Mahindra in Chapter 4; and "Selected Companies "in Annex II) validate emerging market firms' attention to ESG-related issues.

Our analysis vividly highlights the information gap on ESG issues in emerging markets. The following section explores the reasons behind this gap.

2.5. Challenges in assessing ESG performance in emerging markets

The challenges in assessing the ESG performance of EMNCs are rooted in, first, the intrinsic weaknesses of the prevailing ESG rating system, and second, in the specificities of emerging economies and their business sectors.

2.5.1. Intrinsic challenges of ESG rating systems

The shift in focus from concepts, principles, and strategy to measurement and performance assessment (Section 3.1) led to increased demand for means to assess the ESG performance of firms. An increasing number of organizations – some of which have been providing information on CSR and responsible investment for years, others newly emerging – have developed metrics on each of the ESG pillars and overall rating scores. As of 2016, according to the Global Initiative for Sustainability Ratings, there were more than 125 ESG data providers, each with its data sourcing, research, and scoring methodologies.

Box 2.2: A (non- exhaustive) list of ESG-related international reporting standards and frameworks

CDP (Carbon Disclosure Project) Guidance and Questionnaires
CDSB (Climate Disclosure Standards Board)
Financial Stability Board Task Force Recommendations on Climate-Related Financial Disclosures (TCFD)
Global Reporting Initiative (GRI) Standards
ICMA (International Capital Market Association) Harmonized Framework for Impact Reporting
ICMA Green Bond Principles (Voluntary Process Guidelines for Issuing Green Bonds)
IFC Performance Standards
IRIS Global Impact Investors Network Impact Investing System
International Integrated Reporting Council (IIRC) Framework
International Standardization Organization Standards (e.g., ISO 26000; 14001)
OECD Guidelines for Multinational Enterprises on Anti-Bribery & Corruption
Principles for Responsible Investment (PRI)
Sustainable Accounting Standards Board (SASB) Standards
United Nations 2030 Agenda for Sustainable Development
United Nations Global Compact Initiative
United Nations ILO Declaration on Fundamental Rights and Principles at Work
United Nations International Bill of Human Rights
United Nations Paris Climate Change Agreement Treaty
United Nations Guiding Principles Reporting Framework on Human Rights
United Nations Principles for Responsible Banking - Portfolio Impact Tool and Corporate Impact Tool

Source: Authors

This lack of consistency across ESG data providers creates unique challenges in assessing ESG performance. Particularly challenging is the diversity of issues covered under the ESG acronym since, due to a lack of regulation, there is no agreement on what the term should encompass. Since there is no mandatory reporting with specific standards and metrics, multiple organizations have established their ESG reporting frameworks. A number of these frameworks are business-led initiatives — the Carbon Disclosure Project (CDP); the Financial Stability Board Task Force Recommendations on Climate-Related Financial Disclosures (TCFD); the International Integrated Reporting Council (IIRC); the Global Reporting Initiative (GRI);, and the Sustainable Accounting Standards Board (SASB), just to name a few — sometimes supported by international organizations as in the case of the above-mentioned Global Compact Initiative (GRI) and the Principle on Responsible Investments (PRI). Others have been agreed upon amongst governments, such as the OECD Guidelines for Multinational Enterprises on Anti-Bribery & Corruption; the United Nations Guiding Principles Reporting Framework on Human Rights; and the European Commission Guidelines. Some frameworks focus on very specific issues such as human rights or climate change, while others have a much broader scope. Box 2.2 provides a list of international reporting standards and frameworks. Though non-exhaustive, this includes no less than 20 instruments. The system is hence fragmented, and the proliferation of frameworks is a burden for both firms and stakeholders, leaving neither satisfied.

The multiplicity of reporting frameworks not only results in the emergence of numerous data providers, as noted above, but the lack of standardization in data collection —with regard to, for instance, materiality (as shown for instance in the opinion piece on "ESG reporting: key challenges and the way forward" in this report) , timing, estimation, sources, methodologies, weighing, and aggregation —— can also lead to widely different ratings. In our analysis, we found, for instance, that the correlation among ESG scores across

databases is relatively low at 0.35 (Annex II.2 to this chapter). Since data providers often rely on proprietary methodologies, assessing and comparing the final ESG scores is difficult, which adds to concerns about the quality of the evaluations performed.

Additionally, the system largely relies on self-disclosure, and companies understandably tend to report on what they are willing to, or what is easier for them to disclose. They may not have the data collection procedures required to collect detailed data, or the necessary expertise or knowledge to develop and calculate proper indicators. Smaller-sized companies, in particular, may not have the financial and/or human resources needed to produce the various data required for the assessment of their ESG performance. Such firms, especially in emerging markets, maybe less compliant in reporting than others, which does not necessarily mean they have worse ESG practices.

All this undermines efforts to enhance corporate ESG performance and fuels the suspicion of greenwashing. To enhance the convergence of frameworks and standards, many business-led initiatives have been launched. Such initiatives include, for instance, the announced merger in November 2020 of the International Integrated Reporting Council (IIRC) and the Sustainability Accountability Standards Board (SASB); another example is the commitment made in late 2020 by the five large nonfinancial reporting standards setters (CDP, CDSB, GRI, IIRC, and SASB) to work together towards a comprehensive corporate reporting system. In November 2021, at COP 26, the International Financial Reporting Standards (IFRS) Foundation also announced the formation of the International Sustainability Standards Board (ISSB) to develop comprehensive global sustainability disclosure standards to meet the information needs of investors (IFRS, n.d.). Further, Governments are taking significant steps. Significant work takes place in the OECD Committee of Financial Markets to monitor developments in ESG ratings and investing (Boffo and Palatano, 2020). Building on their respective work on green standards and frameworks, the European Union and China are working together —under the auspices of the International Platform on Sustainable Finance— towards a common-ground green taxonomy (Wang & Han, 2021). The UN is also making efforts to create a broad and universally recognized set of measurement and reporting criteria. For instance, the United Nations Conference on Trade and Development (UNCTAD) is developing core indicators for entity reporting on contributions towards implementing the SDGs to facilitate data harmonization and comparability (Box 2.3). It remains to be seen whether all these will lead to a common framework for assessing the business impact on society and sustainability.

Box 2.3 UNCTAD Guidance on core indicators for entity reporting on the SDGs (GCI)

Global core indicators (GCI) for entity reporting on the SDGs have been developed by the UN Intergovernmental Working Group of Experts on International Standards of Accounting and Reporting (ISAR) – a subsidiary body of the UN Economic and Social Council (ECOSOC) responsible for promoting international harmonization of enterprise accounting and reporting coordinated by UNCTAD. The initiative was launched in 2016 with the aim of facilitating harmonization and comparability of data for the private sector's contribution towards the implementation of the SDGs. The initiative resulted in the publication of the "Guidance on core indicators for entity reporting on contribution towards Implementation of the SDGs" in 2019 (also referred as GCI), based on consultations with member states and key players in sustainability and ESG reporting (UNCTAD, 2019a).
The GCI contains 33 universal indicators considered indispensable to assess the economic, environmental, social, and governance impacts of companies' activities. These are common to any business: they focus on a rational use of resources (such as water, energy, air; materials) and waste reduction; social issues and gender equality; as well as governance and transparency. For each of the selected core indicators, the GCI provides a definition, measurement methodology, and accounting sources of data collection.
Since its launch, the GCI has been pilot tested in more than 25 cases in 17 countries that represent different geographical regions, various levels of economic development, different industries, and types of companies, including SMEs. The findings reflected that, while most of the companies could provide data on most of the indicators, they faced challenges, particularly in the environmental area. This was due to lack of data and systems to keep records, lack of technical expertise, regulatory deficiencies, and poor institutional coordination, among other reasons.

Source: Authors based on UNCTAD's Guidance on core indicators for entity reporting on contribution towards implementation of the SDGs and ISAR discussions on this topic at its 36th and 37th annual sessions (UNCTAD 2019b and 2020).

2.5.2. The specific context of Emerging Markets

The challenges outlined above apply to all enterprises. They may be more acute, however, in an emerging market context for the following reasons.

First, the concept of corporate social responsibility (CSR) has often been perceived as a western construct, linked with the notion of capitalism and free enterprise. It was born and developed in the U.S. and most scholars working on it have been affiliated with western universities, particularly in the U.S and U.K. In many parts of the world, CSR has long been an "alien" concept; however, that does not mean that enterprises in those regions did not engage in activities for the good of the community. For instance, many companies in Latin America have a tradition of engaging in CSR (e.g., education, healthcare, and security initiatives) as noted in Chapter 8. However, they do not necessarily communicate about such initiatives, let alone brand them as ESG.

Contextual factors —such as the political system, ideology, culture, and values —influence CSR implementation as well as the level of CSR reporting. In countries where the government plays a major role in the economy, the good of the community is entrusted to the government; the latter is supposed to create the appropriate environment and take the necessary actions to achieve it. In such a

context, firms comply with prevailing laws and regulations in social (like minimum wages and diversity issues), environmental and governance areas, and CSR, per se, is of less significance. In others, like in the Middle East, culture influences the way CSR is viewed, leading to the concept often being understood as philanthropy (Tilt, 2016). Finally, mistrust in the political environment, weak regulatory frameworks, and insufficient enforcement of laws and regulations contribute to a lack of transparency. There is ample scope for further research on the impact of contextual factors on ESG in emerging markets (Tilt, 2016).

Characteristics of the corporate sector in emerging markets also contribute to the low level of ESG reporting. One such characteristic is the prevalence of smaller firms, even among multinationals. Except for China, large economies like Brazil, India, and Mexico only have a handful of enterprises in the Fortune Global 500 for instance. As previously mentioned, smaller-sized enterprises do not necessarily have the resources required for proper ESG reporting. Beyond size, the ownership structure is also important. SOEs as well as family-run firms – which are not subject to the reporting requirements that publicly listed have to comply with – are prevalent in emerging economies.

Additionally, while firms from advanced economies have for over 20 years reported on ESG-related matters, this trend is much more recent in the case of emerging markets. The lack of expertise on ESG indicators and guidance regarding what is more material to their ratings, and the lack of understanding of the rationale behind some of these indicators, combined with the confusion created by the plethora of reporting standards, are major obstacles to ESG reporting by emerging market firms, including in China (Ping An, 2020). Furthermore, rating methodologies that do not sufficiently consider industrial specificities may be detrimental to emerging economies that have a large share of pollution-prone industries (oil, mining, waste recycling, etc.).

The severe lack of data is a major obstacle to the assessment of ESG performance of emerging market firms. Numerous organizations have developed activities to enhance sustainability reporting, targeting emerging markets in particular. For example, the IFC has launched initiatives to develop ESG data for capital markets in emerging economies. This includes training tools for financial institutions on managing environmental and social performance, for instance. Further, the Asian Development Bank plans to set up sustainability data sets for companies in emerging economies, while the United Nations – through UNCTAD – holds training programs to familiarize emerging market entrepreneurs with sustainability indicators.

2.6. ESG will be a business priority in the next decade in emerging markets and beyond

The origins of ESG are rooted in corporate social responsibility (CSR), a concept that emerged more than half a century ago. Centered around the social impact of businesses and firms' responsibilities towards society, CSR gave rise to a significant body of literature, guidelines, and principles. Growing awareness of the sustainability challenge in the early 2000s and of the role of business in sustainable development led to increasing calls for concrete action, highlighting the pressing need for performance assessment. ESG emerged here, as a means of measuring sustainability performance. The UN Sustainable Development Goals (SDGs) —which have become the basis of many sustainability initiatives and reporting frameworks — gave a boost to ESG, as did the COVID crisis.

Even though it is less marked than in advanced economies, the increased take-up of ESG is visible in emerging markets. In this chapter, we undertook a quantitative exercise to explore the ESG performance of emerging market firms and arrived at a list of the top 200 ESG performers in emerging markets. While acknowledging the limitations of this exercise — which were largely due to lack of data— we made a few observations. For instance, we noted the comparatively good performance of companies from Thailand, South Africa, Brazil, and China, three of which (China, South Africa, and Thailand) have a relatively developed legal and regulatory ESG framework, at least compared to other emerging market countries.

This exercise also highlighted the challenges of ESG reporting in emerging markets, as many companies (including some large ones) do not feature in the ESG ratings of major data providers. These challenges are due not only to the intrinsic weaknesses of the reporting systems (the wide range of standards being one of them) but also to the specificities of emerging markets and their business environments. Culture, traditions, limited familiarity with CSR and ESG concepts, lack of expertise and understanding of the rationale behind indicators, as well as poor regulatory frameworks are among the contextual factors that, combined with the cost of data collection, stymie the reporting capabilities of emerging market firms in the realm of ESG.

ESG reporting is at the heart of sustainable finance. The ESG reporting challenges faced by emerging market firms are therefore even more prejudicial, as the need for sustainability financing is highest in those markets. Many international organizations and governments are launching initiatives to move toward a common framework for assessing business impacts, familiarizing the business sector with ESG practices, and enhancing ESG implementation in emerging and developing economies. Crucial, too, is the question of a voluntary versus regulatory approach. A trend toward increased regulation has emerged in the past five years, including in some emerging economies, and we may well be heading towards a hybrid system that combines a voluntary and regulatory approach to stimulate the contribution of businesses to sustainable development.

Emerging market firms have risen dramatically since the turn of the century – a phenomenon closely followed over five years' worth of EMI Reports – and are vital to achieving sustainable development. One can only hope that the ESG take-up observed in emerging markets over the past few years will be pursued and that emerging market firms will emerge as global ESG leaders.

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Annex I Emerging countries ESG policies: selected case studies

Annex I.1. - Brazil and ESG Policies[21]

Brazil is the eighth largest economy in the world and has a population of close to 213 million people, out of which 20% live under the poverty line (defined at USD5.50 per day)[22]

Brazil has several policies on environmental, social, and governance issues. Social policies include income transfer programs to reduce poverty and inequality, such as the Bolsa Familia program launched in 2003. More social policies were put in place due to the COVID pandemic, including a targeted and time-bound fiscal package for social assistance, which amounted to approximately 11% of the country's GDP in 2020 (WB, 2021).

Corporate governance regimes are set by Brazilian Corporate Law, and are complemented by regulations from the Brazilian Securities Commission (the CVM Rulings) and the Brazilian Stock Exchange (B3)[23]. However, governance is a controversial topic in the country as transparency and law enforcement are still challenging. International bodies such as OECD have been helping Brazil to address bribery and corruption-related issues (OECD 2017 and 2019), but much work is still needed.

Brazil's ESG focus has largely been on environment due to the country's natural endowments. Brazil's environmental policy includes general environmental regulations as well as specific regulations targeting, for instance, deforestation, ocean pollution, and air quality. Article 225 of the Federal Constitution provides the basis of the nation's environmental policy and states that all people have the right to an ecologically balanced environment. In 1981, the Environmental National Policy set objectives for the preservation, improvement, and repair of the environmental quality. It created the National Environmental System (SISNAMA), which is responsible for safeguarding, regulating, and enforcing environmental quality and established regulatory competencies at the state and local levels. However, environmental protection has weakened over the past three years, spurring global controversies on, for instance, the preservation of the rainforest in the Amazon Basin. According to Biological Conservation, just in two years (2019-2020), the Brazilian government issued over 50 legislative acts weakening environmental protection. There has also been a 72% reduction in environmental fines during the pandemic, despite an increase in deforestation (Vale and al., 2021; Yale Environment 360, 2021).

Brazil has no strict ESG disclosure or compliance requirements for listed companies. However, the Brazilian Securities and Exchange Commission (CVM) requires companies to submit an annual reference form disclosing socio-environmental risks, environmental policy, compliance costs, and company adherence to the Code of Best Practices of Corporate Governance (issued by the Brazilian Institute of Corporate Governance to encourage firms to use governance tools) (SSE, n.d, and IBGC n.d). In 2011, the first edition of detailed sustainability guidelines for companies was released by B3, and followed by a second edition in 2016. To further improve the quality of ESG information disclosed, the CVM launched in December 2020 a consultation on the amount of ESG-related information companies should be required to disclose. Brazil has been a member of the Sustainable Stock Exchange (SSE) Initiative since 2012.

Brazil has also been a regional leader in sustainability indices. In 2000, B3 created the "Novo Mercado," a special listing segment that requires companies to heighten transparency on corporate governance issues. In 2005, B3 released the Corporate Sustainability Index (ISE) to track the performance of companies with a commitment to sustainability practices. The top 200 most liquid firms on the B3 were invited to fill out a questionnaire on their ESG efforts, after which companies that achieved a certain score on the questionnaire were included in the index. Information about the overall and component scores of companies have not been disclosed to the public in the past, but this will change as of January 2022 (B3 ISE, 2021).

Brazil's banking system has made efforts to build a sustainable finance framework. The first standards and regulations were introduced in the 1990s. In 1995, 5 Brazilian banks signed the first framework, Protocolo Verde, a voluntary commitment to consider environmental and social factors in financial decision-making. Private banks and the Brazilian Federation of Banks (FEBRABAN) later joined Procotoclo Verde. Over the following decades, a number of resolutions and regulations were adopted that aimed to establish standards for voluntary reporting on environmental matters, prevent the financing of companies involved in deforestation, and require the issuers of securities to disclose whether and how they implemented environmental and social policies (FIBRAS and al., 2020). In 2014, the Resolution on Social and Environmental Responsibility for Financial Institutions created a list of principles that financial institutions should consider when developing ESG policies (IFC and SBN, n.d). In 2020, Brazil's central bank, the BCB, joined the Central Banks and Supervisors' Network for Greening the Financial System (NGFS). It also announced that sustainability would be integrated in the bank's strategic plan, including in future regulatory changes. In September 2021, Brazil's central bank published new ESG regulations for the National Financial System (Trench, Rossi and Watanabe, 2021).

A large number of Brazilian companies are signatories of the UN global Compact: 799 as of September 2021, the largest number among emerging economies and one of the largest globally (France, Germany, the U.K. and China have 1342, 589, 430 and 426 respectively).

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[21] The contribution of Vineetha Pachava and the EMI Research team (in particular Maria Alejandra Perez) is gratefully acknowledged

[22] Based on World Bank data, Brazil Poverty and Equity brief, https://databank.worldbank.org/data/download/poverty/33EF03BB-9722-4AE2-ABC7-AA2972D68AFE/Global_POVEQ_BRA.pdf

[23] B3 S.A. (or Brasil, Bolsa, Balcão - in English: *B3 - Brazil Stock Exchange and Over-the-Counter Market*), formerly BM&FBOVESPA, was born out of the merger between São Paulo Stock Exchange (Bovespa) and the Brazilian Mercantile and Futures Exchange (BM&F),

Brazil also counts 104 signatories of the PRI as of September 2021, again the largest number among emerging economies and a relatively large one at the global level.

However, a series of events in recent years have significantly affected the public perception of Brazil's ESG performance. Three of its largest companies – the meatpacker JBS, the oil company Petrobras and the mining corporation Vale – have been involved in major corruption scandals or environmental disasters (WSJ 2021, and Reuters 2020), while a number of measures taken by the current government have been detrimental to its public image on the environmental front.

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Annex I.2. - India and ESG policies[24]

India, the fifth largest economy in the world by GDP and the second largest populated country, with 13% of its population in extreme poverty (defined at 1.90 USD per day)[25], is one of the countries most vulnerable to climate change and natural disasters (Eckstein et al. 2019). Over the years, the government has adopted a number of policies to address challenges in the environment, social and governance areas. Measures have been put in place to, among others, push for the adoption of electric vehicles, promote renewable energy, reduce CO2 emissions, improve access to clean water and sanitation; promote healthcare, education and women empowerment; and tackle corruption.

Though still at a nascent stage, the integration of ESG into business practices is gaining traction in the country, partly due to a policy push over the past few years specifically targeting corporate responsibility. The scope of ESG policies has widened, and the approach has been progressively moving from voluntary to mandatory.

The Ministry of Corporate Affairs (MCA) and the Securities and Exchange Board of India (SEBI) have played an important role in promoting ESG. The MCA started the movement with "Voluntary Guidelines on Corporate Social Responsibility" in 2009, followed by the "National Voluntary Guidelines on Social, Environmental and Economic Responsibilities of Business" (NVGs) in 2011, which stressed the importance of the environmental, social, and economic responsibilities of companies and the need to integrate ESG into business practices. In 2013, India adopted a new Company Act that, among others, made it mandatory for companies of a certain turnover and profitability to spend a minimum of 2% of their net profits on CSR activities, and published in 2014 the Corporate Social Responsibility Policy Rules to clarify the CSR requirements of the new Companies Act. India thus became the first country to legally mandate social responsibility for enterprises. The move spurred a debate in the country (Prasad, 2014).

In 2018, the MCA began revising the National Voluntary Guidelines and, in 2019, released the National Guidelines for Responsible Business Conduct (RBCs) to make them more aligned with the SDGs. The new guidelines deal with key sustainability issues, such as business ethics and transparency, human rights, environmental safety, and fair labor practices. To specifically encourage the financial sector to adhere to sustainable business practices, the government also announced the "National Voluntary Guidelines for Responsible Financing" in 2015.

In addition to the above, through a series of regulations, SEBI stimulated ESG disclosure and reporting. In 2012, it mandated the top 100 listed companies by market capitalization to file business responsibility reports (BRRs), in line with the above mentioned NVGs. Progressively extended, this requirement now applies to the top 1000 listed firms. Following the launch of the 2019 National Voluntary Guidelines for Responsible Business Conduct mentioned above, in 2021, SEBI introduced a new framework, the Business Responsibility and Sustainability Report (BRSR). Based on the new guidelines, it aims to bring India's sustainability reporting closer to global reporting standards and will be mandatory for the top 1000 listed companies from fiscal year 2023.

SEBI also pays particular attention to governance practices. It requires, for instance, that two third of the directors on the remuneration committee and audit committee of listed firms be independent directors, to ensure effective checks and balances. Additionally, it formed the Kotak Committee on Corporate Governance in 2017 with the objective of improving corporate governance standards for listed companies. To increase transparency in investment decisions, in 2019, it also issued guidelines on stewardship for mutual funds and alternative investment funds – just as the Insurance Regulatory Development Authority of India and the Pension Fund and Development Authority did in 2017 and 2018. The guidelines require institutional investors to monitor their investees on governance-related matters and report on their stewardship activities and monitoring, amongst other requirements.

In 2017, SEBI released guidelines for green bonds, officially opening up the green bond market. USD2.3 billion was raised via sustainable bond issuances in 2020 alone. In 2019, the Minister of Finance also proposed the creation of a social stock exchange (SSE) under the regulatory ambit of SEBI so that social enterprises and voluntary organizations could raise capital. The creation of the Stock Exchange was approved by the Board of SEBI in fall 2021 (Financial Express, 2021).

India has also joined various global initiatives relating to ESG. For instance, in 2019, India became a founding member of the European Commission-led International Platform on Sustainable Finance (IPSF), a forum for driving environmentally sustainable finance. In 2021, India's central bank, the Reserve Bank of India (RBI), also became a member of the Network for Greening the Financial System (NGFS), a collective of more than 90 central banks aiming to incorporate sustainability into the country's financial systems.

ESG investing is still a relatively recent trend in India. However, several funds dedicated to ESG have emerged in the past three years. Between 2018 and March 2021, 10 ESG funds were created, with USD 1.4 billion in assets under management as of March 2021 (CRISIL, 2021). India also has ESG-related indexes. For instance, in 2017, the National Stock Exchange (NSE) of India created the Nifty 100 ESG Sector Leaders Index, which includes large-cap companies from the Nifty 100 that have best performed on ESG risk management indicators. In addition to the Nifty 100 ESG Index, other ESG indices in India include the S&P BSE 100 ESG Index and MSCI India ESG Leaders Index (launched in 2008 and 2013 respectively).

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[24] The contribution of Vineetha Pachava and the EMI Research team is gratefully acknowledged

[25] World Bank Data (https://databank.worldbank.org/data/download/poverty/987B9C90-CB9F-4D93-AE8C-750588BF00QA/SM2021/Global_POVEQ_IND.pdf)

ESG is progressively taking root among enterprises in India. Surveys of Indian firms show that they have performed comparatively better in terms of ESG policy disclosures than in governance, environmental, and social factors per se (NSE, 2020). They also show that firms tend to pay more attention to governance and key environmental goals and less to social issues.

Many Indian enterprises are part of major global sustainability initiatives. For instance, 167 firms are signatories of the UN Global Compact and 24 are signatories of the Principles on Responsible Investment as of November 2021. In comparison, 799 and 109 Brazilian companies are signatories of the Compact and the PRI respectively, 462 and 76 from China, 38 and 71 from South Africa, and 40 and 2 from Thailand.

The Dow Jones Sustainability World ranking published in November 2021 includes 6 Indian firms as sustainability leaders, with Hindalco Industries Ltd achieving gold and Wipro Ltd reaching the silver distinction (S&P, 2021).

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Annex I.3. – South Africa and ESG policies[26]

South Africa is the third largest economy on the African continent. As of 2020, about 19% of its population (about 60 million people) were living in extreme poverty — defined as 1.9 USD per day — and more than half were under the 5.50 USD per day poverty line.

Regulation drives ESG integration in South Africa (CFA and PRI, 2019). The country has progressively put in place a network of regulations in the environmental, social and governance areas, accompanied in some cases by some significant business-led initiatives.

In the environment area, for instance, recent moves include the 2019 implementation of a carbon tax aimed at businesses that emit high levels of greenhouse gases. In addition, in October 2021, and after three years of consultations with stakeholders, South Africa's cabinet approved the Climate Change Bill for submission to Parliament. The bill proposes a framework to coordinate action and establish public and private sector obligations related to climate change

In the social area, priorities focus on improving health and safety among employees, expanding workplace benefits, and increasing diversity. Particularly important in that respect are South Africa's efforts to address its historic race-based inequality and inequity, as demonstrated by the Employment Equity Act of 1998, which mandates that employers with more than 150 employees report pay levels for all employees, thereby providing information on race- and gender-based wage disparities. In addition, the 2003 Broad-Based Black Economic Empowerment Act aims at increasing economic participation amongst black South Africans. Since the 2008 Companies Act, public companies and those that attract high level of public interest have also been required to have a Social and Ethics Committee, whose function is to monitor and report on ESG-related matters among others (Geral and al, 2020).

In governance, there is a relatively well-developed framework set up through various laws and the King Codes on Corporate Governance.[27] The King Codes (King IV in the latest iteration) set out voluntary principles and guidelines to promote corporate governance in South Africa. However, compliance with the principles and reporting on their application are mandatory for insurers as well as companies listed on the Johannesburg Stock Exchange (JSE). In fact, many firms use the King Codes on a voluntary basis (Davids and Kitcat, 2020).

The financial sector in South Africa has been a leader in integrating ESG issues into business practices. For instance, the Code for Responsible Investing in South Africa (CRISA), launched in 2011, aims to encourage the inclusion of ESG issues into investment decisions. Though voluntary, the Code is a significant private sector initiative to advance ESG in South Africa, particularly given its broad and influential membership. Addressed to institutional investors and their service providers, CRISA is aligned with the Principles for Responsible Investment (PRI). A revised version, that would inter alia enhance monitoring as well reporting obligations, was supposed to be launched in 2021 to reinvigorate the Code.

Regulation has also played a role in promoting ESG integration into investment decision-making and analysis. The guidance on regulation 28 of the 1956 Pension Fund Act published by the Financial Sector Conduct Authority (FSCA) in 2011 requires that ESG factors be considered when evaluating the sustainability of an asset. Regulation 28 applies to pension funds, but it has also influenced the ESG practices of other institutional investors and asset managers in South Africa (Davis and Kitcat, 2019).

In 2017, the National Treasury launched the South Africa Sustainable Finance Initiative with the support of the IFC and in partnership with SECO (Swiss Department of Economic Affairs) and SIDA (Swedish International Development Cooperation Agency), and it has organized since then a series of policy discussions on the topic. It also joined the IFC-supported Sustainable Banking Network to support global efforts towards accelerating sustainable financing and the development of international standards. In October 2021, just before the COP 26, it published an updated version of its draft technical paper, "Financing a Sustainable Economy," a key step in strengthening sustainable finance in South Africa by identifying gaps in the nation's legal and policy framework. The same month, it also published its own draft green taxonomy to help the financial sector in selecting green investments in line with international best practice and South Africa's national policies and priorities (South Africa Sustainable Finance Initiative, n.d. and Brands 2021). In 2019, South Africa joined the Network for Greening the Financial System.

The Johannesburg Stock Exchange — a PRI signatory and a founding signatory of the Sustainable Stock Exchange initiative – also plays an influential role in promoting corporate transparency and ESG practices in South Africa. In addition to requiring listed firms to comply with the King IV Code and report on it, as mentioned above, the JSE also provides guidance for companies on ESG disclosure in accordance with guidelines set out by the Sustainable Stock Exchange Initiative (SSEI). In 2004, the JSE also became the first emerging market stock exchange, and one of the first globally, to introduce a sustainability index for companies based on indicators related to environment, social and governance practices (JSE, 2020). Since 2015, the JSE has partnered with FTSE Russell to establish the FTSE-JSE responsible investment index series that determines which South African companies are leading in ESG standards.

South Africa is one of the few countries in Sub-Saharan Africa using green bonds. The JSE launched its Green Bond Segment in 2017, later encompassed by the exchange's Sustainability Segment in 2020. As of 2020, only business entities had used such instruments

[26] The contribution of Vineetha Pachava and the EMI research Team (in particular Theresa Oduol) is gratefully acknowledged

[27] The King Code of Governance Principle and the King Reports on Corporate Governance have been issued by the King Committee on Corporate Governance. Three reports were issued in 1994 (King I), 2002 (King II), and 2009 (King III) and a fourth revision (King IV) in 2016.

(Boitreaud and al., 2020). As of July 2021, 23 instruments were listed on the Sustainability Segment, at a total value of nearly USD700M (JSE, 2020 and Africa Business Communities, 2021).

As of 2021, 71 South African companies were signatories of the PRI and 38 had joined the UN Global Compact, a relatively high number compared to other large emerging economies.

South Africa is considered relatively advanced with respect to ESG, reflecting its strong regulatory approach as well as major business initiatives taken over the years such as the King Codes and CRISA. There is room for improvement at the level of business practices — more meaningful action and implementation — as suggested by some observers (Bulbullia, 2020). Nevertheless, renewed policy efforts have been made in the ESG realm and a change is taking place, with corporations moving into more active participation and taking proactive steps to assess ESG (Bulbullia, 2020).

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Annex I.4. – Thailand and ESG policies[28]

Initiatives on ESG-related matters have greatly advanced in Thailand over the years. The state has played a significant role, with a number of laws and regulations in the environment, social and governance areas, including the Enhancement and Conservation of the National Environmental Quality Act, the Factory Act, The Hazardous Substance Act, the Occupational Safety Health, the Public Health Act, and the Act Supplementing the Constitution Relating to the Prevention and Suppression of Corruption, among others. Particular attention has been paid to environment and natural conservation, partly because of the economic relevance of industries such as tourism and fishing, which are especially impacted by environmental issues.

According to the OECD, the country is a regional leader in responsible business conduct (RBC) (OECD, 2021). Thailand, for instance, was the first Asian country to create a standalone National Action Plan on Business and Human Rights (2019-2022) in line with the UN Guiding Principles, and focusing on labor, community land and environmental resources, human rights, and cross border investments and multinational enterprises (OECD, 2021). To date, only 22 countries in the world have such an Action Plan in place. The government has also taken steps to encourage Thai state-owned enterprises to follow RBC standards and practices.

Sustainable growth and development are key elements of Thailand's 4.0 policy — a policy aimed at moving the country into sustainability and prosperity, especially in the face of the 4th generation industrial revolution — and its 20-Year National Strategy (2018-2037), which is the country's main development framework. The 4.0 policy includes social well-being, human development, and environment protection among its key objectives while human resource development, social equality, and green growth are three of the six target areas of the National Strategy.

There have also been serious efforts from various entities from the capital markets and the financial sector. Thailand's securities authorities in particular have worked hard to promote ESG practices. Sustainability has become a key element of the Securities and Exchange Commission (SEC) Strategic Plan, with a Sustainability Development Roadmap included as part of the 2013-2015 Plan, and sustainability is one of its priorities. In 2017, the SEC launched the Investment Governance Code 2017 (I Code) that sets out governance principles and guidance for responsible investment by institutional investors (SEC, n.d.). That same year, it also issued a new Corporate Governance Code, replacing the 2012 Principles of Good Corporate Governance issued by the Stock Exchange of Thailand (SET), to provide guidance and enhance transparency and accountability in firms. The Code requires company boards to engage in sustainability reporting that meets domestic and international standards, with most companies using the GRI framework. As of 2021, the SEC announced it was developing its own ESG disclosure framework, with special emphasis on climate change disclosures (Azizudin 2021).

The Stock Exchange of Thailand (SET), a member of the Sustainable Stock Exchanges Initiative, also promotes sustainability disclosure among listed companies. It has published its own 'Guidelines for Sustainable Reporting' based on the Global Reporting Initiative (GRI). It has made ESG reporting on CSR policies and activities mandatory for listed companies since 2014, though reporting of key performance indicators that quantitatively assess business' performance is voluntary. In 2015, the Exchange launched Thailand Sustainability Investment (THSI), a list of publicly listed companies based on ESG criteria (such as measures to address climate change, energy and water conservation, human rights protection, workplace safety, board independence, and anti-corruption) and, on this basis, created a Sustainability Index, the SET THIS, in 2018.

The Banking sector of Thailand has also taken steps to move forward on sustainable finance. For instance, encouraging financial institutions to integrate sustainability (ESG) into their business and operating models is one of the key objectives of Thailand's Central Bank's three-year strategic plan (2020-2022). In 2018, the SEC launched green bond regulation, based on the International Capital Market Association (ICMA) principles, and in 2019, under the central bank's leadership, the Thai Bankers' Association launched the "Responsible Lending Guidelines". The latter have been signed by most banking institutions in Thailand (BOT, n.d). In addition, with the support of the IFC, the central bank has been developing since 2019 a Sustainable Finance policy framework to help the banking sector improve ESG risk management practices and direct more capital to projects and sectors with environmental and social benefits (IFC, 2019). In 2021, the SEC also announced it was developing a sustainable finance taxonomy (Azizudin, 2021).

Overall, ESG compliance and reporting are still mostly voluntary in Thailand. While a number of stakeholders consider that ESG implementation could be improved (OECD, 2021), awareness has been raising. Thailand is a leader in sustainability reporting (OECD, 2021) and a relatively significant number of Thai companies are included in global sustainability indexes and rankings. Though there are some weaknesses in sustainability scoring and ranking (see section 3.5 in this chapter), the most recent DJSI World ranking published in November 2021 included 11 Thai firms in the gold category (S&P, 2021).

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[28] The contribution of Vineetha Pachava and the EMI Research Team (in particular Chris Goranov, Olin Marman, and Juan Pablo Borda) is gratefully acknowledged

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Annex I.5. - ESG revolution in China

By Lindsey Zhang[29]

The concept of ESG (Environmental, Social, and Governance) did not originate in China, but has been gradually adopted by Chinese companies since the middle 2000s, along with the trends of global sustainability investment, Chinese corporate expansion in the global market and the desire of Chinese firms to attract global investors. Since the early 2010s, regulators from mainland China and Hong Kong stock markets have issued a series of ESG reporting regulations to encourage Chinese companies to improve their ESG performance and reporting. In addition, an increasing number of Chinese asset owners and asset management firms have signed the UN's Principles for Responsible Investment (PRI). As of March 2021, five asset owners and 89 asset management firms in China (both mainland and Hong Kong) became PRI signatories, which accounts for 3% of the total number of asset owners and investment managers globally that have signed the UN PRI. The ESG revolution in China was accelerated by the worldwide COVID-19 pandemic in 2020, which will further accentuate the momentum in China's corporate governance development, positively influence the global ESG movement, and signify ESG as the catalyst for China to augment its position in the global market. How has China's ESG journey developed? How will the ESG revolution play a significant and essential role in China's future growth? The following will explore these key questions.

When did the ESG movement begin to impact China and how is it progressing? What is driving China's ESG revolution? With the growth of sustainable investment, ESG has become an essential part of institutional investors' investment analysis, which led to the emergence of global ESG rating systems in the early 2010s. MSCI, the leading American finance company and global stock market index provider, started to evaluate Chinese companies' ESG performance in 2015, and launched the MSCI China ESG Index in 2018. Since then, the number of Chinese companies participating in MSCI's ESG rating system has been growing, simultaneously with their improving ESG scores, as these companies are realizing that sharpening their ESG performance enhances global investors' confidence while also improving companies' access to global capital markets. It is worth mentioning at this point, however, that the review of emerging market firms — including those in China — by global ESG rating firms such as MSCI remains relatively limited compared to those from advanced countries (as of May 31, 2020, MSCI ESG Emerging Markets Leader Index covered 494 companies, while MSCI World ESG Leader Index contained 726 companies from advanced countries). In order to integrate China's unique economic features with Chinese companies' ESG evaluation systems, a number of Chinese ESG rating systems, including the artificial intelligence (AI)-based Xinhua CN-ESG System that was jointly launched by Ping An Insurance (Group) Company and Xinhua News Agency's China Economic Information service in December 2020, have been in existence since the late 2010s.

As the major driver of China's ESG revolution, the Chinese government has issued several new regulations and procedures since 2012 to guide, encourage, and require ESG information disclosures. Most notable are the Hong Kong Stock Exchange's issuance of its ESG Reporting Guide in 2012 with updates in 2015, 2019 and 2020 (ESG information disclosure became mandatory beginning with the 2019 updates), and, in 2018, the China Securities Regulatory Commission's (CSRC) ESG Disclosure Guide for companies listed on the Shanghai Stock Exchange (SSE) and Shenzhen Stock Exchange (SZSE). The CSRC also issued new ESG reporting rules in June 2021 for SSE and SZSE listed companies, requiring mandatory environmental factors disclosure and voluntary disclosure for social factors. In March 2021, the National Association of Financial Market Institutional Investors issued the Notice on Clarifying Relevant Mechanisms of Carbon Neutrality Bond to guide the use of carbon neutrality bonds' proceeds. Significantly, Chinese regulators took a proactive approach for new ESG regulations issued in 2021, to ensure the country was on track to reach its green finance and energy transformation goal. This approach is a significant departure from China's lagging regulatory reform of the past.

In addition, domestic asset owners, asset management firms, and Chinese multinational companies also implemented ESG strategies as part of their business strategy processes. They put in place plans and procedures to leverage the power of capital and supply chains to amplify ESG influences on their global partners. These companies' experiments will inspire more innovative ideas and systematic strategies toward ESG integration, and facilitate the establishment of a global ESG ecosystem. Moreover, the launch of the National Carbon Trading Market in July 2021 marked a significant milestone for the global climate change movement and established the foundation for the next step — the creation of an international carbon trading platform.

How will the ESG movement contribute to China's 14th Five Year Plan and influence China's corporate governance development? China's 14th Five Year Plan marks the turning point in the country's development strategy from high-speed to high-quality. Instead of setting a specific GDP growth target as did previous Five-Year Plans, the 14th Five Year Plan sets up a number of economic indicators to address the country's unemployment rate, energy consumption, and carbon dioxide emissions. These indicators will complement China's ESG revolution by recommending a new development philosophy that includes innovative environmental protection initiatives to encourage and support green finance, renewable energy vehicles, and investment in renewable energy projects. In addition, actions taken by the Chinese government in 2021 have indicated the government's determination to establish a high-standard regulation system. Those worth watching include the enhancement of Intellectual Property (IP) protection that addresses not only concerns from Western companies of doing business in China, but also the demands to protect Chinese companies' IP rights due to the rapid increase of IP ownership over the past two decades, as well as the anti-trust law enforcement actions that have targeted Chinese giant tech companies such as Alibaba and Meituan (the latter is a Chinese leading delivery company). Alibaba was fined a record-high RMB 18.2

[29] Founder & CEO of Boardroom&Beyond, and Doctoral Researcher at Henley Business School, University of Reading

billion (USD2.8 billion) in April 2021 and Meituan RMB 3.4 billion (USD527.4 million) in October 2021. The first-ever verdict in favor of the 315 minority shareholders of Feilo Acoustics Co., Ltd. (China's first joint-stock listed company) in May 2021, resulting from a class action lawsuit, is also particularly notable. It indicates the successful establishment and application of a "representative action" legal platform to protect minority shareholders' interests and encourage shareholder engagement, all of which are significant elements of the global ESG movement. Through such reforms, including the development of a Corporate Social Credit System (CSCS), the Chinese government is building a social and economic environment aimed at improving the corporate governance landscape and facilitating future regulation development and practices[30].

How will China influence the global ESG movement and what is China's role in the global collaboration of climate change mitigation? The consistent improvement of Chinese companies' ESG performance and the fast development of Chinese domestic ESG rating systems illustrate emerging markets' active participation in the global ESG movement, and the need for ESG evaluation standards that fit into emerging markets' business environments. Indeed, the global ESG movement has been led by Western countries over the past few decades, but what has worked for those countries may not work in emerging economies. In addition to actively promoting green and low-carbon energy in its domestic market in order to achieve the country's carbon neutrality goals by 2060, China has taken a lead role in the global energy transformation movement. For instance, the nation's largest bank, the Industrial and Commercial Bank of China (ICBC), withdrew its financing of the Zimbabwe coal project in June 2021 to demonstrate China's commitment to limiting global carbon emissions by suspending a decades-long program of coal financing. Then, in September 2021, Chinese President Xi Jinping publicly announced that China will not construct additional coal-fired power projects abroad, and will provide poorer countries with assistance in their energy transformation process. This signaled the country's intention to play an influential role in the global ESG movement via the green and low-carbon energy transformation.

Will the ESG revolution reshape China's corporate governance landscape and advance the country's global position during its high-quality development era? With the emerging trends of creatively-evolving corporate governance models built upon the ESG movement (e.g., new succession planning, the mindset-change towards social entrepreneurship, and the new social impact strategy), young entrepreneurs will "ride the wave" through these new models to optimize their companies' governance practices and cement their leadership in the global market. As one of the two biggest carbon polluters in the world, can China put aside disagreements with other superpowers, accelerate conversations regarding climate collaboration, and share the country's intellectual and financial resources to influence and jointly lead global efforts for collective battle against mutually-shared environmental quagmires? Time will tell. As of November 2021, the leaders of China and the US have jointly declared their willingness to discuss climate collaboration, possibly signifying the beginning of a new era of cooperation toward global climate change eradication.

[30] For more on the ESG revolution in China and its interrelation with corporate governance in China, as well as the specificities of the Chinese business environment, please see Lindsey Zhang's (forthcoming), Corporate Governance in China – Through a practitioner's Lens

Annex II Methodology

Daniel dos Anjos, Program and Research Coordinator
Emerging Markets Institute, Cornell University, United States

Executive Summary

This section explores the Environmental, Social, and Governance (ESG) performance of EMNCs based on ESG ratings from different sources (see below). Most of these sources only rate companies with an International Securities Identification Number (ISIN) associated with it. This is a 12-digit alphanumerical code that identifies security. A country's National Numbering Agency (NNA) assigns this identification. An ISIN is different from a ticker, which identifies a public company in a stock market. Using ISINs alone leaves behind all the State-Owned Enterprises (SOEs) which have no ISIN attached to them and are common in emerging countries. As a result, the rating sources exclude the SOEs. SOEs often follow environmental, social, and governance policies; in fact, often, they are a government's instruments for implementing these policies but are not rated by the sources as their disclosures are directed to the government and not to the market. Companies like Petrobras or PetroChina, which are not 100% government-owned, are covered in this section (charts and figures in this annex can be found in this link: EMI EMNC Rankings).

Annex II.1. Companies' universe and ESG rating sources

For reasons explained in the previous sections (wide coverage of EMNCs and reliability of the data), the universe of companies under consideration was built based on Standard & Poor's Capital IQ. We follow the following criteria:

- The first selection: all **companies from emerging countries with total revenues bigger than USD 1billion** (downloaded on Jul 1, 2021): 8,745 companies (see Annex II Table 1).
- This study delineates the companies' headquarters as the headquarter of the ultimate parent.
    - Different databases consider ultimate parent in different ways. For this study, the headquarter was defined based on three different sources. When there was a difference among the databases, we used the ultimate parent headquarter (HQ) country as the one for which two data sources agreed.
        - If the ultimate parent company's headquarter country is the same in both Capital IQ and Orbis Bureau Van Dijk, we keep it.
        - However, if the ultimate parent headquarter country is different in the two databases, we check FactSet and take the ultimate parent headquarter country for which two data sources concur.
        - If all three sources show different headquarters countries for a company, the EMI research team decided to use Capital IQ's[31].
- Only companies with ISINs are considered: from the initial sample, only 2,256 EMNCs were kept (Annex II Table 2). Hence,
    - subsidiaries of the same companies but with different ISINs are considered.
    - If the parent company of these subsidiaries also has a unique ISIN, then it will be considered.
    - If the parent and the subsidiary had the same ISIN, then the subsidiary is excluded. However, we never encountered this case.
- All industries were included, even Oil and Gas. Commodities are key to many emerging countries. Companies like Petrobras in Brazil, Pemex in Mexico, Codelco in Chile, Petronas in Malaysia, PTT and Thailand, and many others are critical to their respective countries. Often these EMNCs are state-owned or partly state-owned and partly public and, as such, support social policies and cultural activities in their countries. Hence, the decision in this study is to include Oil and Gas companies in the study.

[31] For example, Banco Santander Brasil, owned by a consortium of investors: Santander Spain, Sterrebeeck B.V. and Qatar Foundation, is considered Brazilian by Capital IQ, but Spanish by Orbis and Brasilian by FactSet. Hence it is kept as Brazilian Banco Santander Brazil is owned by a consortium of investors based in Holland: Santander Spain, Sterrebeeck B.V. and Qatar Foundation based in Holland.

Annex II Table 1. Number of EMNCS companies with ISIN, with revenues exceeding USD 1bn of revenue, per country*

Country	E20+1	No of companies	Share
China	Y	1308	58.0%
India	Y	178	7.9%
Russia	Y	97	4.3%
Brazil	Y	94	4.2%
South Africa	Y	68	3.0%
Thailand	Y	59	2.6%
Mexico	Y	57	2.5%
Malaysia	Y	51	2.3%
Turkey	Y	44	2.0%
Indonesia	Y	41	1.8%
Philippines	Y	40	1.8%
Saudi Arabia	Y	35	1.6%
Chile	Y	30	1.3%
Vietnam	Y	22	1.0%
Argentina	Y	16	0.7%
Colombia	Y	15	0.7%
Qatar		12	0.5%
Egypt	Y	9	0.4%
Ukraine		8	0.4%
Peru		8	0.4%
Pakistan	Y	8	0.4%
Total of 45 countries		**2,256**	

* Companies from emerging and developing companies are included.
Source: EMI research team based on S&P Capital IQ (https://www.capitaliq.com/), accessed in July 2021.

Among the different ESG Rating sources (Annex II Table 2), the following were considered based on the methodology described below

- From the **Bloomberg** database:
  - Bloomberg ESG Disclosure
  - Sustainalytics Rank ESG
  - S&P Rank ESG
  - Bloomberg Gender-Equality Index
  - ESG Improvers Index
- From the **Factset** data base:
  - FTSE Russell ESG
  - Sustainalytics Rank ESG
- From the **Wind**[32] data base
  - Wind Sino-Securities Index
  - FTSE Russell ESG
  - SynTao ESG
  - CASVI ESG
- Refinitiv ESG Combined from **Refinitiv Eikon**
- MSCI ESG from **MSCI Direct**
- S&P Global ESG Score from **S&P Market Intelligence** (called **S&P Capital IQ Pro** from September 2021)

[32] Wind gave temporary access for this study. Their help is gratefully acknowledged.

Annex II Table 2. Comparison of ESG Sources Across Different Parameters

	BLOOMBERG TERMINAL						FACTSET		WIND-FINANCIAL TERMINAL							
	BLOO (Bloomberg ESG)	SUSB (Sustainalytics)	SPRS (S&P Rank)	BGEI (Gender Equality)	BIMP (Improvers)	ARBQ (Arabesque)	FTFA (FTSE)	SUSF (Sustainalytics)	WSSI (Sino Index)	FTWI (FTSE)	STAO (SynTao)	CASV (CASVI)	REFT (Refinitiv)	MSCI	SPMI (S&P)	GC (Global Compact)
Downloaded	Y	Y	Y	Y	N	N**	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Share of the sample	71%	10%	44%	1%*	NA*	—	31%	12%	38%	27%	35%	15%	53%	46%	13%	~10%
E/S/G can be disaggregated	✓	✓	✓	—	—	—	—	✓	—	—	—	—	✓	✓	✓	—
Comparable industries	✓	✓	✓	NA	NA	✓	✓	✓	—	✓	—	—	✓	✓	✓	—
Rating Format***	0 / 100	1 / 100	1 / 100	1 / 100	NA	1 / 100	0 / 5	100 / 0	C / AAA	0 / 5	D / A+	D / AAA	0-100	0-10	0 / 100	—
Assesses Performance	—	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	—
Controversies mentioned	—	✓	—	—	—	NA	—	✓	—	—	✓	—	✓	✓	✓	—
Directly accessed	✓	—	—	✓	NA	NA	—	—	—	—	—	—	✓	✓	✓	✓
Available at Cornell	✓	✓	✓	✓	NA	✓	✓	✓	—	—	—	—	✓	✓	✓	✓
Max Adjusted Rating	73	94	100	158	-	-	96	92	100	78	89	95	90	81	92	-
Min Adjusted Rating	1	0.5	1	39	-	-	4	37	13	6	22	15.8	0.1	9	7	-
Avg Adjusted Rating	34	29	36	67	-	-	53	70	77	29	54	57	45	41	53	-
SD Adjusted Rating	14	24	30	23	-	-	19	10	16	12	13	19	19	11	20	-
SD/Avg	41%	82%	82%	34%	-	-	35%	15%	20%	40%	24%	33%	42%	27%	38%	-

* Not considered. Improvers only covers U.S. and Canadian companies. BGEI covers only 1% of the companies in the sample

** Limited access or no access through the available data sources at Cornell. Cornell does not have access to RepRisk. Arabesque is available through the Bloomberg terminal, but the data could not be downloaded in bulk.

WSSI, STAO, CASV were available with letter ratings only, then converted to numerical ratings.

Source: EMI research team based on Bloomberg Terminal (https://www.bloomberg.com/professional/solution/bloomberg-terminal/), FactSet (https://www.factset.com/), Wind Terminal (https://www.wind.com.cn), Reuters Refinitiv (https://www.refinitiv.com/), MSCI Direct (https://www.mscdirect.com/), S&P Capital IQ Pro (https://www.spglobal.com/marketintelligence), and Global Compact (https://www.unglobalcompact.org/), all accessed between April and July 2021.

The table above summarize the criteria and other elements we took in consideration during the research, as shown below. After downloading the data, each rating source was analyzed with the purpose of identifying possible bias in their ratings.

1. **Criteria to choose databases**. The EMI research team analyzed 16 databases and decided to exclude some for the following reasons:

- Improvers and Arabesque from Bloomberg were excluded because.
    - Improvers only lists U.S. equities.
    - Arabesque is available through the Bloomberg terminal, but the data could not be downloaded in bulk.
    - Gender Equality Index only covered 1% of the sample.
- Some sources were accessible from more than one database:
    - Sustainalytics was downloaded from Bloomberg and FactSet. The research team chose FactSet Sustainalytics because it covered more companies from our universe of EMNCs.
    - Capital IQ S&P was used because we had direct access, while S&P data from Bloomberg was available in the form of a ranking (not a rating).
- The coverage of some of the EMNCs in the universe (see a share of Starting sample in Annex II Table 2) was very limited. Hence, as explained later, we only choose companies from the sample covered by three sources.

2. E/S/G disaggregation was also an important criterion. Hence, we checked the availability in the different databases for the three pillars.
3. Industry weight was considered important as well. For example, Sustainalytics ratings assign a different weight to its ESG scores when comparing an Oil company with one from IT.
4. All the ratings were converted to the 1-100 range. The ones with letters were distributed according to the methodology disclosed by the source; for instance, MSCI discloses “the value” for its ratings and makes the conversion easy. However, some databases do not disclose the rating methodology, so we applied a distribution to make the scores comparable with other sources.
5. In most cases, the goal of the ESG score is to show whether a company has good, bad, or average ESG performance. However, Bloomberg ESG grades the company’s disclosure of documents and information about ESG, not necessarily the performance.
6. Controversies disclose whether a company has been involved in controversial activities, actions, reputation, etc.

Annex II.2. Correlation among rating agencies

We also took into consideration the correlation among the ESG ratings from the different databases. Overall, the average of all correlations among ESG databases is relatively low at 0.35. But if we consider only the databases used in the sample, the correlation is 0.41. These results, which are similar to 0.33 of correlation found by a Ping An study[33], indicate an important divergence in ESG ratings because there are no standardized ways to measure ESG. Hence, there is no consistent evaluation, and even more so in the case of EMNCs.

- Capital IQ S&P rating published by Bloomberg is a rank (percentile of the ranking), not a direct rating score. Hence, we are using Capital IQ S&P, which shows the actual rating score.
- Another case was FTSE data from FactSet and FTSE from Wind, which are the same. But the sample of companies covered by FactSet FTSE is global, while Wind FTSE covers only Chinese companies. In this case, we kept both databases and used Wind FTSE when the company was only covered by them.
- WSSI is discarded because the correlation with other databases was only 0.10 (average), and with some rating sources, it was even negative (compared with FTSE and S&P).

For all the above reasons, this study does not consider Bloomberg Sustainalytics, Bloomberg Standard & Poor’s, Bloomberg Gender Equality, Wind Sino Security Index. Ratings from Wind FTSE were used for the companies not covered by FactSet FTSE.

[33] Ping An Digital Economic Research Center. ESG in China, Current State and Challenges in Disclosures and Integration. June 2020.

Annex II Table 3. Correlation Matrix Across ESG Rating sources with the Number of Companies in parenthesis.

	BLOO	SUSB	SPRS	BGEI	FTFA	SUSF	WSSI	FTWI	STAO	CASV	REFT	MSCI	SPMI
BLOO	1												
SUSB	0.63 (227)	1											
SPRS	0.58 (934)	0.72 (204)	1										
BGEI	0.31 (23)	0.55 (9)	0.34 (22)	1									
FTFA	0.56 (672)	0.68 (161)	0.59 (642)	0.09 (18)	1								
SUSF	0.07 (265)	0.41 (55)	0.37 (260)	-0.13 (8)	0.29 (240)	1							
WSSI	0.30 (688)	0.16 (72)	-0.02 (227)	- (1)	-0.23 (94)	0.07 (41)	1						
FTWI	0.63 (606)	0.46 (109)	0.41 (320)	-1.00 (2)	0.85 (203)	0.03 (90)	0.16 (495)	1					
STAO	0.73 (739)	0.61 (134)	0.56 (373)	-1.00 (2)	0.60 (223)	0.27 (98)	0.27 (605)	0.64 (555)	1				
CASV	0.60 (339)	0.28 (65)	0.47 (184)	- (1)	0.16 (72)	0.20 (36)	0.28 (348)	0.45 (300)	0.49 (345)	1			
REFT	0.67 (1130)	0.60 (228)	0.58 (901)	0.31 (22)	0.57 (658)	0.26 (266)	0.17 (398)	0.55 (468)	0.65 (546)	0.55 (294)	1		
MSCI	0.39 (900)	0.54 (175)	0.40 (721)	0.13 (14)	0.43 (531)	0.41 (204)	0.03 (270)	0.30 (330)	0.48 (425)	0.23 (207)	0.48 (871)	1	
SPMI	0.50 (282)	0.63 (66)	0.87 (292)	0.49 (15)	0.61 (244)	0.26 (112)	-0.06 (14)	0.29 (39)	0.46 (55)	0.00 (12)	0.44 (287)	0.27 (242)	1

Source: EMI research team based on data from Bloomberg Terminal (https://www.bloomberg.com/professional/solution/bloomberg-terminal/), FactSet (https://www.factset.com/), Wind Terminal (https://www.wind.com.cn/), Reuters Refinitiv (https://www.refinitiv.com/), MSCI Direct (https://www.mscdirect.com/), S&P Capital IQ Pro (https://www.spglobal.com/marketintelligence), and Global Compact (https://www.unglobalcompact.org/), all accessed between April and July 2021.

After all the above considerations, we narrowed down the sources to the following nine (those providing separate ratings for E, S, and G are shown in italics):

- **Through FactSet**

1. FTSE Russell ESG
2. Sustainalytics ESG. Provided separate ratings for E, S, and G.

- **Through Wind**

3. FTSE Russell ESG (only if needed)
4. SynTao ESG (Wind)
5. CASVI (Wind)

- **Direct access**

6. Refinitiv ESG scores.
7. MSCI ESG (MSCI Direct).
8. S&P global ESG (Market Intelligence).
9. Bloomberg ESG Disclosure.

Annex II.3. Methodology

Overall, we summarize the methodology as follows:

- Companies rated by three or more databases were considered. Doing so reduced the initial sample of 2,256 companies with an ISIN to 1,132 firms which is the final sample for this exercise in July 2021 (Annex Table 4).
  - The best 200 companies of ESG overall and for each pillar were chosen.
- A simple average ESG score was calculated for each company, and the companies were sorted by descending order of results.
- The top 200 companies were divided into five groups of 40 in descending order: 40 best, 40 second best and 40 third best.
  - The 200 best-performing companies (both in overall score and individual E, S, and G pillars) were distributed in 5 groups. As shown in Annex II Table 2, from the nine sources chosen for this work, only 5 had a breakdown by the three pillars.

Annex Table 4. Number of companies with ISIN, with revenues exceeding USD 1bn, covered by at least 3 of the selected ESG rating agencies

Country	E20+1	No of companies	
China	Y	625	55.2%
India	Y	102	9.0%
Brazil	Y	60	5.3%
South Africa	Y	52	4.6%
Malaysia	Y	38	3.4%
Mexico	Y	35	3.1%
Thailand	Y	34	3.0%
Russia	Y	29	2.6%
Saudi Arabia	Y	26	2.3%
Turkey	Y	25	2.2%
Philippines	Y	20	1.8%
Chile	Y	18	1.6%
Indonesia	Y	17	1.5%
Colombia	Y	14	1.2%
Qatar		7	0.6%
Argentina	Y	5	0.4%
Kuwait		5	0.4%
Peru	Y	4	0.4%
Hungary		3	0.3%
Egypt	Y	3	0.3%
Pakistan	Y	1	0.1%

Source: EMI research team based on S&P Capital IQ (https://www.capitaliq.com/), accessed in July 2021.

Annex II.4. The 200 best ESG performers among EMNCs

The 200 best-performing companies represent almost 10% of the initial data sample of 2,256 EMNCs. China dominates the ranking with a quarter of the 200 best ESG performers. However, of the EMNC 500 by revenue, China represents 75% of the total 2,256. The difference between the two is because of the high percentage of State-Owned Enterprises among the biggest Chinese companies (47 of the 100 biggest, Casanova & Miroux 2018). As this ESG study only considers companies with an ISIN, i.e., (partially or totally) public companies, SOEs from any emerging market could not be ranked.

In the overall ranking, South African, Brazilian, and Thai companies are well represented. Interestingly enough, Thai companies take the helm in the 40 best performers group, Brazilian is second with nine, and South Africa is third with five tied with India and China

has only one. While South African and Brazilian companies are present in all the groups, there are few Thai companies in the fourth and fifth groups (Annex II Table 5).

Annex II Table 5. Top 200 EMNCs ESG performers 2021, number of companies per country.

Country	Number of EMNCs	Share among 200	40 best	41-80	81-120	121-160	161-200
China	51	26%	1	11	8	18	13
South Africa	26	13%	5	5	7	3	6
Brazil	24	12%	9	4	2	4	5
Thailand	24	12%	13	6	4	1	0
India	14	7%	5	2	5	1	1
Malaysia	11	6%	0	2	4	2	3
Mexico	10	5%	1	2	0	5	2
Colombia	9	5%	3	2	3	0	1
Turkey	9	5%	1	1	3	4	0
Chile	5	3%	0	3	0	1	1
Russia	4	2%	1	0	2	0	1
Indonesia	4	2%	0	0	1	0	3
Philippines	3	2%	0	0	0	0	3
Hungary	2	1%	1	0	0	1	0
Papua New Guinea	1	1%	0	0	1	0	0
Saudi Arabia	1	1%	0	1	0	0	0
Qatar	1	1%	0	0	0	0	1
Mauritius	1	1%	0	1	0	0	0

Source: EMI research team. Results can be found on EMI EMNC Rankings.

Next, we rank the companies separately based on the different pillars, Environmental (E), Social (S), and Governmental (G). For each pillar, the best 200 firms were selected. Hence, the ranking of countries per pillar may be different from the overall ESG rankings.

Regarding the Environmental performance, Chinese firms are at the top, followed by Brazilian and Indian companies. The forty best performers are from China, Brazil, and Thailand.

Annex II Table 6. Top 200 EMNCs ESG performers 2021. Environment pillar, number of companies per country.

Country	Number of EMNCs	Share among 200	40 best	41-80	81-120	121-160	161-200
China	61	31%	8	10	11	16	16
Brazil	26	13%	8	5	6	1	6
India	19	10%	3	5	4	3	4
Thailand	19	10%	8	3	3	2	3
South Africa	15	8%	4	2	3	2	4
Mexico	10	5%	3	3	2	1	1
Turkey	10	5%	3	0	1	5	1
Colombia	9	5%	1	3	1	2	2
Russia	8	4%	0	1	2	4	1
Chile	7	4%	1	3	2	0	1
Malaysia	6	3%	0	1	3	2	0
Hungary	2	1%	0	1	1	0	0
Saudi Arabia	2	1%	1	1	0	0	0
Philippines	1	1%	0	1	0	0	0
Kenya	1	1%	0	0	0	0	1
Mauritius	1	1%	0	0	0	1	0
Peru	1	1%	0	0	0	1	0
Kuwait	1	1%	0	0	1	0	0
Argentina	1	1%	0	1	0	0	0

Source: EMI research team. Results can be found on EMI EMNC Rankings.

China also leads the social pillar, with 32 firms, although Brazilian firms with eleven are on top among the forty best, followed by Thailand (column 40 best of Annex II Table 7).

Annex II Table 7. Top 200 EMNCs ESG performers 2021 – Social pillar, number of companies per country.

Country	Number of EMNCs	Share among 200	40 best	41-80	81-120	121-160	161-200
China	32	16%	6	3	8	7	8
Thailand	26	13%	10	8	3	1	4
India	25	13%	1	6	6	7	5
Brazil	23	12%	11	3	2	4	3
South Africa	17	9%	3	3	4	3	4
Turkey	13	7%	1	2	3	5	2
Colombia	11	6%	2	1	4	2	2
Malaysia	11	6%	1	3	2	2	3
Chile	8	4%	1	3	2	2	0
Russia	8	4%	1	3	1	1	2
Mexico	7	4%	1	3	1	2	0
Indonesia	6	3%	0	1	2	2	1
Philippines	6	3%	0	1	1	1	3
Argentina	2	1%	0	0	0	1	1
Hungary	2	1%	1	0	1	0	0
Kenya	1	1%	0	0	0	0	1
Mauritius	1	1%	0	0	0	0	1
Saudi Arabia	1	1%	1	0	0	0	0

Source: EMI research team. Results can be found on EMI EMNC Rankings.

As for the Governance pillar, China's performance is the best with 83 firms. South Africa is second with 22 firms, and Brazil third with 20.

Annex II Table 8. Top 200 EMNCs ESG performers 2021 – Governance pillar, number of companies per country.

Country	Number of EMNCs	Share among 200	40 best	41-80	81-120	121-160	161-200
China	83	42%	17	16	15	17	18
South Africa	22	11%	6	6	4	5	1
Brazil	20	10%	5	4	1	7	3
India	17	9%	3	5	1	1	7
Thailand	16	8%	3	3	4	3	3
Malaysia	10	5%	2	3	1	2	2
Russia	8	4%	2	1	4	1	0
Colombia	6	3%	0	1	2	1	2
Indonesia	4	2%	0	1	1	1	1
Turkey	4	2%	0	0	2	1	1
Chile	3	2%	1	0	1	0	1
Mexico	3	2%	0	0	2	1	0
Mauritius	1	1%	0	0	0	0	1
Papua New Guinea	1	1%	0	0	1	0	0
Philippines	1	1%	0	0	1	0	0
Saudi Arabia	1	1%	1	0	0	0	0

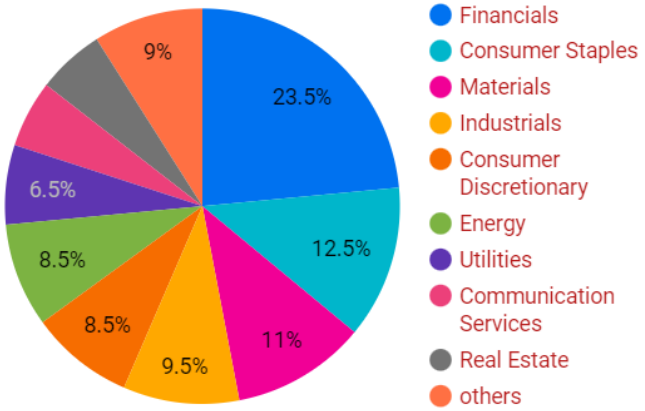
Source: EMI research team. Results can be found on EMI EMNC Rankings.

Regarding sectors, Annex II Figure 1 shows:

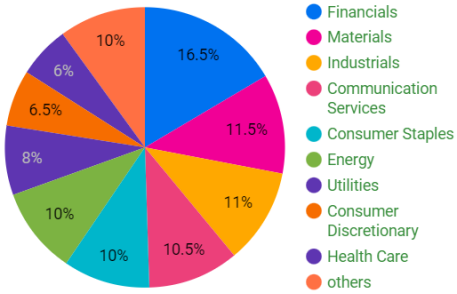
- Financials are at the top with 23.5% of the top 200 best ESG performers.
- Consumer Staples (Packaged Foods, Soft Drinks, Food Retail, Hypermarkets, etc.) are in the second spot based on overall ESG scores with 12.5% but make up only 10% in Environmental, 9.5% in Social and 12.5% in Governance rankings.
- The share of Industrials varies significantly according to the pillar. For instance, Airlines, Electrical Components, and Equipment, Industrial Conglomerates, account for 11% of the best in environmental pillar but for only 7% in the social ranking.
- Utilities and IT perform better on the social and governance pillars. Utilities, which include Electric and Gas companies, ranks second in the social pillar, and is in the top 5 in the others.
- IT (Data Processing, IT Consulting, and Communication Equipment companies) is among the best only in the governance pillar.
- Energy makes up 8.5% of the best companies based on the overall ESG score.
- The materials sector, which includes industries like Construction Materials, Gold, Commodity Chemicals, Diversified Metals and Mining, Steel, etc., perform similarly across pillars: 11% on ESG, 11.5%, 11%, 12.5% on E/S/G.

Annex II Figure 1. Top 200 EMNCs ESG performers. Sectors distribution (A) Overall Score and (B) per pillar

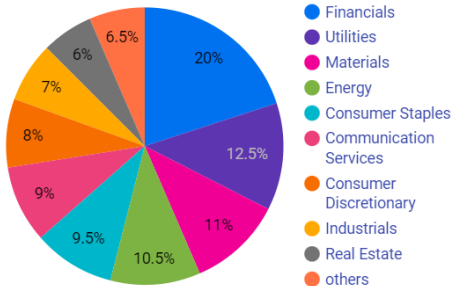
(A)



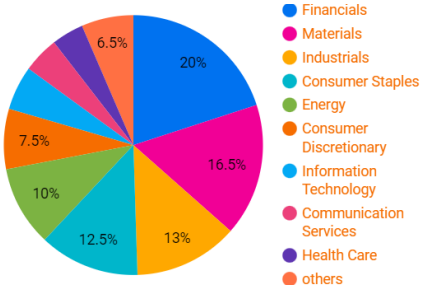
(B) Environmental



Social



Governance



Source: EMI research team. Results can be found on EMI EMNC Rankings.

Annex II Table 9. Best 40 EMNCs ESG performers 2021 in alphabetical order.

Company Name	Country	Ticker	Company Name	Country	Ticker
Absa Group	South Africa	ABG	Investec	South Africa	INL
Advanced Info Service	Thailand	ADVANC	Itaú Unibanco Holding	Brazil	ITUB4
Arçelik	Turkey	ARCLK	Kasikornbank	Thailand	KBANK
BTS Group	Thailand	BTS	Klabin	Brazil	KLBN4
Banco Bradesco	Brazil	BBDC4	Localiza Rent a Car	Brazil	RENT3
Banco Santander Brasil	Brazil	SANB4	Lojas Renner	Brazil	LREN3
Banco do Brasil	Brazil	BBAS3	MOL Group	Hungary	MOL
Bancolombia	Colombia	BCOLOMBIA	Mahindra & Mahindra	India	M&M
Bangchak Corporation	Thailand	BCP	Mediclinic International	South Africa	MDC
Banpu	Thailand	BANPU	Motus Holdings	South Africa	MTH
CELSIA	Colombia	CELSIA	PTT	Thailand	PTT
CEMEX	Mexico	CEMEX CPO	PTT Exploration and Production	Thailand	PTTEP
CLP Holdings	China	2	PTT Global	Thailand	PTTGC
Cementos Argos	Colombia	CEMARGOS	Polymetal International	Russia	POLY
Centrais Elétricas Brasileiras	Brazil	ELET6	Tech Mahindra	India	TECHM
Clicks Group	South Africa	CLS	Thai Oil	Thailand	TOP
Companhia Energética de Minas Gerais	Brazil	CMIG4	The Siam Cement	Thailand	SCC
Hindustan Zinc	India	500188	The Siam Commercial Bank	Thailand	SCB
IRPC	Thailand	IRPC	True Corporation	Thailand	TRUE
IndusInd Bank	India	532187	Wipro	India	507685

Source: EMI research team. Results can be found on EMI EMNC Rankings.

Annex II Table 10. Best MNCs ESG performers in the world (using the same methodology)

EMNC 200ESG		EMNC 200ESG Environment		EMNC 200ESG Social		EMNC 200ESG Governance	
Country	Companies	Country	Country	Country	Companies	Country	Companies
U.S.	26	U.S.	43	U.S.	26	U.S.	43
France	22	France	21	France	21	U.K.	23
U.K.	19	Japan	20	Italy	17	Canada	20
Japan	15	U.K.	17	Spain	15	Australia	16
Germany	14	Italy	14	U.K.	14	France	12
Netherlands	11	Germany	12	Germany	13	China	10
Switzerland	10	Switzerland	12	Switzerland	10	Germany	10
Spain	10	Spain	11	Thailand	9	Switzerland	10
Thailand	10	Canada	10	Finland	8	Netherlands	7
Italy	9	Thailand	5	Brazil	8	Spain	7
Finland	7	Netherlands	5	Netherlands	8	South Korea	6
Sweden	6	Australia	4	Japan	7	Italy	6
Canada	6	Sweden	4	China	5	Ireland	4
Brazil	6	Brazil	4	Canada	5	Finland	3
Austria	4	Ireland	2	Australia	5	Sweden	3
Australia	4	India	2	South Korea	4	South Africa	3
Portugal	3	Portugal	2	Singapore	3	Brazil	2
India	3	Finland	2	Portugal	3	India	2
Ireland	3	South Africa	2	Austria	3	Norway	2
Norway	2	South Korea	2	Colombia	2	Russia	2
Belgium	2	Belgium	1	South Africa	2	Japan	2
Colombia	1	China	1	Malaysia	1	Chile	1
Singapore	1	Austria	1	Greece	1	Greece	1
Turkey	1	Mexico	1	India	1	Denmark	1
Russia	1	Turkey	1	Ireland	1	Luxembourg	1
Denmark	1	Greece	1	Belgium	1	Austria	1
Luxembourg	1			Chile	1	Bermuda	1
Greece	1			Israel	1	Malaysia	1
South Korea	1			Norway	1		
				Saudi Arabia	1		
				Hungary	1		
				Turkey	1		
				Mexico	1		

Source: EMI research team.

Annex II.5. Selected companies[34] from the ESG lists

Six selected companies were detailed analyzed through the EMI EMNC Rankings to understand the results with actions recently taken by the companies and compare the actions with the ESG results.

Arçelik

ESG	Environment Pillar	Social Pillar	Governance Pillar
best 40	-	best 40	121-160

A Household Appliances company, Arçelik, announced a little more than USD 5 bi in revenue and that it supports women in the workforce by defining targets and creating and running projects to achieve better distributions of women and diversities on its workforce breakdown. The company also brings information on achieving better supplier process practices and products inspections focused on quality improvement, efficiency increase, and digital transformation. The company also claims to be carbon-neutral and has met the 2023 target of preventing food wasting.

Rosneft Oil

ESG	Environment Pillar	Social Pillar	Governance Pillar
81-120	81-120	best 40	best 40

The Russian oil company Rosneft Oil has invested in all the pillars of ESG,

[34] This section counted on the support from Michael Pocress based on Annual Reports from Arçelik (https://www.arcelikglobal.com/), Rosneft Oil (https://www.rosneft.com/), MercadoLibre (https://investor.mercadolibre.com/), Mahindra & Mahindra (https://www.mahindra.com/), Itaú Unibanco Holding (https://www.itau.com.br/), and Ping An Insurance (https://group.pingan.com/), accessed between August and October 2021.

from 120 billion rubles (USD 1.7 bi in September 2021 exchange rates) on green investment from 2018 to 2020 – reducing air pollution by 14% and increasing the drilling waste processing in 2020, going through supporting classes in secondary schools and improving life condition for over 1,000 employees under subsidized mortgage program in 2020, to keeping a high level of compliance with fire safety and with the Bank of Russia's Corporate Governance Code.

MercadoLibre

ESG	Environment Pillar	Social Pillar	Governance Pillar
-	41-80	161-200	-

MercadoLibre, the Latin American largest eCommerce company, works with 100% recyclable, reusable, or compostable packaging. It has invested in expanding its electric fleet and recharging infrastructure in its service centers and distribution. Also, the company promotes talent inclusion and equal opportunities in IT, expanding access to technological education, especially focused on women. It has raised funds for the Red Cross and UNICEF.

Mahindra & Mahindra

ESG	Environment Pillar	Social Pillar	Governance Pillar
best 40	best 40	41-80	best 40

Mahindra & Mahindra has all its plants certified for Zero Waste to Landfills. Has partnered for a watershed project benefitting more than 20,000 individuals in Igatpuri, Nashik District. The company supports education for over 33,000 girls through the Project Nanhi Kali. It provides benefits ranging from providing opportunities to youth from low-income families to undergo diploma courses at vocational education institutes. The company has also acted on establishing a Risk Management Committee, Codes of Conduct for all the Board Members and employees, imparting programs for its directors including review of Investments by Strategic Investment Committee, Industry Outlook at the Board Meetings, Regulatory updates at Board and Audit Committee Meetings, Prevention of Insider Trading Regulations, Listing Regulations, Framework for Related Party Transactions, Meeting with Senior Executive(s), etc.

Itaú Unibanco Holding

ESG	Environment Pillar	Social Pillar	Governance Pillar
best 40	best 40	best 40	best 40

The largest Brazilian bank Itaú Unibanco assesses its potential suppliers from reputational standpoint, taking in consideration environmental and social criteria. 57% of its employees are women, majorly also in management positions; 23% declare themselves as black, as well as may be supported by company's scholarships. The company set out a Climate Risk Governance framework; it has an Environmental and Social Risk Committee; and includes climate on credit risk ratings of its corporate segment.

Ping An Insurance

ESG	Environment Pillar	Social Pillar	Governance Pillar
41-80	41-80	121-160	121-160

Ping An launched in 2019 the Group ESG Awareness Week, briefing weekly its employees about ESG. As of end of 2020, it has made three green buildings projects certifies. Since 2020, the company directly impacted low-income households, upgraded village clinics, trained village doctors, has acted on poverty alleviation through educational programs, has set up the Employee Assistance Program. The company also diversify channels for feedback, complaints, and reports to protect employees' freedom of expression.

Chapter 3
The E20 and China: A New Definition for a New Decade

Lourdes Casanova, Senior Lecturer and Gail and Rob Cañizares Director
Anne Miroux, Faculty Fellow
Emerging Markets Institute, Cornell University, United States

Executive Summary

Towards the end of 2020, prospects of a vaccine against the COVID-19 virus began to materialize. As industries reopen and workforces return, the global economy has started to recover. However, not all economies are recovering at the same pace. In light of this, the following chapter examines how emerging markets have fared. However, this chapter will first revisit the concept of the E20 that was created five years ago to examine the emerging markets phenomenon.

3.1. From "E20" to "E20+1"

Although widely used for more than twenty years, the term "emerging markets" in business has no standard definition. First coined by Antoine Van Agtmael at the International Financial Corporation (IFC) in 1981, the term was used to describe equity, bond, or currency markets with strong growth potential but also high risk and volatility, mainly in developing countries. From a primarily finance and investment banking related category, the term evolved into a broader economic concept, referring to the progress of certain developing economies and countries that had moved away from a centrally planned to a market economy, such as in Eastern Europe and Russia. In its common usage, "emerging markets" refers to countries or economies that are transitioning towards a mature stage of development and have the potential to become significant players in the global landscape (Casanova & Miroux, 2016 and Karolyi 2015). That said, the world of emerging economies is diverse, and the distinction between "emerging" and "developing" countries is imprecise. For instance, the International Monetary Fund (IMF) often includes the two in one category: "emerging and developing economies" (Duttagupta & Pazarbasioglu, 2021).

When the Emerging Markets Institute (EMI) launched its first report on emerging market multinationals in 2016, it established a group of top 20 emerging economies—referred to as the E20—to analyze and illustrate the "emerging markets" phenomenon. Considering their upward growth trajectory and level of development, these countries were selected based on the size of their GDP, population, and influence in global and regional trade and investment. Five years later, as mentioned in the 2020 EMI report, we revised our list and established a ranking of the best performing emerging markets over the last decade (Casanova & Miroux, 2020). In this report, we have further refined this list to better suit today's reality (see below). A case in point is South Korea (included in many emerging market indices and in the EMI E20 list, till 2020) that experienced tremendous growth in the past decade: by the end of the 2010s, the Korean GDP per capita surpassed that of developed countries such as Greece, Portugal, and Spain and was just below Italy. It was about 80% that of Japan in 2019.

The case of China raises another challenge. The Chinese economy is the second largest in the world today, with a nominal GDP that reached 70% of the US GDP in 2020, compared to 40% in 2010 (and 12% in 2000)[35]. Though it has been slowing down since the mid-2010s, it still grew by almost 7% during the second half of the past decade and managed an impressive 2.3% growth rate in 2020, the year the COVID crisis emerged (Figure 3.1). Its remarkable economic rise and impressive progress in technology, innovation and global business beg the question, as noted in the 2020 EMI report: is China an emerging market? To answer this question, it is worth putting its growth trajectory and global economic leadership in perspective. For instance, the Chinese GDP per capita (nominal), at about USD10,500 in 2020, stands at only 17% of the U.S., and while the country has eliminated extreme poverty, it still counts 373 million living under the poverty line of USD5.50 per day. As shown in Table 3.1, our revised list still features China as an emerging economy. Our analysis below confirms its status as an emerging market. Yet, it is different from the rest of the E20 in terms of its scale and innovation, which span 5G, artificial intelligence, the space race, and more, typical of a developed country. To highlight its singularity

[35] Based on World Bank Data, nominal GDP, USD.

among emerging economies, we created the "E20+1" category of emerging economies, to better account for China's unique position in the rankings.

The EMI team revised the original E20 list of top emerging economies (Casanova & Miroux 2016) to continue accounting for the changing economic landscape. The methodology used is as follows:

- Countries that fit one of the following criteria were excluded:
  a) those considered advanced economies by the IMF[36]
  b) those with a population of less than 1.5 million
  c) those with World Bank GDP data older than 3 years. Hence, Venezuela was excluded
- A weighted score was calculated for each of the remaining countries, using World Bank data (data: https://data.worldbank.org/ accessed in August 2021). The following variables were used with the weightings shown:
  a) GDP per capita with a weight of 0.4
  b) Share in total global trade with a weight of 0.1
  c) Poverty level with a weight of 0.2 and
  d) Extreme poverty level with a weight of 0.3
- On this basis, a list of 42 emerging economies was established. These countries were then ranked by nominal GDP to stablish the 20 biggest economies.

Based on the results of the above methodology, Table 3.1 provides a list of the 20 largest emerging economies and China, i.e., the "E20+1" list, in Table 3.1 (A), and the next 21 largest emerging economies, in Table 3.1 (B).

Table 3.1. List of emerging economies: "E20+1" (A) and the next 21 (B)

A

	Country	Region
1	China	Asia
2	India	Asia
3	Russia	Europe
4	Brazil	Latin America
5	Mexico	Latin America
6	Indonesia	Asia
7	Turkey	Asia
8	Saudi Arabia	Asia
9	Iran	Asia
10	Thailand	Asia
11	Nigeria	Africa
12	Argentina	Latin America
13	Egypt	Africa
14	Philippines	Asia
15	Malaysia	Asia
16	Bangladesh	Asia
17	South Africa	Africa
18	Colombia	Latin America
19	Vietnam	Asia
20	Pakistan	Asia
21	Chile	Latin America

B

	Country	Region
22	Romania	Europe
23	Peru	Latin America
24	Kazakhstan	Europe
25	Iraq	Asia
26	Ukraine	Europe
27	Hungary	Europe
28	Qatar	Asia
29	Algeria	Africa
30	Kuwait	Asia
31	Morocco	Africa
32	Ethiopia	Africa
33	Cuba	Latin America
34	Kenya	Africa
35	Ecuador	Latin America
36	Sri Lanka	Asia
37	Dominican Republic	Latin America
38	Guatemala	Latin America
39	Oman	Asia
40	Myanmar	Asia
41	Ghana	Africa
42	Bulgaria	Europe

Source: EMI research team based on data from World Bank (https://data.worldbank.org/), accessed in August 2021, and IMF World Economic Outlook (https://www.imf.org/), last updated in July 2021.

As a region, Asia dominates in the EMI top "E20+1" list, accounting for over half of the countries in the grouping, with nine economies from East and South Asia alone. Latin America only has five countries, and Africa—with three—even less. Other than Korea and Poland, which are no longer included in the list, the E20 has not changed much. Due to its GDP per

The EMI "E20+1" grouping

The EMI "E20+1" group includes (in alphabetical order):

Argentina, Bangladesh, Brazil, Chile, China, Colombia, Egypt, India, Indonesia, Iran, Malaysia, Mexico, Nigeria, Pakistan, Philippines, Russia, Thailand, Turkey, Saudi Arabia, South Africa, Vietnam.

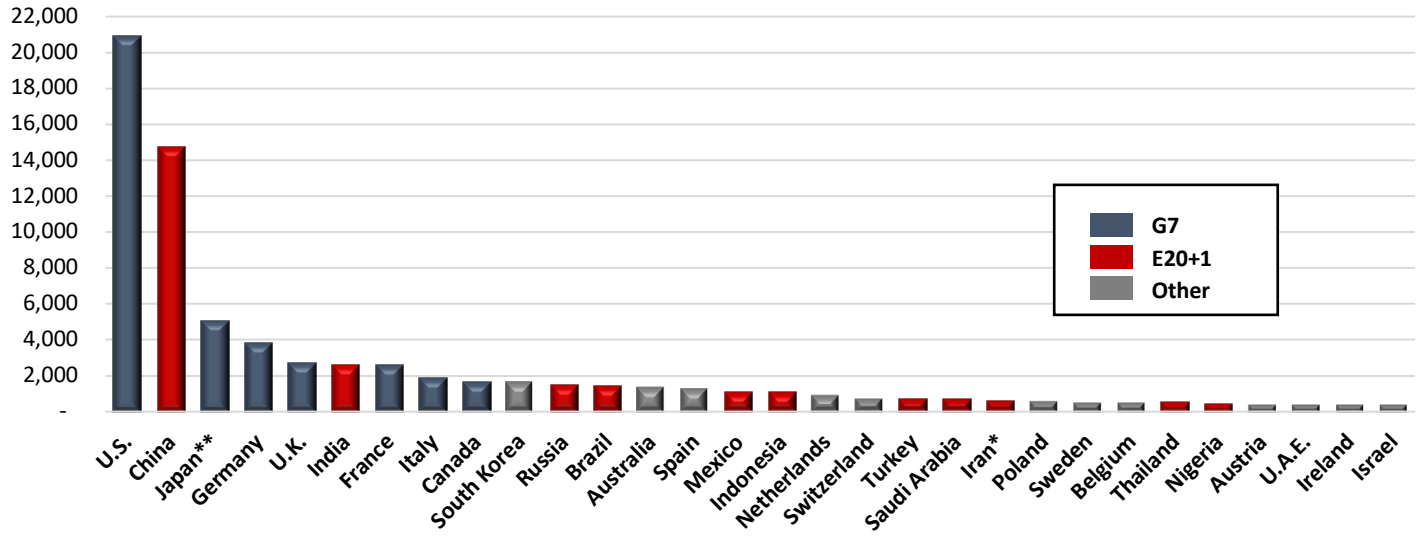
These economies account for about 44% of global GDP on a PPP basis.

[36] Andorra, Australia, Austria, Belgium, Canada, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hong Kong SAR, Iceland, Ireland, Israel, Italy, Japan, Korea, Republic of, Latvia, Lithuania, Luxembourg, Macao SAR, Malta, Netherlands, New Zealand, Norway, Portugal, Puerto Rico, San Marino, Singapore, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Taiwan Province of China, United Kingdom, and United States (https://www.imf.org/external/datamapper/NGDP_RPCH@WEO/ADVEC)

capita, Korea is considered a high-income economy by the IMF, and Poland was eliminated because it has successfully eliminated poverty over the last decade. On the other hand, Vietnam enters the E20 for the first time, and Pakistan and Chile reenter after being removed from the list in 2019. Based on nominal GDP, a few countries that did not make the list, such as Romania or Peru, are not that far from Chile, which is the last country in the ranking—these countries could be considered as being on a "waiting list," and it will be interesting to watch their progression, and possible inclusion in the "E20+1", in future years.

Eight of the emerging economies on the "E20+1" list are among the 20 largest in the world, based on their 2020 nominal GDP (Figure 3.1)—the same number as the year before. China, which ranked second maintains its position, and India—which jumped to fifth in 2018, is now in sixth position; on the other hand, Brazil slid from ninth to 12th. In some sense, the E20+1 represents investment hubs and companies from countries that have made an impact not only within their regions but also across the world. Some economies, like those in Latin America, have been more volatile than, for example, China and India. However, despite these challenges, emerging economies are expected to continue playing a major role in the global economy.

Figure 3.1. 30 largest economies in the world by the real GDP, 2020 (USD bn).



* Based on World Bank Macro Poverty Outlook, April 2021.
** Based on 2019 data.
Source: EMI research team based on data from World Bank (https://data.worldbank.org/), accessed in August 2021.

3.2. Emerging markets entering a new decade of growth

A distinctive feature of the early 21st century is the shift of power in the global economy, with emerging economies registering remarkable growth rates. During the first decade of the 2000s, the "E20+1" countries averaged 6% economic growth and 5.2% in the 2010s, despite a slowdown in the second half of the decade (Figure 3.2). Their performance contrasted that of the G7, with a differential between the two groups peaking at five percentage points in the second half of the 2000s (Figure 3.3). Despite the deceleration of China and poor performance of major Latin American economies (Argentina and Brazil) in the second half of the 2010s, the share in the global GDP of the "E20+1" stood at 44% in 2020, compared to 32% at the turn of the century. Additionally, emerging economies consolidated their position as major trade and investment partners and emerged as key actors in global innovation and technology.

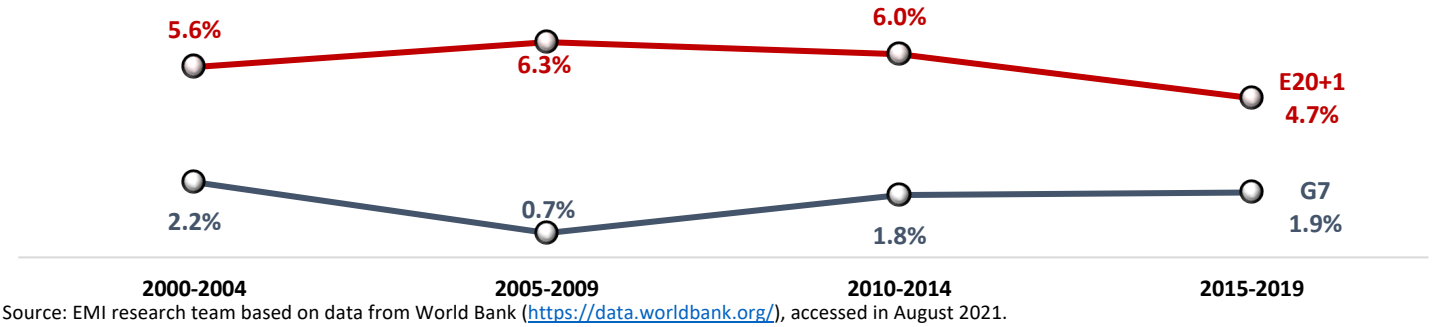
Emerging market growth performance was largely led by Asian nations, given that Latin America lagged behind (Figure 3.2 and Figure 3.4). Indeed, emerging Latin America grew much less than other regions, especially Asia, in the 2000s. However, the continent regained ground during the first half of 2010s largely due to rising commodity prices, and the gap between emerging Latin America and other regions narrowed, with the E20 in Latin America being the only regional group to register an increase in growth rate during the period 2005-2014 (from 3 to 3.5%). The reprieve was short, however, as the region's growth dropped to less than 1% in the latter half of the decade (Figure 3.4). The fall was particularly remarkable in Argentina and Brazil, both of which recorded negative rates (-0.3% and -0.5%, respectively).

Figure 3.2. Real GDP growth, E20+1 and G7 countries, 2000-2020, and forecast for 2021 and 2022

	2000-2004	2005-2009	2010-2014	2015-2019	2020	2021f	2022f
E20+1	5.6%	6.3%	6.0%	4.7%	-1.7%		
Asia	4.4%	4.6%	5.4%	4.4%	-0.5%		
Asia (E20)	6.6%	7.7%	7.1%	5.9%	-0.8%		
Bangladesh	4.8%	6.3%	6.1%	7.4%	2.4%	5.0%	7.5%
China	9.2%	11.5%	8.6%	6.7%	2.3%	8.1%	5.7%
India	5.6%	6.9%	6.6%	6.7%	-8.0%	9.5%	8.5%
Indonesia	4.6%	5.6%	5.8%	5.0%	-2.1%	4.3%	5.8%
Iran	5.4%	3.5%	1.0%	0.3%	1.7%	2.5%	2.1%
Malaysia	5.4%	4.1%	5.8%	4.9%	-5.6%	6.5%	6.0%
Pakistan	4.7%	4.3%	3.4%	4.5%	0.5%	1.5%	4.0%
Philippines	4.6%	4.5%	6.2%	6.6%	-9.6%	6.9%	6.5%
Saudi Arabia	4.0%	2.8%	5.3%	1.5%	-4.1%	2.4%	4.8%
Thailand	5.5%	3.1%	3.8%	3.4%	-6.1%	2.6%	5.6%
Turkey	4.5%	3.3%	7.5%	4.1%	1.8%	6.0%	3.5%
Vietnam	6.7%	6.5%	5.9%	6.8%	2.9%	6.5%	7.2%
Latin America	2.6%	3.4%	3.3%	-0.7%	-6.2%		
Latin America (E20)	2.4%	3.0%	3.5%	0.8%	-6.5%		
Argentina	0.1%	4.6%	2.9%	-0.3%	-9.9%	5.8%	2.5%
Brazil	3.1%	3.6%	3.4%	-0.5%	-4.1%	5.3%	1.9%
Chile	4.6%	3.7%	4.6%	2.0%	-5.8%	6.2%	3.8%
Colombia	3.3%	4.5%	5.0%	2.4%	-6.8%	5.2%	3.6%
Mexico	2.0%	0.9%	3.3%	2.0%	-8.2%	6.3%	4.2%
Africa	4.8%	5.4%	3.9%	2.5%	-2.9%		
Africa (E20)	5.2%	5.5%	3.9%	2.4%	-0.7%		
Egypt	3.9%	6.0%	2.8%	4.8%	3.6%	2.5%	5.7%
Nigeria	8.5%	6.8%	6.1%	1.2%	-1.8%	2.5%	2.6%
South Africa	3.6%	3.5%	2.6%	0.8%	-7.0%	4.0%	2.2%
Europe	2.6%	1.3%	1.4%	2.0%	-6.1%		
Russia	6.8%	3.9%	3.1%	1.0%	-3.0%	4.4%	3.1%
G7	2.2%	0.7%	1.8%	1.9%	-5.0%		
Canada	3.5%	2.8%	2.6%	1.8%	-5.4%	6.3%	4.5%
France	2.1%	0.8%	1.2%	1.6%	-8.1%	5.8%	4.2%
Germany	1.0%	0.5%	2.2%	1.6%	-4.9%	3.6%	4.1%
Italy	1.5%	-0.5%	-0.5%	1.0%	-8.9%	4.9%	4.2%
Japan*	1.4%	-0.4%	1.6%	0.9%		2.8%	3.0%
U.K.	2.8%	0.7%	2.0%	1.7%	-9.8%	7.0%	4.8%
U.S.	2.7%	1.1%	2.1%	2.5%	-3.5%	7.0%	4.9%

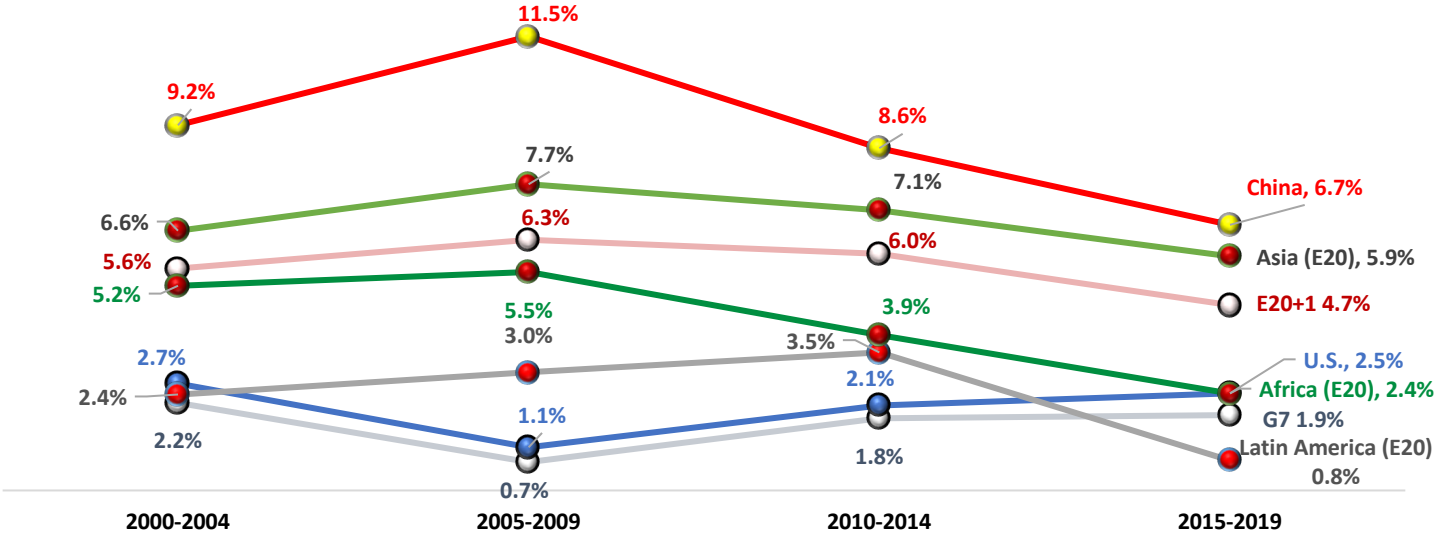
Source: EMI research team based on data from World Bank (https://data.worldbank.org/), accessed in August 2021, and IMF World Economic Outlook (https://www.imf.org/), last updated in July 2021.

Figure 3.3. GDP growth, E20+1 and G7, 2000-2019



Source: EMI research team based on data from World Bank (https://data.worldbank.org/), accessed in August 2021.

Figure 3.4. GDP growth, E20+1 and G7, within China, the U.S. and emerging regions, 2000-2019



Source: EMI research team based on data from World Bank (https://data.worldbank.org/), accessed in August 2021.

The COVID crisis hit just at the beginning of a new decade. As examined in the EMI Report 2020 (Casanova & Miroux, 2020), emerging economies—though less affected overall than initially anticipated—were dealt a severe blow when global trade and investment fell and activity in some sectors such as tourism—a vital industry for many emerging economies—collapsed. Unemployment increased drastically across the world, and in 2020, for the first time in 20 years, global poverty increased. However, as a result of unprecedented government rescue packages (Casanova & Miroux, 2020), emerging economies managed to confront the crisis. Their efforts, though smaller than those of more advanced economies, were significant, and the unorthodox policies of the developed world and multilaterals such as Quantitative Easing (QE) entitled, even pushed, them to take whatever steps necessary to address the crisis. For instance, between March and September 2020, Brazil, Chile, Peru, Poland, South Africa, and Thailand adopted fiscal measures and packages corresponding to between 10% and 15% of their respective GDPs, compared to the approximate 20% seen in many developed countries[37] (Casanova & Miroux, 2020). The GDP of the "E20+1", as a group, dropped by -1.7% in 2020, a significant but much smaller fall than the one registered by the G7 (-5.1%). Few economies managed to register growth rates and those that did were in Asia. Within the "E20+1", six of the seven economies that succeeded in doing so were Asian: Bangladesh, China, Iran, Pakistan, Turkey, and Vietnam (Figure 3.4). China was the only major economy in the world with a positive growth rate (2.3%), while all G7 economies dipped into negative territory.

The divide among emerging markets has been increasing over the years: Asia registered remarkable growth rates, while the performance was more subdued in Africa, and even more so in Latin America. The COVID crisis exacerbated the heterogeneity of situations, both among emerging regions and within them. Although Asia managed to limit the fall in GDP in 2020 to less than 1% (Figure 3.2), the fall was much more dramatic (-6.5%) in Latin America, with major economies such as Argentina and Mexico falling by 8% and approximately 10%, respectively. Within Asia, the situation was markedly different between the Philippines (-9.5%) and Vietnam (+2.9%), the latter registering one of the highest growth rates in the world. This divergence can be explained by differences in the economic situations of countries before the pandemic, as well as by differing policy responses. For instance, Argentina, Brazil,

[37] With the exception of Japan, Germany, and Italy—for which the total fiscal packages reached between 30% and 40% of GDP—this ratio remained close to 20% for major developed economies.

and Mexico already faced serious economic and political difficulties before the crisis. For other countries, their extreme dependence on commodity exports or tourism made them highly vulnerable; still others, like China, seemed to successfully and quickly contain the spread of the virus before it caused irreversible economic damage.

However, it remains to be seen whether countries will be able to maintain the level of economic support they managed to provide during the beginning of the pandemic—an acute challenge, given many emerging markets' budget limitations. As the crisis lingers we will see how the situation continues to evolve.

In July 2021, the IMF projected a global recovery of about 6% in 2021, the highest ever since 1973 (IMF 2021). Although there is still a high level of uncertainty, emerging markets were forecast to do well. Even Latin America was forecast to do better than originally projected, with 6% growth for 2021, because of the surge in commodity prices (see Table 3.2). As seen in Figure 3.2, all major Latin American emerging economies are expected to register a remarkable rebound in 2021 from their 2020 dip.

The risks for emerging markets including deteriorating sanitation situations due to lesser vaccine availability; inability to maintain fiscal support; inflation; and tighter financial conditions combined with a high debt burden. As a result of the crisis, structural long-term changes will also greatly influence emerging markets. Global trade will change due to the reconfiguration of global value chains (GVCs), which will have to balance reliance, flexibility, and efficiency. With globalization's inherent risks and countries' vulnerabilities exposed by the crisis, globalization is being questioned, and many nations are taking more nationalistic and inward-looking approaches, such as major trade actors like the U.S. and China. Countries that rely on trade as an engine for growth are likely to suffer.

Among the positive signs for emerging countires, commodity prices have driven the recovery from their mid-2020 trough, offering a reprieve to commodity exporting nations. Led by the rebound in activity in major economies such as China, the U.S., and some European Union members, the prices of commodities—in particular, raw materials such as aluminum, copper, iron ore, and oil and gas—increased in the first half of 2021, by almost 60% year on year (Table 3.2). The price of minerals, ores, and metals rose by 26%, and that of fuel and commodities rose by more than 90% (Table 3.2 and Figure 3.5). While some reasons for this surge are conjunctural, others are more profound: the transition away from fossil-fueled energy, for instance, could strengthen the demand for certain metals that are essential for electric batteries.

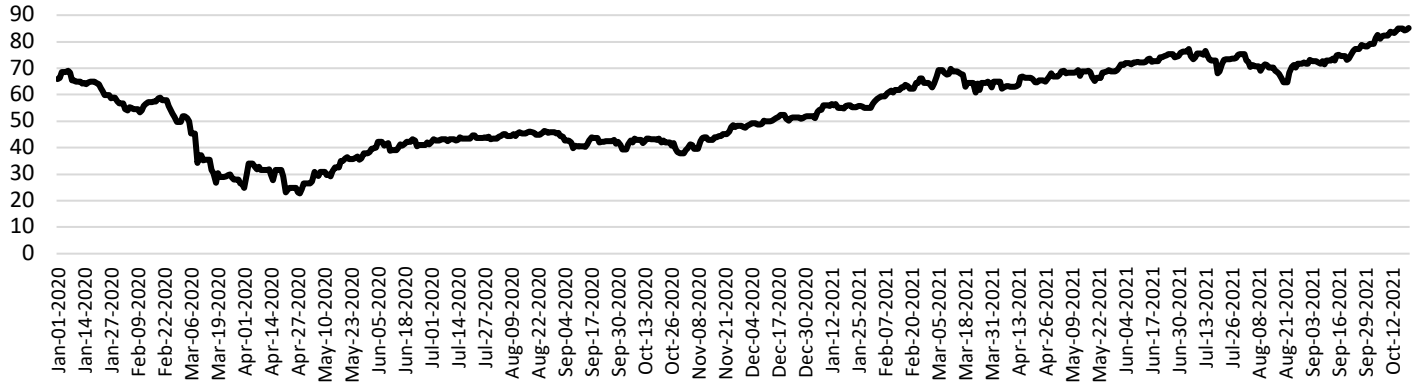
Table 3.2. Commodity prices, percentage change*, 2020- 2021

	2020	2021*
All commodities	-15.9	59.5
All food	6	37.1
Agricultural raw materials	-2	18.0
Minerals, ores, and metals	15.5	26.0
Fuel commodities	-32.1	90.7

* January-July, year on year

Source: EMI research team, based on UNCTAD Commodity Price Index (UCPI), and UNCTAD commodity price bulletin, July 2021, https://unctad.org/system/files/official-document/gdsdsicpb2021d9_en.pdf (accessed in October 2021).

Figure 3.5. Crude oil price, USD per barrel (2020, 2021 YTD)



Source: EMI research team based on S&P Capital IQ (https://www.capitaliq.com/) accessed in October 2021.

Regional trade agreements have increased, with two major ones recently signed and coming into force: the Regional Comprehensive Economic Partnership (RCEP) in Asia and the African Continental Free Trade Area (AfCFTA). Signed in November 2020 between 15 Asian-Pacific economies—11 of which are developing and emerging economies—the RCEP is the largest free-trade agreement to date, covering approximately 30% of world trade and GDP. It is expected to significantly strengthen supply chains in the region and further enhance Asia's role in the global economy. In Africa, the AfCFTA agreement—signed in 2018 by virtually all African states—came into

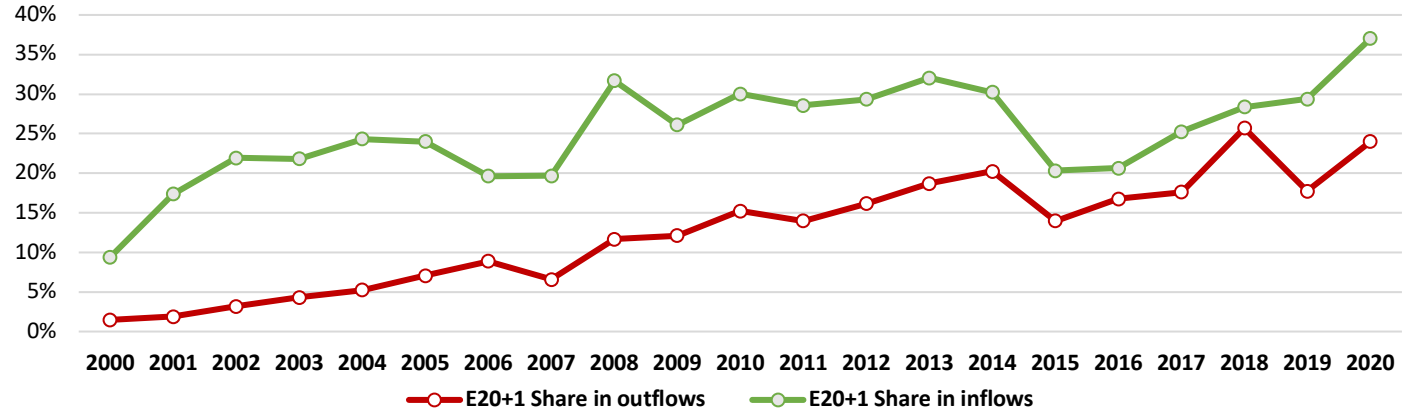
force in May 2019 and has been ratified by 36 countries as of February 2021. Aimed at boosting intra-African trade by creating a single market for goods and services, the AfCFTA could be a key agent of change for the continent. While Mexico, Canada, and the U.S. signed the USMCA—the "new NAFTA"—in July 2020, the rest of Latin America does not have a trade agreement beyond Mercosur—which includes only four full members (Brazil, Argentina, Paraguay, and Uruguay)—and which, by many accounts, has not made significant progress since its inception in 1991.

3.3. Emerging markets as global investors

Over the years, emerging economies have accounted for an increasing share of global FDI inflows and outflows. The trend accentuated in 2020: their share, as illustrated by the "E20+1", accounted for almost 40% of global FDI flows compared to 30% the year before (Figure 3.6), a consequence of the COVID crisis. Indeed, the 35% fall in global FDI flows—the largest in 20 years—was largely accounted for by advanced economies (-60%). By contrast, with a decline of "only" 23%, the "E20+1" group fared relatively well, largely on account of the good performance in Asia. China, for instance, became the second largest host country in 2020 (with USD149 billion) and India jumped to fifth place with USD51 billion (Figure 3.7). Both countries were among the few major economies that registered increased FDI inflows. By contrast, in Latin America—which experienced the sharpest economic contraction in 2020—many economies saw their FDI inflows plunge: -60% in the case of Brazil and -40% and -50% in Argentina and Colombia, respectively.

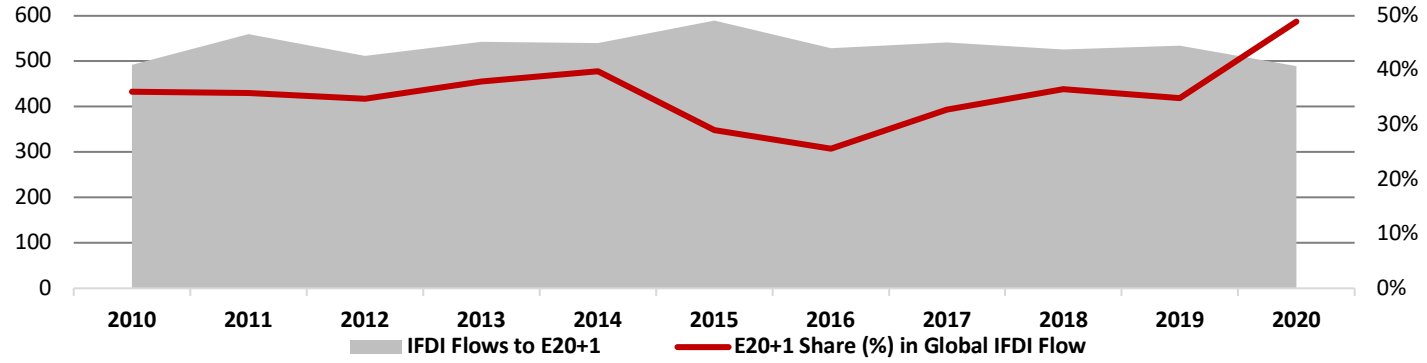
Emerging economies have also confirmed their strong presence as global investors. Despite being dragged down by the negative outflows from Brazilian multinationals using their overseas subsidiaries to raise funds, the "E20+1" accounted for almost 25% of world total outflows in 2020 (Figure 3.6). Within the global context of sharply declining FDI outflows, many of these emerging economies registered only a small decline in outflows, or even an increase in some cases. This trend propelled a few of them—such as Chile, India, and Thailand—to the list of top 20 global investors. China, for the first time, became the largest investor in the world (Figure 3.8).

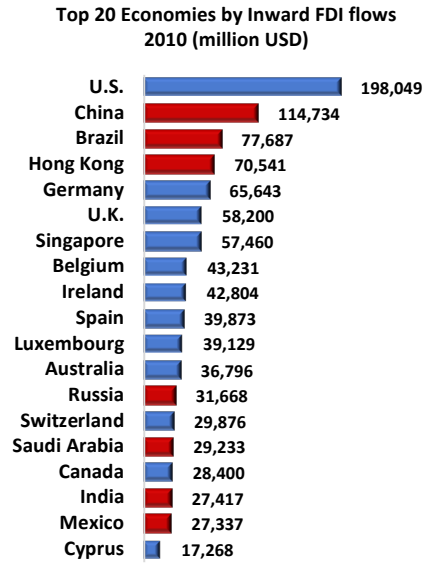
Figure 3.6. E20+1, share in global FDI inflows and outflows, 2000-2020

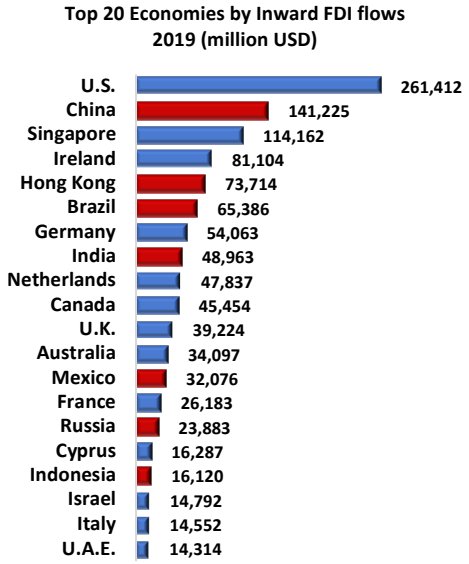


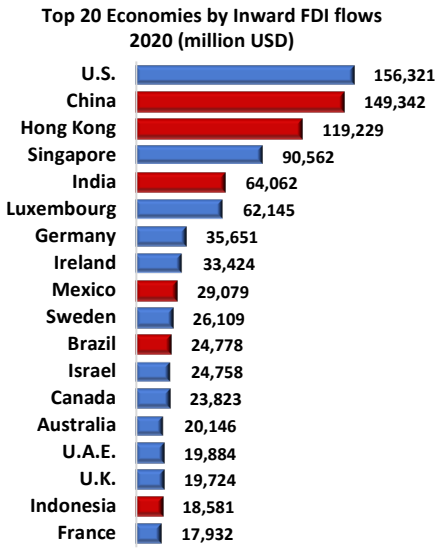
Source: EMI research team, based on UNCTADStat (https://unctadstat.unctad.org/EN/Index.html), accessed in September 2021, and World Investment Report 2021 https://unctad.org/webflyer/world-investment-report-2021.

Figure 3.7. Top 20 economies by FDI inflows, 2010, 2019 and 2020



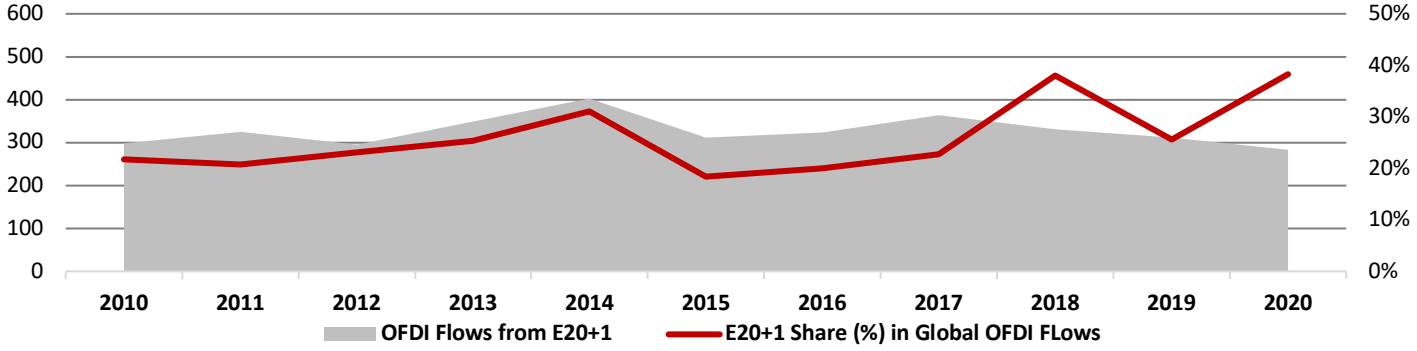


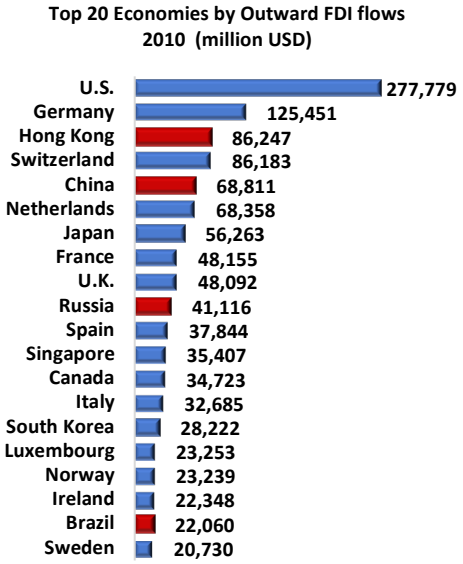


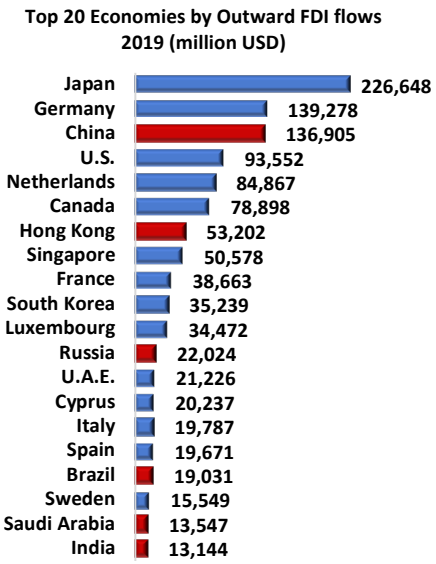


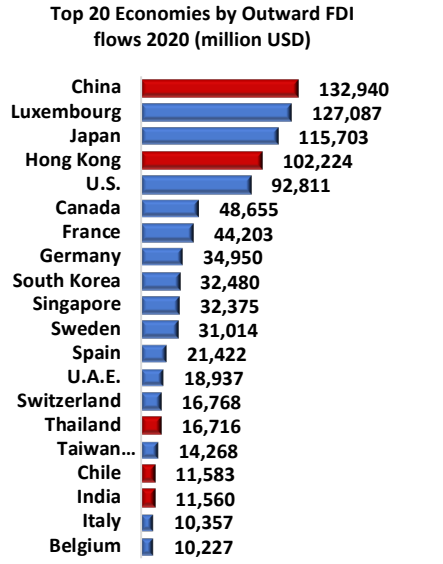
Source: EMI research team based on UNCTADStat (https://unctadstat.unctad.org/wds/TableViewer/tableView.aspx?ReportId=96740), accessed in October 2021, and World Investment Report 2021and World Investment Report 2021 https://unctad.org/webflyer/world-investment-report-2021.

Figure 3.8. Top 20 economies by FDI outflows, 2010, 2019 and 2020









Source: EMI research team based on UNCTADStat (https://unctadstat.unctad.org/wds/TableViewer/tableView.aspx?ReportId=96740), accessed in October 2021, and World Investment Report 2021and World Investment Report 2021 https://unctad.org/webflyer/world-investment-report-2021 .

3.4. There is no going back

The impact of the COVID crisis has led to the question of whether the emerging world is still emerging. Admittedly, emerging economies have suffered extensively due to the crisis, just as all economies across the world have been. Further, after almost 15 years of remarkable growth, emerging economies as a group have experienced a slowdown, which reflects, in particular, Latin America's lackluster performance and China's deceleration. Given the size of China's economy, maintaining its growth rates would have been a

major feat. One year after the crisis, however, emerging economies have maintained their position in the global economy, with over 40% of global output coming from the top 20 emerging economies and China. Emerging nations have even strengthened their role in investment flows, and a network of multilateral development banks and intra-regional trade agreements led by emerging economies is progressively taking place. The landscape of emerging economies is very diverse, and with the shadow of uncertainty looming over the global economy, they will certainly face ups and downs in this next phase. The emerging world may hence not be emerging as strongly as before, but it is there and there is no going back.

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PART II
SPECIAL CONTRIBUTIONS

EMERGING MARKETS RESEARCH NETWORK
Paris, France

PIOTR MAZURKIEWICZ
Washington, United States

JAMES ZHAN
Geneva, Switzerland

LIMIN CHEN, XUELIN BU
Wuhan, China

GAUTAM JAIN
Ithaca, United States

VENETA ANDONOVA, JUANA GARCÍA, JUAN PABLO BORDA
Bogota, Colombia

ERICA CHICOLA, TONY CARRANZA
Washington, United States

Editors:

Lourdes Casanova - Gail and Rob Cañizares Director

Anne Miroux - Faculty Fellow

Emerging Markets Institute, Cornell University, United States

Chapter 4
Paths to Progress for Business and Sustainability in Emerging Markets

Lorenzo Pavone, Deputy Head - Networks, Partnerships and Gender Division
OECD Development Centre's Emerging Markets Network (EMnet)[38], France

Executive Summary

The importance of sustainable business has grown considerably since 2010, as companies have come to understand the importance of putting sustainability at the core of their corporate strategies and of including Environmental, Social and Governance (ESG) criteria when screening potential investments.

Across emerging markets, multinational enterprises have created sustainability initiatives that are locally relevant and embedded sustainability in their operations, leveraging collaborations for greater impact. Initiatives to measure progress and impact in this space have garnered interest in emerging markets and have the potential to further attract investment, access new markets and opportunities, improve talent retention and increase global competitiveness.

However, the Coronavirus pandemic has the potential to affect sustainable business negatively, although it is not yet clear how permanently or how profoundly. In particular, the economic crisis could create disincentives for sustainable initiatives in the short term, particularly where uncertainty is high and projects require significant upfront investments with delayed returns.

At the same time, the current economic and social crisis is changing sustainable business models and their relation to key stakeholders across emerging markets. As the pandemic continues to unfold in unpredictable ways, firms are rapidly adapting in order to identify new ways of doing business that can support resilience to the crisis and contribute to a lasting and sustainable recovery.

Consequently, harnessing the potential of business for recovery will be key in emerging markets, as the fiscal space post COVID 19 is set to narrow. In addition, a favorable enabling environment can promote an all of industry approach, attract more sustainable private investment and facilitate public private collaborations.

This chapter looks at the role businesses can play in supporting sustainable recovery in developing economies. It addresses the mainstreaming of sustainability concepts in emerging markets and the associated challenges, including measurement. It then highlights the impact of COVID-19 on sustainability, including sustainable investment. Finally, this chapter focus on the key drivers of the post-pandemic recovery for business in a range of areas that are considered as enablers of sustainable and inclusive growth, such as promotion of government support for sustainable business models, digital transformation, and the green economy.

4.1. Sustainability in emerging markets

Businesses across emerging markets are affected by the same sustainability megatrends that can be observed globally. In emerging markets, these discussions are taking place against the backdrop of specific national and regional dynamics, from the need for a renewed social contract in Latin America to the government led drive towards a more sustainable development pattern in the People's Republic of China (hereafter 'China') and delivering on the promise of the African Continental Free Trade Agreement (AfCFTA).

Almost 20 years ago, research by the International Finance Corporation compared the business case for sustainability in developed markets to that of emerging markets. It found that, in the main, companies in emerging markets focused more on short term cost savings and revenue gains. Intangible assets, such as brand value and reputation, were considered more significant in developed countries (IFC, 2002).

The full picture was and still is more complex than this overview might suggest, with prominent examples of emerging market companies already successfully placing sustainability at the core of their business proposition. Founded in 1969, Natura, a Brazilian cosmetics multinational, has built a reputation for treating the environment, suppliers and customers responsibly. Its business model

[38] This chapter builds on the work of the OECD Emerging Markets Network (EMnet) thematic Working Group on Business and Sustainability and on the findings of the EMnet Policy Note "Paths to progress for business and sustainability in emerging markets" and the EMnet "Business Insights on Emerging Markets 2021" publications

connects the conservation of the Amazon with local communities and technological innovations. Natura built a business case for sustainability by sourcing sustainable ingredients in the rainforest for their beauty products, encouraging farmers to preserve trees and make a greater income by partnering with the company rather than logging. For example, the Ucuuba tree was threatened with extinction until it was tested for use as a cosmetics asset. It was protected from logging due to its increased value to farmers collaborating with Natura to grow it for cosmetics purposes.

Over the course of the years, many other emerging market multinationals have placed sustainability at the core of their corporate philosophy and business model. In 2011, Mahindra in India launched Mahindra Rise as a guiding philosophy for the Group, the third pillar of which is to create positive change within the organization and in the ecosystem (The Economic Times, 2012). The company has also invested in business models adapted to the local market that have sustainability at their core. Mahindra's electric vehicle company designed India's first electric three wheeler platform to address India's bottleneck of short distance commute. By contributing to the efforts to decarbonize Indian cities and by providing collective clean mobility solutions, Mahindra is a business case for sustainable development through green mobility in India (Babu, 2020).

4.1.1. Adapting sustainability initiatives in emerging markets

The IFC's research also found that community investment and development, seen primarily as an overhead item in firms operating in developed countries, were important in emerging markets in retaining the license to operate and in reducing risk (IFC, 2002). An analysis of numerous examples submitted to EMnet, spanning a wide range of sectors, shows that companies are going beyond these incentives in designing their sustainability initiatives, leveraging their understanding of the local environment and their specific areas of business expertise, to maximize the relevance of these initiatives to their business models.

With widely varying social and economic conditions across emerging markets, sustainability initiatives need to adapt to more heterogeneous environments than those in more advanced economies. This presents challenges across areas as wide ranging as infrastructure, with significant gaps exacerbated by rapid urbanization; labor markets with informal workers representing 70% of the workforce; or social protection, which for example only covers just over half of vulnerable populations and just under half of the poor in Latin America (OECD, 2020a). These differences also extend to sustainability policies. The 2020 Environmental Performance Index (EPI), which provides a data driven summary of the state of sustainability around the world notes that, to date, good sustainable policy results are associated with wealth (i.e. with level of GDP per capita). One factor posited is that economic prosperity makes it possible for nations to invest more in policies and programs that lead to desirable outcomes (EPI, n.d.). This trend may also be exacerbated by the exporting of polluting activities, such as management of plastic waste, to emerging markets such as Thailand, Malaysia, Vietnam, Turkey, and India. This practice has triggered concerns about the health and environmental impacts that could result in these countries, given their poorly developed plastics recycling facilities and relatively weak environmental and treatment standards (OECD, 2018a). This said, environmental health policies are gaining greater prominence across emerging markets, with many emerging markets governments including sustainability policies in their national plans. Circular economy is part of the national economic plans of both Colombia and Indonesia, while sustainable mobility is a policy priority in India (IKI, 2020). Yet much more remains to be done for these efforts to gain in scope and take hold across emerging markets as a whole.

In designing their sustainability strategies, multinationals operating in emerging markets need to take into account and adapt to these wide differences in local context. In resource scarce areas, firms have introduced technologies and accelerated sustainability initiatives, with the aim of improving efficiency, saving energy and reducing waste. For example, SUEZ, a leader in smart and sustainable resource management, has partnered with Chile's largest water utility company, Aguas Andinas, to process Santiago's wastewater using the principles of the circular economy: design out waste and pollution, keep products and materials in use and regenerate natural systems. Aware of the local resource limitations, SUEZ's biofactories adjusted to reduce pollution in the Mapocho River and are generating bioenergy and fertilizers in the process. It created self sufficiency using renewable energy sources and systems to control emissions, minimizing environmental impacts in the region. The wastewater treatment plant has become a center that produces resources (water, nutrients, fertilizer) and energy (biomethane, electricity, heat), with minimal environmental impact on noise, odors and landscape. Treated wastewater is re used directly or indirectly for agriculture to enhance the resilience of territories and to mitigate water scarcity risks (SUEZ, n.d.).

The political context is also a critical factor for companies to consider to ensure the impact of their sustainability strategies. In Colombia, the energy company Grupo Energía Bogotá launched an initiative called Energy for Peace. The program seeks to help build peace in territories affected by the armed conflict through an electrical energy transmission project. Among the objectives is the strengthening of the social and institutional fabric, bringing security, progress and well being to communities in areas affected by violence, going beyond operational and humanitarian demining. The project includes environmental, education and training initiatives, such as Bosques de Paz (Forests for Peace), Habilidades para la Paz (Skills for Peace) and Energía que Construye mi Futuro (Energy to Build my Future), among others.

Promoting climate smart dairy initiatives underpins Danone's Algerian H'lib Dzair project. The project is adapted from traditional Algerian dairy farming models and provides farmers with technical expertise, as well as individual audits and advice, enabling them to become more competitive and to reduce their ecological footprint. H'lib Dzair also contributes to the circular economy by encouraging

local production of feed and use of agro industrial and agricultural by products, while supporting milk collectors by improving milk quality.

The Mars and 'Economics of Mutuality' initiative, the Maua business in Kenya, is an example of how financial goals can be achieved while acting sustainably to improve the income and well being of impoverished communities. The Maua business established a new route to market by engaging partners in informal settlements and rural areas that were difficult to reach through traditional distribution channels by expanding the distribution of Mars Wrigley products through local micro distributors. The project uses non financial metrics to drive business performance holistically (including financial returns).

Circular economy roadmaps were introduced in China in 2013 (OECD, 2018b). More than 60% of the industrial waste generated in 2014 was "utilized", compared to about 45% in 2000 and 30% in 1990. Recovered materials and products grow on average by 0.3% annually. In 2015, China recovered a total of 246 million tons of scrapped metals, plastics, paper, glass, tires, batteries, electrical and electronic equipment, automobiles and ships, representing a total value of 515 billion yuan (OECD, 2018c). In a context where digital access is high and e waste is a growing issue, in 2020, Huawei Technologies improved their online One Stop trade in program: when customers trade in their old device, they can get the new device at the same time. To incentivize returns, by recycling old devices, customers receive vouchers to purchase new ones. Since 2015, Huawei Technologies' trade in program has reached nearly half a million devices. Its circular economy model provides an opportunity to maximize the product value, reduce waste and have a positive environmental and ecological impact. Companies are also building on efforts by local authorities. Unilever has joined forces with the Alibaba Group to launch the country's first large scale closed loop plastic recycling system. The joint initiative – called Waste Free World – is described as an active response to the Shanghai government's plan to create a plastic packaging management system (Unilever, 2021).

4.1.2. Mainstreaming sustainability in emerging markets

Placing sustainability at the core of multinational companies' strategies implies a sustainable approach across the whole of business, often reflected in companywide sustainability commitments, which should in turn always be adapted to the local context. For example, global initiatives on responsible business conduct such as the recommendations in the OECD Guidelines for Multinational Enterprises (OECD, 2011) set expectations that businesses, while contributing to economic, environmental and social progress, also need to manage negative impacts on people, society and environment associated with their activities including through their supply chains and business relationships. Similarly, the Ten Principles of the United Nations Global Compact require companies to operate in ways that, at a minimum, meet fundamental responsibilities in the areas of human rights, labor, environment and anti corruption across their global operations.

While standards may vary across countries, the OECD Guidelines for Multinational Enterprises note that "a state's failure either to enforce relevant domestic laws or to implement international human rights obligations, or the fact that it may act contrary to such laws or international obligations, does not diminish the expectation that enterprises respect human rights" (OECD, 2011). The Guidelines also encourage enterprises to work to raise the level of environmental performance in all parts of their operations, even if this may not be formally required by existing practice in the countries in which they operate. They specifically note that enterprises should take due account of their social and economic effects on developing countries. The potential costs of failing to do so were set out in EMnet's previous Policy Note on Sustainability. These can take the form of missed business opportunities, but also reputational costs. It cited the efforts made by Nike, which was ranked the most sustainable apparel and footwear company in North America following years of reputational challenges (OECD, 2018d).

The mainstreaming of sustainability has led to accountability across the supply chain, including from purchasers and end customers, for companies to ensure that sustainable principles are embedded in their business operations and in those of their suppliers. This has created strong incentives for companies operating across emerging markets to invest in more effective monitoring and tighter controls and audits of their supply chain, and to trace and verify sustainable sourcing more effectively.

A. Cross sector collaboration can help companies achieve impact

In many instances, collaborations, particularly in the form of partnerships to supplement specific needs, have allowed companies to achieve greater impact. Barry Calebaut, a global manufacturer of chocolate and cocoa products, has established a collaboration with SAP, a software solutions company, to help enable sustainable cocoa farming, providing traceability and sustainability related activity records. The SAP solution allows for data collection at every level of the supply chain, providing tighter monitoring and assessment of individual farmers' and community needs, which results in higher quality and targeted impact support.

Companies seeking to move the dial have also grouped together at industry level to create vehicles for change. Certification initiatives, such as the Roundtable on Sustainable Palm Oil (RSPO), allow industry to encourage sustainable production. Indeed, almost 20% of palm oil globally is RSPO certified, with the majority coming from Indonesia and Malaysia (RSPO, 2020a). The RSPO has seen an increase in membership from emerging markets companies. China is one of the biggest markets for palm oil globally (Gillespy, 2020). As of August 2020, the number of Chinese RSPO members had increased by 50% over the same period last year to 222, of which 163 are from mainland China (RSPO, 2020b).

The incentives created by these initiatives complement action by governments: they do not replace them. A favorable enabling environment can create a level playing field for companies and favor an all of industry approach, while still allowing for complementary targeted initiatives where required.

4.1.3. Challenges of measuring progress on sustainability in emerging markets

There is abundant anecdotal evidence of sustainability initiatives across emerging markets led by the private sector. Yet, presenting an accurate picture of their impact remains a challenge. In particular, the lack of a common measurement and reporting standard makes it difficult to interpret existing evidence, while the lack of data itself poses additional challenges. Measurement of the non financial performance of all businesses, not just the leading few, is necessary to hold businesses accountable and better monitor progress.

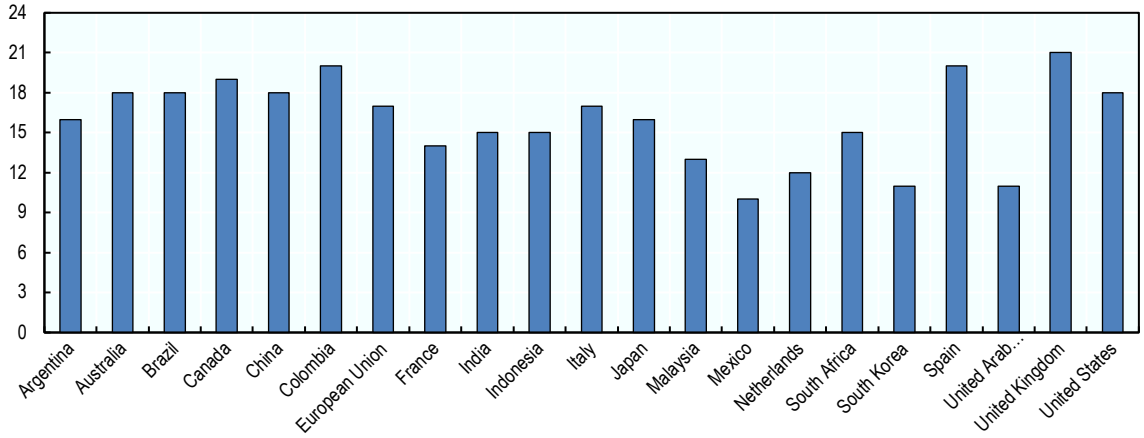
A. There is an appetite for better measurement of sustainability efforts

Initiatives offering voluntary measurement services across emerging markets have had significant success, although not uniformly through regions or countries. In Latin America, markets like Argentina, Brazil and Chile show significant uptake of voluntary certification methods, such as B Corp, overtaking certain European countries (Sistema B, n.d.). These initiatives do not have equal cross sector appeal, with representation higher among consumer facing brands, where the business case for undertaking this form of audit may be stronger, than across other sectors.1 Yet, there is potential for wider reach, particularly through the incorporation of companies in sectors with systemic impact. Bancolombia, for example, partners with B Corp to measure and manage the positive impact of their suppliers2 (B The Change, 2016).

Recent years have witnessed a significant increase in responsible business conduct (RBC) and due diligence legislation in support of sustainability efforts. From 2010 to 2020, legislation has been passed in many developed markets, and mandatory rules are currently being considered in several countries and by the European Union (OECD, 2021a). These developments could have implications for all actors globally, including those from emerging markets. In parallel, some emerging markets have been stepping up efforts in increasing sustainability. Along with economic growth and integration into the global economy, Thailand has also made considerable strides in the area of inclusive and sustainable development. While challenges remain in some areas of RBC, there is strong political will to address them. A regional leader in RBC, Thailand became the first country in Asia to adopt a standalone National Action Plan on Business and Human Rights (2019-2022) (OECD, 2021b).

A key global trend in the uptake of Environmental, Social and Governance (ESG) factors is pressure from investors, who are increasingly focused on climate risks (Wamsley, 2020). They pragmatically want to see comparable data, to better understand underlying company and industry risks, as well as accurately report on the impact of their investments. Large and listed companies are facing growing pressure from the investment community, which is increasingly taking data on ESG into account when making investment decisions. This interest is mirrored in the growing number of national reporting provisions on sustainability related topics. To date, national reporting provisions primarily cover climate change, human rights, labor and anti corruption and are featured both on a voluntary and mandatory basis. In terms of the composition of the reporting provisions, overall, it is clear that climate change is a top agenda item for policymakers. On the social agenda, human rights and labor similarly score highly in terms of frequency of the topic being addressed (Carrots & Sticks, 2020).

Figure 5.1. Where the largest number of reporting provisions are found (2020)



Source: Carrots & Sticks (2020), Sustainability Reporting Policy: Global trends in disclosure as the ESG agenda goes mainstream, www.carrotsandsticks.net/media/zirbzabv/carrots-and-sticks-2020-interactive.pdf.

The above graph covers key reporting provisions, meaning any instrument, mandatory or voluntary, that either require, encourage and/or support organizations to report on or disclose information related to their sustainability performance. This includes "non-financial" or "pre-financial" and "integrated" information found in annual financial, integrated or sustainability reports, on websites,

in documents submitted to stock exchanges for listing purposes, and in data published in response to questionnaires and specific regulations.

For large listed companies at least, sustainability reporting has moved away from showcasing preferred projects, towards external assessments that often adopt a "comply or explain" approach, penalizing companies that are not able to justify missing data. Many businesses are now ESG ranked, including by mainstream agencies, such as Bloomberg, which feature indexes targeting emerging markets (Bloomberg, 2020). The Dow Jones Sustainability Emerging Markets Index, for example, aims to represent the top 10% of the largest 800 companies in 20 emerging markets, ranked by long term economic, environmental and social criteria (S&P, 2020).

Global initiatives are complemented by country led initiatives to enhance the visibility of ESG investments. The Egyptian Exchange, Egypt's stock exchange, recently launched an ESG index with the stated purpose of raising the profile of companies that perform well along the three parameters of environmental, social and corporate governance responsibility, compared with their market peers (EGX, 2020). Initiatives to enhance reporting at the national level across emerging markets, including in China (The Reporting Exchange, 2018) and Colombia (Carrots & Sticks, 2020), show that governments see the potential in incentivizing these forms of investments.

B. No common set of measurement criteria

ESG investing has grown considerably and is fast becoming mainstream. Yet market participants across the board are missing the relevant, comparable ESG data they need to properly inform decisions, manage risks, measure outcomes, and align investments with sustainable, long-term value (OECD, 2020b). One of the difficulties in progressing further and faster in measuring sustainability in business is the proprietary nature of many measurement initiatives. Each rating agency develops their index based on different methodologies and criteria, often not publicly disclosed. The competition between ranking firms can create confusion, as companies are ranked differently by different indexes, and there have been high profile examples of rankings failing to provide a comprehensive ESG assessment, particularly when it comes to reflecting sector specific risks. In the wake of the Samarco disaster, for example, the Corporate Human Rights Benchmark suspended Vale, noting that its assessment of human rights allegations was not particularly well suited to dealing with rare large scale harm events (CHRB, 2019). Fragmented ESG frameworks and inconsistent disclosure requirements also mean that both institutional investors and corporates cannot properly communicate on their ESG related decisions, strategies and performance criteria, with beneficiaries and shareholders. This in turn makes it hard for such beneficiaries to assess how their saving are used, and for companies to attract financing at a competitive cost that fully considers ESG factors (OECD, 2020b).

Global initiatives that seek to create a set of common measurement and reporting criteria will be key in unlocking progress in this area. Advances have been made by the Global Reporting Initiative (GRI) which has developed a number of standards for reporting publicly on economic, environmental and social impacts, and the World Economic Forum, which has proposed a set of common metrics on sustainable value creation (WEF, 2020).

The OECD is currently developing a complementary initiative, using its Well Being Framework as a starting point to measure the non financial performance of firms by stakeholders across different dimensions of well-being. This framework, which distinguishes between people's current well-being and the resources that contribute to well-being in the future, allows us to look at businesses' performance in terms of well-being and sustainability in a comprehensive manner. By aligning the measure with established country-level indicators of progress, it has the added advantage of shining a light on how businesses perform relative to national progress indicators. The OECD also supports the Business for Inclusive Growth (B4IG) coalition to advance and harmonize measurement approaches for monitoring inclusion and sustainability aligned with the Pledge to Fight against Inequalities. The progress made in ESG reporting also bodes well for the ability of companies across emerging markets to adapt to these global initiatives and ultimately benefit from them.

These initiatives complement OECD work on responsible business conduct, help support a common understanding of sustainability achievements and promote cross-recognition between different initiatives and programs. For example, in the garment sector, the OECD has launched a voluntary process to assess the alignment of these frameworks and indicators with the OECD Due Diligence Guidance for Responsible Supply Chains in the Garment and Footwear Sector. This work includes, for example, an Assessment of the Sustainable Apparel Coalition, whose Higg Brand & Retail Module is a tool to assess the environmental and social performance of its brand and retail members (OECD, 2019a).

C. ESG performance and financial accounting are not yet connected

Failing to take sustainability into account can have an effect on financial performance. Research by Société Générale found that two thirds of companies hit by a major ESG controversy saw their stock price underperform the MSCI World by an average of 12% in each of the following two years (Andrew, 2020). Yet, currently, very few companies are tracking the return on their ESG investments in their accounting systems. Thus, there are virtually no connections between accounting data and sustainability investments (Whelan, 2020).

There are examples of companies seeking to account for external costs better and to represent the value of certain investments more accurately. In 2016, Mahindra was the first Indian company to announce an internal carbon price. Internal carbon pricing produces carbon value that can be used as a financial metric in decision making, allowing organizations to determine the most cost effective strategy to reduce their emissions. Internal carbon pricing is a decision making tool companies use, to understand their exposure to external carbon pricing schemes and to guide their business decisions and investments. The capacity of this metric to effect change, therefore, depends on the extent to which it is considered in decision making. Critically, it helps organizations understand the climate

related financial risks and opportunities that could arise from government policies related to the transition to a low carbon economy. Its use has become widespread across business and governments and established across emerging markets, thanks to both the global reach of supply chains and uptake by business.

An initiative proposed by The Adecco Group intends to reflect the value of an investment in skills more accurately. It proposes accounting and investment models to help change how expenses for human capital investments are capitalized over time and, therefore, to incentivize investment in training and skills (The Adecco Group, n.d.).

These efforts are important in that they propose a path forward, but also because they shine a light on the way in which current business metrics fall short of effectively accounting for the benefits of investing in sustainability, and the human cost of failing to do so. They show that, despite progress, there are significant challenges and disincentives under current business metrics for companies to prioritize sustainability. The tension between sustainability metrics and the bottom line is likely to become particularly acute during economic crises, especially when they are of the magnitude seen in the wake of COVID 19.

4.2. The impact of COVID 19 on sustainability: In the spotlight and under pressure

The human toll of the COVID 19 (coronavirus) crisis is still unfolding. Parts of the world are struggling to vaccinate the population, contain the contagion and ensure that health systems are not overwhelmed while trying to salvage the economy. The impact of the virus varies by region, but the economic and social crisis is of a global nature.

All G20 countries except China suffered recessions in 2020. Across emerging markets, recessions in several African countries – the first in 25 years – are now likely, with ripple effects on already high poverty numbers (Beegle and Christiaensen, 2019). GDP in 2020 declined by 3.4% on average in Emerging Asia and by 1.7% in the Association of Southeast Asian Nations 10 (OECD, 2021c). Despite high heterogeneity across countries, all Latin American countries are being hit by the crisis, and on average, GDP growth contracted by 7.7% in 2020 (OECD, 2021d). Year-on-year GDP growth of the G20 rebounded to 3.4% in the first quarter of 2021, following a contraction of 0.7% in the previous quarter. However, this figure conceals large differences across countries. GDP is still lagging behind pre-pandemic levels, with countries recording diverging developments in the first quarter of 2021. Among the G20 economies, India, Turkey and China, whose GDP was already above pre-pandemic levels in the previous quarter, continued their recovery, by 2.1%, 1.7% and 0.6%, respectively (after 9.3%, 1.7% and 2.6% in the previous quarter). While GDP growth slowed in Indonesia (to 1.6%, after 2.3%), South Africa (to 1.1%, after 1.4%) and Mexico (to 0.8%, after 3.2%) (OECD, 2021e).

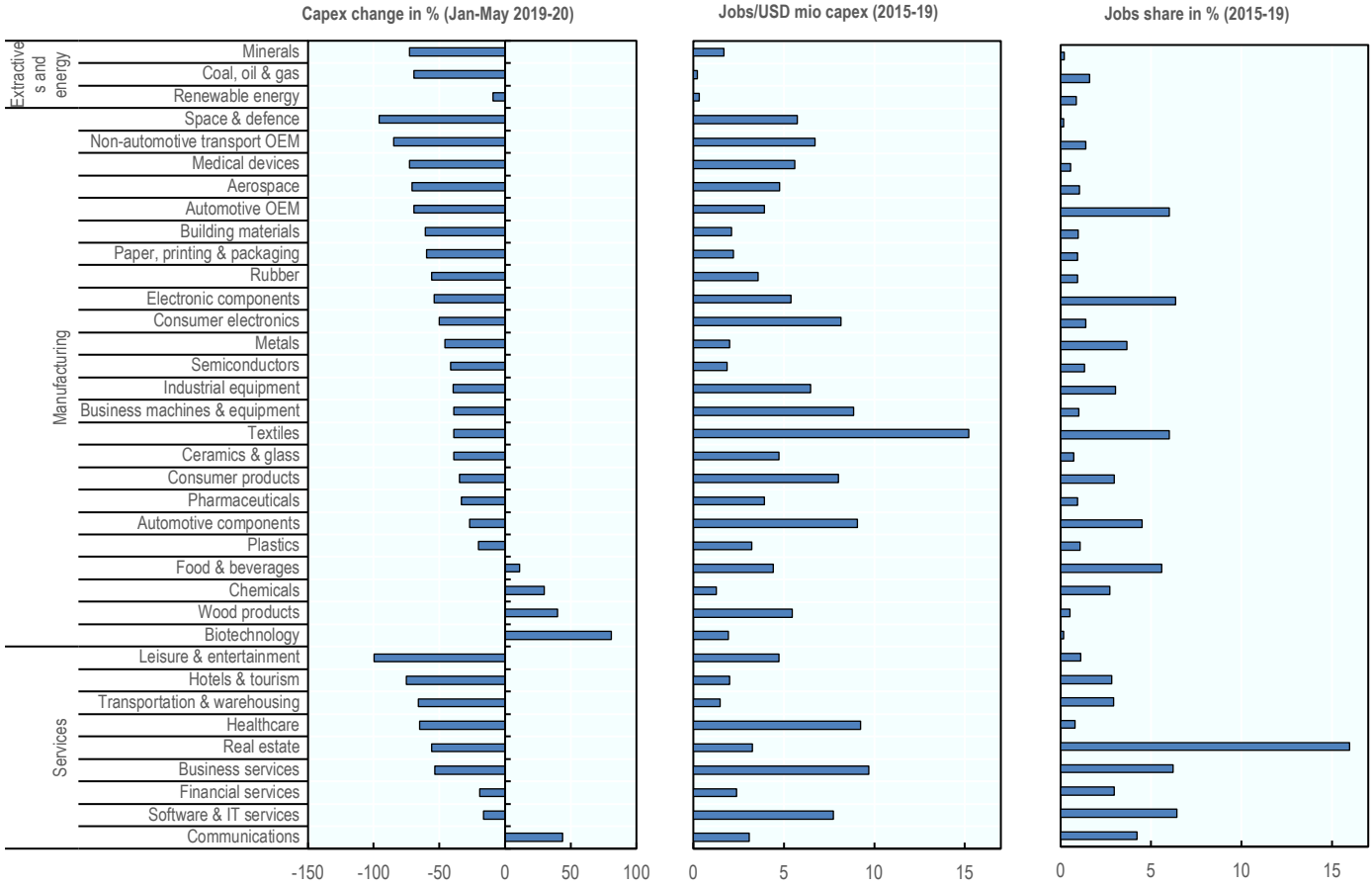
The impact on businesses and livelihoods stands to be dramatic. In Latin America, the COVID 19 crisis is particularly difficult for the close to 40% of workers who do not have access to any form of social assistance or social protection mechanism, but also for micro and small firms that lack capacity to absorb this shock. According to ECLAC and ILO, 47 million jobs were lost in the second quarter of 2020, and although 12 million were recovered in the third, they were mainly low-quality jobs. As a result, an additional 45 million people will become poor, representing a decade and a half of regression in this field. Poor urban households where workers are mainly informal have been hit particularly hard. (OECD, 2020d). COVID 19 has revealed tensions, weaknesses and inequalities across emerging markets that are inherent in existing economic and social systems. In many instances, it has also exacerbated them, particularly on vulnerable categories such as women

The OECD finds that the speed and depth of the economic crisis have shown that a core principle of the global economy – prioritizing short term economic growth and efficiency over long term resilience and well being – can have huge societal costs. The precariousness of long and complex global value chains has been revealed, with many countries struggling to acquire medical and other strategic supplies. Social inequalities have been exposed and rapidly exacerbated by the massive but uneven loss of employment, with the equivalent of more than 300 million jobs potentially at risk. Although this is not the first economic crisis to expose these fragilities, the depth and breadth of the current circumstances have brought the issues of resilience and preparedness high in the public consciousness (OECD, 2020e).

The impact of COVID 19 has been felt across all sectors, but in a highly unequal way, with industries including air transport, travel, tourism, and hospitality particularly affected (OECD, 2020d). The COVID 19 crisis is also causing abrupt reductions in the operations of foreign firms in developing countries. This, in turn, affects workers, whose jobs, incomes and livelihoods are at risk. Just as with domestic business (OECD, 2020f) some foreign firms have been able to shield their workforce from such impacts and are choosing to keep and pay employees during the suspension of activities, many businesses have had to lay off workers or reduce their work hours.

Several general cross sector trends can be identified, to analyze the impact of COVID 19 on the shape of sustainability initiatives, as companies reorganize their business to adapt to a “new normal” (Figure 5.2).

Figure 5.2. Job creation intensity of FDI in the developing world during COVID 19, by industry



Note: Capex = announced capital expenditure.
Source: Calculations from the Financial Times fDi Markets database (10 August 2020), in OECD (2020f), Investment and sustainable development: Between risk of collapse and opportunity to build back better, www.oecd.org/investment/Between-risk-of-collapse-and-opportunity-to-build-back-better.pdf.

In response to an EMnet survey3, companies across all sectors reported that they had not decreased their sustainability efforts following the outbreak of the pandemic, with some declaring an increase in the portfolio of projects, and others choosing to adapt their existing initiatives.3 As the health crisis continues and the economic outlook remains uncertain, there is increased pressure on both governments and business to cut costs (UNCTAD, 2020). Nonetheless, firms have reaffirmed their commitment to sustainability as a strategy for the recovery. The reaction of companies in the immediate response to the pandemic, shows that sustainability initiatives have created their own set of incentives for business and suggests that the business case for sustainability remains relevant.

4.3. The shape of sustainability post COVID: Policies for the future

The OECD has warned that, in order to ensure a sustainable and resilient recovery from the COVID 19 crisis, a return to "business as usual", including environmentally destructive investment patterns, must be avoided. Economic recovery packages should be designed to "build back better", meaning that, in addition to supporting economic recovery, policies also need to trigger investment and behavioral changes that will reduce the likelihood of future shocks and increase society's resilience to them. Central to this approach is a focus on well being and inclusiveness (OECD, 2020e).

The social and economic case for a sustainable and resilient recovery is clear. Despite this, in many countries policy responses have, so far, mostly scored poorly on environmental and inclusiveness metrics. Furthermore, announced stimulus packages to date had a net negative environmental impact in 15 of the G20 countries, including the emerging economies4 (Vivid Economics, 2020).

Harnessing the potential of business for the recovery will be key in emerging markets, as the fiscal space post COVID 19 is set to narrow. There is scope for policy action in a range of areas that are considered as enablers of sustainable and inclusive growth, such as digitalization, the green economy and gender equality. It is also critically important to understand the regulatory impact of policy measures on sustainability efforts and to look for opportunities for multi stakeholder collaborations (OECD, 2019b).

4.3.1. Creating an enabling environment for sustainability

A number of regulatory initiatives across emerging markets have primarily focused on the financial contribution companies can make to wider sustainability initiatives (WRI, 2018). A prominent example is India, which mandated Corporate Social Responsibility (CSR)

contributions by large companies in 2008 and regulated their purpose in 2014. However, the lack of impact assessment frameworks and clear outcomes based targets makes it difficult to present an overall picture of the effects of this initiative. On the main purpose of the legislation, which was to increase the amount of CSR expenditure by large Indian companies, studies suggest that levels of expenditure may have dropped (Mukherjee, Bird and Duppati, 2018).

Discussions in EMnet meetings suggest that a broader policy approach focusing on the enabling environment for sustainable business models could better support a resilient and inclusive recovery. Companies highlighted the importance for governments to enact policies conducive to sustainable private investment, based on legal certainty and a reassessment of existing sectoral policies. In the case of digitalization, policy changes in the wake of COVID 19 have already laid the groundwork for progress. Companies recognize that governments and regulators globally have gone to great lengths in their response to the current crisis (OECD, 2020g), and note that some of the policy responses across a wide range of areas – from expedited digitalized customs procedures, labor policies allowing for remote working, reduced reporting requirements and additional spectrum availability – showing potential to support inclusive digitalization and long term economic growth.

Decarbonization is another area where government policies and private initiatives, such as internal carbon pricing, are pushing in the same direction and can be supported by multi stakeholder collaboration (CPLC, 2020). As of June 2019, 57 carbon pricing initiatives have been implemented or scheduled for implementation. This consists of 28 emissions trading systems in regional, national, and subnational jurisdictions, and 29 carbon taxes, primarily applied at the national level (CPLC, 2020). Dialogue with the private sector can help unpick how these multiple initiatives interact and make clear their impact on business across a range of sectors, as well as identify drivers of adoption or barriers to implementation.

Companies operating internationally are also well placed to support the sustainability objectives of regional initiatives. The AfCFTA for example has the potential to support sustainable and inclusive growth across Africa. The agreement explicitly references the importance of women's empowerment for the development of international trade and economic co operation and emphasizes the promotion of gender equality as one of its general objectives (UNECA, 2020). However, implementing the provisions of the trade agreement alone will not be sufficient to achieve these social objectives. For example, empowering female entrepreneurs to take advantage of the AfCFTA will require a combination of policies focused on, among others, access to finance, entrepreneurship, access to markets, mentorship and digital skills (UNECA, 2020), all areas where private sector contributions could complement government actions.

A. Public private collaboration for sustainable development

Policy dialogue with the public sector on opportunities for collaboration can enhance the impact of private initiatives and can encourage alignment with the priorities of governments. Closer collaboration will allow businesses and governments to identify concrete projects, where common objectives can support progress and increase positive impact. High ambition projects that require public private collaboration have the potential to garner the support of multinational companies to maximize their impact and ultimately result in gains that will benefit all of industry. Examples include circular economy, which is part of Colombia's national economic plan, and sustainable mobility, a policy priority in India (IKI, 2020).

Public private collaboration is particularly effective when it helps identifying initiatives that leverage the competences of the private sector in support of specific policy objectives. For example, Internet para Todos, developed by Telefónica, Facebook, CAF (the Development Bank of Latin America) and the Inter American Development Bank, was created to connect communities in isolated areas in Peru, while ensuring a financial return and commercial viability that could be replicated in the region, ultimately to bring Internet access to over 100 million people in Latin America. Through this project, a combination of new technologies and business models have rendered previously unconnected and under connected areas in Peru profitable (NERA Economic Consulting, 2020).

The OECD has already stressed that achieving a greening of the economy will require a combination of incentives, investment and support measures to ensure a smooth transition and maintain popular support (OECD, 2019c). Even before the pandemic, public private partnerships to develop innovative technologies showed the potential to generate significant jobs and growth, while making efforts to decarbonize the economy. South Africa's Renewable Energy Independent Power Producer Procurement Programme, for example, has successfully channeled private sector expertise and investment into grid connected renewable energy. Some USD 14 billion has flowed into 64 projects, some of them already online, leading to substantial drops in average solar photovoltaic and wind tariffs (68% and 42%, respectively). The initiative has created an estimated 39 000 jobs for youth and women and reduced South Africa's carbon emissions by 33.2 million tons (Bellens and Atalla, 2020).

B. Reduce perceived investment risk and political risk in emerging markets

EMnet participants agree that strengthening public governance and regulations can increase trust and alleviate investment barriers, but more work is needed, particularly in relation to institutional stability and sound regulatory frameworks. The shock that the pandemic inflicted on the global economy increased business risk and consequently reduced global foreign investment. Many emerging markets entered the crisis from a weaker economic position and have experienced a massive drop in portfolio investment inflows as a result, as international investors tend to transfer capital back home or invest in safer assets during periods of uncertainty (OECD, 2020h).

In LAC, institutional instability has reached an all-time high due to the increasing social discontent since 2010, whereby satisfaction with public services has declined steadily. The COVID-19 pandemic has further exacerbated this discontent, widened inequalities, heightened uncertainty and, ultimately, eroded investor confidence (OECD et al., 2020). These two factors combined also encourage polarization and the perception that countries are governed in the interests of a few, fueling a new wave of social protests that could lead to increased support for populist political parties' options through the electoral cycle in the region (OECD et al., forthcoming). In this context, companies raised the issue of discontent translating into resource nationalism, particularly for extractive industries, and the danger of economic and political hostility developing towards certain business sectors.

Governments can help reduce private investment risks by providing a liquidity backstop through government-backed guarantees, either directly or through development finance institutions. The Multilateral Investment Guarantee Agency (MIGA), part of the World Bank Group, provides a political risk guarantee and other guarantees to investment projects in emerging economies. Governments can also use delivered assets as collateral in order to guarantee the private financing of new infrastructure. In 2000, Peru's Banco de la Nación created a trust division to provide collateral and support to infrastructure investors and developers and has supported more than 60 projects since then (McKinsey, 2019). Countries can provide further support by co investing with the private sector, either directly through a public-private partnership, or with the participation of DFIs and regional or national development banks. In this context, a number of countries have used the income and assets of state-owned enterprises or sovereign wealth funds as the basis of guarantees or collateral (McKinsey, 2019).

Reducing trade and investment restrictions can also contribute to creating an attractive business environment. The OECD Services Trade Restrictiveness Index (STRI) showed that barriers to services trade were rising pre-pandemic, and that the pace of global service trade liberalization slowed by 60% compared to 2018 (OECD, 2020i). With the onset of the COVID 19 crisis, the global regulatory environment for services trade became even more restrictive. New barriers across all major sectors compounded the shock of the COVID 19 pandemic on exporters, with restrictions affecting services traded in sectors including computer services, commercial banking and broadcasting (OECD, 2020j).

Finally, companies have stressed the need for regulators and permitting entities that are independent and have the necessary resources and frameworks to run efficiently. Indeed, a lack of support from key agencies that ensure business continuity can slow the permitting of projects and affect their implementation and final output.

C. Sustainable investment in emerging markets

The potential to unlock investment and generate a competitive advantage creates powerful incentives to pursue sustainability efforts, particularly in a context where global investment is dropping. Studies suggest that sustainable investment has paid off in the context of COVID 19, especially in emerging markets (Friede et al., 2015). The initial four months of 2020 show that ESG funds are outperforming the broader market during the pandemic (Whieldon, Copley and Clark, 2020; Zhou et al., 2020). Evidence of higher return on investment over a longer period remains contested, not least given the widespread discrepancies in criteria among ESG indexes (Boffo and Patalano, 2020). What is clear is that ESG indicators are attracting greater investor interest globally and are perceived as an attractive investment product for emerging markets (Dunne, 2020), particularly to manage risk.

Emerging markets and developing economies can further explore the potential of sustainable investment to mitigate the impact of the crisis. Evidence shows that the COVID 19 pandemic affected greenfield investments more intensively in emerging markets than in advanced economies (fDi Markets, 2020). In the first half of 2020, M&A deal values in emerging markets fell by 18%, while the actual number of completed deals decreased by 22%. In the same period capital expenditures dropped by 9% in advanced economies as compared to the last half of 2019, while they plunged by 46% in emerging markets and developing countries (OECD, 2020f). Governments in emerging markets have therefore an interest in unlocking sources of sustainable finance, to make their countries more competitive and maximize the positive impact of private investments. To secure sustained private capital inflows, policy makers should be looking at best practices in the public finance space and promote recovery stimulus packages that support sustainable and innovative corporate practices. This year has also seen a significant number of new green bond issues by countries in emerging markets, including Egypt, the first Arab country to do so (Reuters, 2020), and Chile, which created the conditions to issue more green, social or sustainable bonds, by publishing a new regulatory framework with the support of the Inter American Development Bank (2020).

D. Increase resource mobilization for infrastructure financing

Emerging economies are facing a large infrastructure financing gap. According to pre-COVID 19 pandemic McKinsey estimates, developing countries will need to invest more than USD2 trillion per year in infrastructure just to keep pace with projected gross domestic product growth over the next 15 years. Some of the biggest gaps remaining are in Indonesia and Mexico, although Brazil, India, Saudi Arabia and South Africa also face significant gaps. These gaps apply across different sectors. In Africa, for example, annual investment in the power structure will need to increase from USD33 billion in 2015 to USD55 billion in 2025. Over the same period, annual investment in transport infrastructure will need to increase from USD20 billion to USD45 billion, while major additional investments will also be needed in water and telecommunications infrastructure (McKinsey, 2019).

EMnet participants have confirmed the need for a sound enabling environment in order to unlock more investment in infrastructure. The main issues identified concern safeguarding the security of their investments and creating the conditions for bankable projects,

particularly in infrastructure development. Given the long-term nature of the cash flow required for these projects, EMnet participants highlighted the critical importance of legal certainty and a stable legal and regulatory environment. Ethiopia, for instance, has established industrial parks with specific regulation to attract foreign direct investment (FDI). This strategy is viewed as largely successful with respect to attracting investments in light manufacturing such as garments, textiles, leather and agro processing: in 2016, Ethiopia received inflows of close to USD4 billion, accounting for over 50% of all FDI in the East Africa region (AUC/OECD, 2019). Other African examples can be found in Morocco (Tangier Med), Rwanda (Kigali Special Economic Zone) and Egypt (Suez Canal Economic Zone). To varying degrees, firms operating in these zones benefit from infrastructure, tailored regulations, and administrative procedures such as custom procedures, taxation and business permits, and targeted support (for example, facilitating matchmaking and partnerships with local suppliers, research institutions, labor associations and investors) (AUC/OECD, 2019; OECD, 2020c).

An unprecedented era of low interest rates can offer the right conditions to help establish a pipeline of bankable projects. The current low interest rate environment is pushing investors to diversify their portfolio of investments, and new opportunities can also emerge from infrastructure projects (Haegeli, 2020). Investments will be more selective going forward, shifting from growth metrics alone towards sustainable profits (Google, Temasek and Bain, 2021). However, public policies must accompany this process by providing the necessary enabling conditions for increasing access to finance. In emerging markets there is still scope to further ease interest rates where fiscal support is limited, provided that inflation and exchange rates remain stable (OECD, 2021b). Furthermore, governments should address other roadblocks such as regulatory barriers, market fragmentation, information asymmetries and local capacity to deal with complex project financing models (OECD, 2020d).

Strengthening African infrastructure includes increasing domestic resource mobilization through peer learning and exchange of information, strengthening the Pan-African policy dialogue on taxation, the joint production of up-to-date and comparable statistics on domestic revenue mobilization, and cross-border tax information sharing. Finally, it is also necessary to strengthen institutions in order to attract private investment and enhance the effectiveness of public investment and services (OECD, 2021b). For a sustainable recovery, African governments need to increase investment in high-value sectors through the empowerment of national investment promotion agencies. These can then encourage foreign investors to transfer knowledge to local companies by employing, training and subcontracting locally (AUC/OECD, 2018). By providing financial assistance, market intelligence, branding and investor aftercare, and by assisting with overseas expansion, foreign investors help develop local business ecosystems. Their actions can be supported by policies for industrial clusters and value chain development. The African Union Commission (AUC)-OECD Development Centre Platform on Investment and Productive Transformation can facilitate dialogue between African governments, Regional Economic Communities, development partners and the private sector to better attract and co ordinate investment5 (OECD, 2021b).

Furthermore, to close the infrastructure finance gap, domestic capital markets have a role to play in mobilizing funds in the local currency that can eliminate foreign exchange risks. In a successful example, India's National Highways Authority issues tax-exempt bonds in order to attract domestic investment to finance road projects across the country (McKinsey, 2019).

Finally, the LAC region requires greater resource mobilization at the national and international level to ensure a strong and inclusive recovery. As highlighted in the forthcoming Latin American Economic Outlook 2021 (OECD, forthcoming), fiscal policy must help drive a productive transformation that generates formal employment, while also fully leveraging digital transformation and prioritizing the environment. For fiscal policy to be effective, a well-defined sequence of actions and reforms is needed at the national level, as well as clear communication and pedagogical dialogue with citizens. At the international level, co ordination is crucial to ensuring the sustainability of the recovery. There is no single solution to public debt management in LAC: countries differ in terms of their initial fiscal conditions, types of foreign creditors and capacity to tap into capital markets (OECD et al., 2020). Co ordination should involve multilateral banks, developed countries and private creditors (Nieto-Parra and Orozco, 2020). So far, private creditors have not engaged sufficiently with the relevant parties, and some countries have opted out of international programs to avoid possible credit rating downgrades (OECD, 2021a; Nieto-Parra et al., 2021).

4.3.2. Promote public-private dialogue and multilateral co operation to address global issues

EMnet meetings participants underlined the importance of public-private dialogue and multilateral co operation to address current global issues, particularly those related to the COVID 19 crisis. They suggested that public-private dialogue and stakeholder consultation could help to better identify how the private sector might support specific policy actions that could accelerate the successful implementation of recovery plans. Likewise, this dialogue and consultation could help governments understand how to support responsible business practices, including adherence to the United Nations' Guiding Principles on Business and Human Rights (UN, 2011) and the OECD Guidelines for Multinational Enterprises (OECD, 2011). Apart from collaboration with existing partners among international organizations, such as the OECD and the World Bank Group, corporations expressed an interest in working more closely with new development banks in some emerging markets, such as the Asian Infrastructure Investment Bank (AIIB) and the New Development Bank (NDB), formerly known as the BRICS (Brazil, Russian Federation, India, China, South Africa) Development Bank after its founders).

Companies also emphasized the relevance of policy discussions to regional economic integration. For example, the Africa Private Sector Forum serves as a sounding board for the AUC in its efforts and commitment towards enhancing the private sector's capacity

to contribute to the realization of Agenda 2063 (a set of initiatives proposed and currently under implementation by the African Union) and to be part of the global value chain for inclusive and sustainable growth in Africa (AU, 2019). Similarly, the ASEAN Business Advisory Council provides inputs to the ASEAN member countries on the opportunities and challenges related to doing business in the Southeast Asia region (ASEAN, n.d.).

4.4. Conclusion

The COVID 19 crisis has encouraged many multinationals to further embed sustainability considerations into their corporate practices. This is in line with significant progress in recent years which has seen both global and locally driven sustainability initiatives shape ways of doing business across emerging markets. While there are difficulties in accurately measuring and mapping this progress, it remains uneven across emerging markets. Wider challenges such as growing inequality and the looming climate crisis create a pressing need to move further faster.

The economic crisis that has accompanied the pandemic presents a real challenge for companies wishing to enhance their sustainability efforts. As seen throughout this chapter, the financial, logistical and sanitary impacts of the pandemic are making it difficult for firms to systematically prioritize and incorporate sustainability into their core business.

In this challenging and rapidly changing context, the role of governments will be decisive in both encouraging and channeling private sector efforts. Discussions in EMnet meetings favor an approach which seeks to support sustainable business models that can support a resilient and inclusive recovery. There is an opportunity for governments to enact policies conducive to sustainable private investment, based on legal certainty and a reassessment of existing sectoral policies. Policy dialogue will be critical to ensuring private sector efforts can progress in line with government priorities whether through digital transformation, the transition to a green economy or enhanced trade and regional collaboration. A favorable enabling environment can promote an all of industry approach, attract more sustainable private investment and facilitate public private collaborations.

Notes

1. Analysis of B Corp certified companies undertaken based on publicly available information on 27 October 2020.
2. Bancolombia is also taking steps to become a certified B Corp. www.elcolombiano.com/negocios/bancolombia-le-apuesta-a-la-sostenibilidad-PE12619143.
3. The EMnet survey targeted multinational companies active across emerging markets and was conducted from March to April 2020.
4. The list of G20 emerging economies with announced stimulus that will have a net negative environmental impact includes Argentina, Brazil, China, India, Indonesia, Mexico, Russia, Saudi Arabia, South Africa and Turkey. Vivid Economics (2020), Greenness of Stimulus Index (database), Vivid Economics, London, www.vivideconomics.com/casestudy/greenness-for-stimulus-index/#:~:text=Of%20the%20total%20quantified%20green,negative%20expected%20impacts%20on%20biodiversity.
5. For more information on the AUC-OECD Development Centre Platform on Investment and Productive Transformation in Africa, please visit https://www.oecd.org/fr/dev/afrique/platform-investment-productive-transformation-africa.htm.

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Chapter 5
Five Critical Challenges of ESG Investing in Emerging Markets

Piotr A. Mazurkiewicz[39], Principal E&S Risk Officer
International Finance Corporation, World Bank, United States

Executive Summary

Since the late 1980s, considering ESG risks has been used as part of an investment approach, initially by development financial institutions and gradually adopted by a broader universe of financiers such as many universal banks or institutional investors. In contrast to developed markets, investors operating in emerging markets have been slower to integrate sustainability into their investment processes. Several factors contribute to the lingering challenges of ESG integration in emerging market investing. This paper focuses on five critical challenges of ESG investing in emerging markets:1) Regulatory frameworks and enforcement of ESG laws and regulations; 2) Underdeveloped capital markets and policy instability; 3) Cost and capacity to manage ESG requirements; 4) ESG data integration; and 5) Limited selectivity. Various new avenues to overcome the above challenges are emerging, with the strengthening of local frameworks and capital markets, the multiplication of investment options in emerging markets and the rise of regulations qualifying profit maximization and fostering of ESG integration. Those avenues need continuing exploration and reinforcement in order to create consistent, sound and impactful ESG investing in emerging markets.

5.1. Introduction

It is commonly recognized that financing from the private sector, including institutional investors, is critical to achieving the Sustainable Development Goals (SDGs) and curbing climate change. Currently, the leading view on financial markets is that investors and shareholders should look beyond traditional financial metrics, and include environmental, social, and governance (ESG) factors in management, evaluation and investment processes.[40] ESG can be understood as a set of principles for a company's operations that investors hoping to demonstrate social responsibility apply to screen investment opportunities.[41] ESG investing's success is particularly due to the win-win argument, i.e., the idea that ESG investing goes hand in hand with profit. Since the late 1980s, considering ESG risks has been used as part of an investment approach, initially by development financial institutions and gradually adopted by a broader universe of financiers such as many universal banks or institutional investors, even though recent articles suggest that there is a need to exercise caution, as current ESG investing impacts are far from being ascertained[42], and may even be associated with counterproductive greenwashing[43] techniques reinforcing the legitimacy of mainstream profit-oriented investing.[44]

In Emerging Markets, ESG investing is all the more difficult as emerging economies face specific or reinforced challenges. In contrast to developed markets, investors operating in emerging markets have been slower to integrate sustainability into their investment processes. Ironically, however, research indicates that the nature of emerging markets begs for even greater focus on sustainability criteria than in developed markets. The operational challenges that many of these markets face – uneven governance, weak institutions, and a lack of regulatory oversight – make it all the more necessary that investors consider ESG factors in their due diligence and engage with portfolio companies on such issues.[45]

[39] The author would like to acknowledge background research conducted by Reinett Erkan, Alice Schoonejans and Vincent Darcy of the IFC Environment and Social Policy and Risk Department that supported findings of this paper
[40] Kuzmina, Lindemane. ESG Investing: New Challenges and New Opportunities. Journal of Business Management, 2017, No. 14.
[41] Ibid.
[42] https://www.institutionalinvestor.com/article/b1tkr826880fy2/The-Trillion-Dollar-Fantasy
[43] Where an organization presents itself as more environmentally friendly than it is
[44] https://www.usatoday.com/story/opinion/2021/03/16/wall-street-esg-sustainable-investing-greenwashing-column/6948923002/
[45] Odell, Ali. ESG Investing in Emerging and Frontier Markets. Journal of Applied Corporate Finance • Volume 28 Number 2, Spring 2016.

As noted in the Sustainable Banking Network's[46] 2020 report on national sustainable finance initiatives in low-income countries, clear progress and commitment have been demonstrated by low-income countries, despite resource constraints and competing national priorities.[47] Nevertheless, several factors contribute to the lingering challenges of ESG integration in emerging market investing. This paper focuses on five critical challenges of ESG investing in emerging markets:

- Regulatory frameworks and enforcement of ESG laws and regulations;
- Underdeveloped capital markets and policy instability;
- Cost and capacity to manage ESG requirements;
- ESG data integration; and
- Limited selectivity.

5.2. First, weak environmental and social regulatory frameworks or a lack of proper enforcement of environmental and social laws and regulations may impede ESG investing

Environmental and social rules of law constitute critical factors in assessing risks associated with investing in a particular country. Following the 1992 Rio Earth Summit, many emerging market countries made significant efforts to establish sound environmental and social legal frameworks and build appropriate institutions. However, many of them often have less developed ESG requirements for corporations, for instance, related to the construction and operation of assets, greenhouse gas emission standards, land acquisition, or community engagement requirements than in developed economies.

The 2019 First Global Report on Environmental Rule of Law notes that while environmental laws have become commonplace across the globe, too often, they exist primarily on paper because government implementation and enforcement is irregular, incomplete, and ineffective. In many instances, the laws that have been enacted are lacking in ways that impede effective implementation (for example, by lacking clear standards or the necessary mandates).[48] In many cases, while support from the international community has helped in developing legal frameworks, neither domestic budgeting nor international aid has been sufficient in creating robust enforcement mechanisms. As a result, many of these laws have yet to take root across society, and in most instances, there is no culture of environmental compliance. Moreover, donor support often focuses on a particular area of the environment or social aspects, such as wildlife protection or climate adaptation, but may neglect other essential topics. In the absence of an integrated national ESG framework, this can lead to fragmented approaches resulting in robust coverage in some areas and no funding or attention to other areas[49].

In their efforts to overcome challenges related to gaps in legal frameworks and their enforcement, many financial institutions started initiating various types of voluntary initiatives. Adoption of voluntary frameworks like the Equator Principles, the International Finance Corporation (IFC) Performance Standards[50], and other voluntary commitments such as the United Nations Environment Programme (UNEP) Finance Initiative[51] or the Principles for Responsible Investment (PRI)[52] has increased among financial banks, private equity funds and insurance companies over the last decade.

Sound ESG legal frameworks are particularly important for institutions focused on investing in listed securities. The key reason is that as opposed to making a direct investment in a company or project where the investor can assess the quality of assets through the ESG due diligence process at the asset level – institutional investors or asset managers usually have limited access to companies and have a much shorter period to make purchase decisions. This constraint usually precludes in-depth ESG-related due diligence. Limited leverage over an issuer may also rule out the option of mitigating ESG risks at the asset level after purchase. Many institutional investors and asset managers are trying to address this gap by applying various engagement strategies to encourage issuers to follow certain ESG performance standards but these are costly and time consuming endavours. Countries with sound and adequately implemented legal frameworks on which investors can relay are usually more attractive given the comfort that issuers of listed securities operating in these jurisdictions would not be exposed to any significant ESG controversies.

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[46] The Sustainable Banking Network (SBN) is a voluntary community of financial sector regulatory agencies and banking associations from emerging markets committed to advancing sustainable finance in line with international good practice. SBN supports member countries through technical resources, capacity building, and peer-to-peer knowledge exchange.

[47] SBN, "Necessary Ambition: How Low-Income Countries Are Adopting Sustainable Finance to Address Poverty, Climate Change, and Other Urgent Challenges", 2020 - https://bit.ly/3hFKS9y

[48] UNEP (2019). Environmental Rule of Law: First Global Report - https://bit.ly/3klGr5P

[49] Ibid.

[50] Performance Standards (ifc.org)

[51] UNEP FI is a global partnership between UNEP and the financial sector. Over 200 institutions, including banks, insurers and fund managers, work with UNEP to understand the impacts of environmental and social considerations on financial performance.

[52] https://www.unpri.org/

5.3. Second, overall macroeconomic and policy instability and underdeveloped capital markets can also be major hindrances for foreign investors.

Sound taxation and accounting frameworks, solid creditor rights, bankruptcy, and competition law are the necessary building blocks to ensure favorable investment climates.[53]

A healthy banking sector and adequate market infrastructure, such as exchange and trading platforms and credit risk assessment models, are also necessary for emerging deep and liquid capital markets.[54] These are necessary for issuers of ESG focused securities such as green bonds, sustainability bonds, sustainability-linked bonds, social bonds, blue bonds or transition bonds. Disparity among developed and emerging markets in issuances of green bonds is an example supporting this thesis. Overall, developed market countries contributed 76% of green bond issuance in the first half of 2021. The share of emerging market countries grew marginally from 18% to 19% between H1 2020 and H1 2021[55]. Among top 15 issuers by country there were only two from emerging markets – China and India.

Governments can also implement policies to promote various kinds of corporate behaviours. These policy levers, for instance, could take the form of market-based solutions such as carbon trading schemes, subsidies for alternative energy technologies, or various types of financial penalties for companies that violate ESG standards. For example, in 2021, Bangladesh's Central Bank started off the year with legislation mandating the nation's banks and other financial institutions to devote a minimum of 2% of their loans towards green projects and 15% to a wider "sustainable" definition[56]. Also, China announced plans to incorporate climate change into its monetary policy framework and to encourage financial institutions to extend low-carbon credit via preferential interest rates and special relending facilities[57].

Governments can also promote greater corporate disclosure, by means of either a voluntary or mandatory requirement for listing on a stock exchange or for raising capital. For instance, India's national securities regulator, the Securities and Exchange Board of India (SEBI), announced disclosure requirements for India's largest 1,000 public companies starting in 2022.

According to its "Business Responsibility and Sustainability Report," SEBI will require India's largest corporates to disclose sustainability performance metrics that relate to climate and social issues as part of their corporate filings[58]. The benefits of disclosure may be difficult to quantify, but they can be substantial. The discipline of disclosure requirements, in effect, may prevent some companies from pursuing projects that would otherwise result in lawsuits, environmental sanctions or a higher tax bill.[59] Stock exchanges are playing an important role in encouraging better reporting and disclosures, and providing recommendations on corporate governance. Many emerging markets stock exchanges have increased their listing requirements and, in recent years, several have joined the United Nations' Sustainable Stock Exchange (SSE) initiative,[60] which provides guidance on ESG reporting and disclosures.

In some countries, capital markets have issued the first national sustainable finance frameworks and have been champions with fellow regulators for a collective national sustainable finance roadmap. Examples include Morocco's Capital Market Authority (AMMC) in partnership with Morocco's Central Bank, Bank Al-Maghrib; China's Banking and Insurance Regulatory Commission, People's Bank of China, and multiple other agencies; and South Africa's National Treasury, Prudential Authority, and Financial Sector Conduct Authority.

5.4. Third, significant obstacles are the cost and the required capacity to manage gaps between local ESG requirements and good international industry practices (GIIP).

Local ESG requirements do not always align, and complying with ESG requirements is often considered both by financial institutions and real sector companies in emerging markets as a competitive disadvantage against local peers, at least in a short time frame. Banks are concerned with the cost of due diligence[61] and often lack local qualified expertise to conduct adequate ESG due diligence.[62]

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[53] Amundi and IFC (2019) "Emerging Market Green Bonds"
[54] Amundi and IFC (2019) "Emerging Market Green Bonds"
[55] Climate Bond Initiative (2021) Sustainable Debt Market Summary H1 2021
[56] Taiyang News, 2021. Central Bank Of Bangladesh Makes It Mandatory For Banks & NBFC's To Disburse 2% Of Sustainable Financing To Green Financing. http://taiyangnews.info/markets/bangladesh-bank-makes-green-finance-mandatory
[57] Xinhua, 2021. China's central bank mulls policy tools to support carbon emission cuts. http://www.xinhuanet.com/english/2021-05/03/c_139922197.htm
[58] SEBI Board Meeting (Securities and Exchange Board of India, March 25, 2021), https://www.sebi.gov.in/media/press-releases/mar-2021/sebi-boardmeeting_49648.html.
[59] IFC. Sustainable investing in emerging markets: Unscathed by the Financial Crisis. 2009. https://bit.ly/3AnSRzG
[60] https://sseinitiative.org/
[61] According to an IFC survey in 25 countries, since green lending practices do require more careful due diligence and stricter selection of clients and projects to finance, there are perceptions among banks that green lending could potentially cost them more in terms of doing business, Greening the Banking System - Experiences from the Sustainable Banking Network (SBN) (Input Paper for the G20 Green Finance Study Group) - https://bit.ly/3IzVx6S
[62] Greening the Banking System - Experiences from the Sustainable Banking Network (SBN) (Input Paper for the G20 Green Finance Study Group) - https://bit.ly/3IzVx6S

International development institutions and other stakeholders are increasingly coordinating their efforts to address these capacity needs. At IFC, for example, advisory services and enhanced stakeholder engagement programs assist clients in building Environmental and Social (E&S) capacity, providing training in conducting E&S due dilligence and monitoring frameworks as appropriate.

Awareness among companies is also a challenge. Indeed, even if companies understand the negative consequences of overlooking ESG in their operations, implementation of sound ESG practices is not always obvious. For example, switching off the installed pollution prevention equipment and paying a fine is sometimes less expensive than using it, given additional operational cost. Such perverse practices are pretty common in many emerging markets. In practice, the smaller the gap between existing ESG regulations and GIIP, the lower is the cost of implementing corrective actions meeting expectations of international lenders and investors. As such, mechanisms to implement, comply with and enforce the ESG requirements of foreign investors are significantly stronger when policies and principles reflect the country context, including existing specific laws and regulations.[63]

5.5. Fourth, the lack of transparency around instrument labeling, reporting and data disclosure 64 as well as integration of ESG data is at the forefront of the challenges faced by investors in emerging markets.

This may leave many stakeholders wondering whether greenwashing is at play. There is a limited amount of available information on emerging market companies provided by research houses and rating providers.[65] A report prepared for the United National Development Program (UNDP) in Spring 2018 stated that a lack of data was the biggest market barrier to ESG integration.[66] Limited data availability is the result of several factors, including inconsistent tracking but also confidentiality policies, which may not enable companies to more ESG data transparency.

Another common drawback to integrating ESG data is the lack of data consistency and comparability, as there is no standard definition of ESG – with diverse views particularly in the 'social' area. As markets, technologies, policies, values and social preferences vary from region to region and change over time, it becomes impossible to define what constitutes ESG.

One of the outcomes of World Bank Group and Japan's Government Pension Investment Fund (GPIF) joint research program[67] highlights that ESG investing has been mainly concerned with inputs (e.g. finding ESG data, products) and internal processes (e.g. ESG analysis, compliance), but that in the future, more efforts will need to go into the ESG output, including clearer conceptualizing of ESG outcomes ; developing more appropriate ESG metrics; and mapping portfolios and SDG outcomes.[68] The current profusion of different data classifications and standards makes it challenging for investors to produce clear and consistent issuer and project comparisons. There is a lack of clear and standard taxonomies defining what can be classified as "good" ESG practices,[69] and there is a lack of commonly accepted ESG reporting standards. Moreover, ESG data providers usually generate thousands of different metrics and ESG scores, since their methodologies widely vary depending on their underlying components. This issue stems from three different factors: data providers can determine which factors are material to a company's financial performance; they can use different methods to source and acquire raw data; and they are free to choose how to aggregate and weigh specific ESG factors.[70] Some progress in addressing this challange can be observed in the last few years.

Data coverage in a given investment universe also needs to be taken into account when assessing the quality of a data providers' methodology. Coverage of the investment universe is often very heterogeneous across data providers and can include sectoral and geographical biases. In particular, data coverage for ESG products tends to be biased in favor of developed countries due to the higher availability and quality of data published by issuers. Additionally, data providers generally base their issuer coverage on global equity indices in which emerging markets, and bond-only issuers, are under-represented.

On top of this, methodologies too often lack transparency and reliability. All of these data related aspects act as an obstacle to investment, as it prevents investors from reliably selecting issuers and projects that are in line with their investment philosophy. This problem has already been recognized by a number of regulators in developed economies. For instance, In December 2020, France's Autorité des Marches Financiers and the Dutch Autoriteit Financiële Markten put forward plans for mandatory regulation of all ESG data service providers to be overseen by the European Securities Market Authority.[71] Similar steps might also be necessary in emerging

[63] Greening the Banking System - Experiences from the Sustainable Banking Network (SBN) (Input Paper for the G20 Green Finance Study Group) - https://bit.ly/3lzVx6S

[64] https://www.corporatesecretary.com/articles/esg/32711/sp-global-raises-concerns-over-greenwashing

[65] IFC, State of Sustainable Investment in Key Emerging Markets, 2011; IFC, Better ESG Reporting – A Key to Strengthening Capital Markets, 2018

[66] Columbia SIPA Capstone Executive Summary For United Nations Development Programme, ESG investing: how to increase ESG investing in developing countries, Spring 2018

[67] Incorporating Environment, Social and Governance (ESG) Factors Into Fixed Income Investments (worldbank.org)

[68] Inderst, Georg; Stewart, Fiona. 2018. Incorporating Environmental, Social and Governance Factors into Fixed Income Investment. World Bank, Washington, DC. © World Bank. https://openknowledge.worldbank.org/handle/10986/29693

[69] OECD, 2020, ESG Investing: Practices, Progress and Challenges

[70] Boffo, R., and R. Patalano (2020) "ESG Investing: Practices, Progress and Challenges", OECD

[71] AMF France (2020) Provisions of Non-financial Data: Maping of Stakholders, Products and Services https://www.amf-france.org/fr/sites/default/files/private/2020-12/mapping-esg-publication.pdf

markets as increasing data transparency and accuracy appears as a priority to increase investor interest in securities issued for EM companies.

In this regard, international convergence in standards for sustainability reporting and disclosure is key to supporting ESG investing in emerging markets. The Task Force on Climate-Related Financial Disclosures (TCFD)[72] is driving urgency with regards to climate-related information. Additionally, guidance such as that provided by the The United Nations Sustainable Stock Exchanges (SSE) initiative for climate disclosure,[73] provides additional support for stock exchanges to assist issuers in aligning with the recommendations of the TCFD. The EU Taxonomy Delegated Act[74] and updated People's Bank of China Green Projects Catalogue were released in April 2021. The EU Taxonomy provides a common language to describe and help drive capital to climate-related investments. All investors and large corporations in Europe will be required to report annually on the sustainable portion of their portfolios and activities, and green and sustainable financial products will have to use the Taxonomy's definitions. The People's Bank of China's updated taxonomy brings it closer to the EU one. The two economies are actively working to develop a "common ground" taxonomy to drive global investment in sustainable solutions, under the umbrella of the International Platform on Sustainable Finance. Similarly, the International Financial Reporting Standards Foundation (IFRS) project on sustainability-related reporting[75] represents a promising initiative toward adopting globally accepted ESG reporting standards. While regional taxonomies can cater to a country's specific needs, there should also be global convergence to make it easier to align on definitions and data,[76] which would thus reinforce sound decision-making processes when it comes to ESG investing.

Investors are also partnering with other investors, data providers, and technology firms to drive the development of ESG data for capital markets in emerging economies. For instance, The Asian Infrastructure Investment Bank and Amundi have both announced plans with Aberdeen Standard Investments to establish climate and sustainability data sets for companies in emerging markets to inform investment strategies. Allianz, Amazon, Microsoft, and S&P—are a cross-industry grouping working to establish an open-source climate data and analytics platform[77]. IFC has engaged data provider Arabesque to collect ESG information that is disclosed by emerging market bond issuers following IFC's ESG Performance Indicators[78]. They are a sustainability data framework aimed at providing tools and infrastructure to help reduce the ESG data reporting burden for Emerging Market capital markets issuers and enhance sustainability reporting. The Indicators are based on IFC's E&S Performance Standards and Corporate Governance Methodology. They help investors to focus on significant ESG issues common for companies operating in emerging markets. The information will be made available as a global public good for the investment community to advance investments in emerging markets. Amundi and IFC are also partnering to validate the effectiveness of these indicators as an investor framework.

5.6. Finally, another important aspect that is often forgotten but is particularly relevant for banks and investors operating in smaller economies, is limited selectivity.

Given a limited number of bankable projects, banks or local investors may often neglect ESG-related aspects to secure a deal. This reinforces the potential to manage financial trade-offs in ESG risk management. For markets relying on international investment flows, a strong signal from lenders and investors highlighting the weight attached to ESG practices in their decision-making may be very important. It could help, at least partially, in addressing the issue.

A recent World Bank Group study[79] shows that its mandate for impact led the IFC to find equity opportunities that other investors missed, by investing in markets that lacked access to capital. The contemporaneous collapse in global foreign direct investment (FDI) inflows, which favored middle-income economies, is consistent with a decline in available investment opportunities in those economies where the IFC continued to scale up. The study shows, however, that among these economies, investments in countries with barriers restricting firms' access to capital, such as limited banking system development, generated the highest average returns. Providing capital to economies in which capital is scarce can be an especially lucrative way to make a difference. Imperfect integration

[72] Recommendations of the Task Force on Climate-Related Financial Disclosures, Final Report, June 2017 - https://assets.bbhub.io/company/sites/60/2020/10/FINAL-2017-TCFD-Report-11052018.pdf

[73] UN Sustainable Stock Exchanges, Model Guidance on Climate Disclosure: A template for stock exchanges to guide issuers on TCFD implementation, June 2021 - https://sseinitiative.org/wp-content/uploads/2021/06/Model-Guidance-on-Climate-Disclosure.pdf

[74] https://ec.europa.eu/info/law/sustainable-finance-taxonomy-regulation-eu-2020-852/amending-and-supplementary-acts/implementing-and-delegated-acts_en

[75] IFRS Foundation, Exposure Draft: Proposed Targeted Amendments to the IFRS Foundation Constitution to Accommodate an International Sustainability Standards Board to Set IFRS Sustainability Standards, April 2021 - https://www.ifrs.org/content/dam/ifrs/project/sustainability-reporting/ed-2021-5-proposed-constitution-amendments-to-accommodate-sustainability-board.pdf

[76] Lai, Karry. International Financial Law Review, London; Financial institutions grapple with ESG taxonomy data challenges (Jun 14, 2021)

[77] Amundi-IFC (2021) Artificial Intelligence Solutions to Support Environmental, Social, and Governance Integration in Emerging Markets. https://www.ifc.org/wps/wcm/connect/d1d93264-54b7-4d23-a1d7-6a385aa3d868/IFC+Amundi_AI+ESG+Research+Paper.pdf?MOD=AJPERES&CVID=nCzWYlt

[78] IFC ESG Indicators for Capital Markets, https://www.ifc.org/wps/wcm/connect/Topics_Ext_Content/IFC_External_Corporate_Site/Sustainability-At-IFC/Company-Resources/ESG+Performance+Indicators_SA/

[79] Cole, Melecky, Mölders, Reed. World Bank Group Policy Research Working Paper: Long-run Returns to Impact Investing in Emerging Market and Developing Economies. August 2020. https://bit.ly/3nNMq5p

of global capital markets appears to have left attractive opportunities in countries with less developed banking systems and capital controls, creating scope for both profit and ESG impact.[80]

5.7. In conclusion

ESG investing still faces many challenges, including weak local frameworks, underdeveloped markets, inconsistent and difficult data design, collection and management, and limited selectivity — as well as the primacy of maximizing financial returns, with an emphasis on short-term time horizons and traditional financial factors despite ESG factors.[81] However, ESG investing remains a necessity to achieve the SDGs. IFC 2019 report on impact investing[82] notes that meeting the SDGs in just five key areas (education, health, roads, electricity, and water and sanitation) is estimated to require additional annual spending in 2030 of USD0.5 trillion in low-income developing countries, and USD2.1 trillion in emerging market economies. In emerging markets, this additional spending amounts to 4 percentage points of GDP.[83] Avenues to overcome the above challenges are emerging, with the strengthening of local frameworks and markets, the multiplication of investment options in emerging markets, and the rise of regulations qualifying profit maximization and the fostering of ESG integration.[84] IFC's 2019 report on creating impact still suggests that regulators should keep nuancing the primacy of profit maximization and emphasize the need for appropriate risk-adjusted returns in line with the mission of the organization, in order to represent the best interests of their beneficiaries, including but not limited to protecting their economic interests. Those avenues need continued exploration and reinforcement in order to create consistent, sound and impactful ESG investing in emerging markets.

IFC's equity portfolio may be the largest equity portfolio managed under an impact strategy, so these findings are significant. But they need to be supplemented by more research into the financial performance of a wide range of ESG investing portfolios, which will only be possible with increased willingness to share performance information. This will help build confidence among investors – especially institutional investors concerned about their fiduciary duty – that they can invest for impact while not compromising the well-being of their finances, even if they revisit their financial performance targets. This analysis will hopefully motivate other ESG investors to share their performance track record, and encourage more investors to invest for impact in emerging markets, where equity capital is needed most.[85]

[80] Ibid.
[81] IFC, 2019, Creating Impact – the Promise of Impact Investing
[82] IFC, 2019, Creating Impact – the Promise of Impact Investing
[83] Gaspar et al. 2019
[84] e.g., Basel II, see ORSE, 2012, How to integrate ESG risks into the financial sector's operational risk management methods.
[85] Ibid.

Chapter 6

From Efficiency to Legitimacy: The Changing Logic of EMNCs in Corporate Social Performance

Limin Chen, Full Professor
Xuelin Bu, PhD Candidate
School of Economics & Management[86], Wuhan University, China

Executive Summary

The influence of the degree of internationalization (DOI) on corporate social performance (CSP) remains debated in both research and practice. This study outlines three types of constraints on CSP and proposes a U-shaped model for the DOI-CSP relationship in Emerging Market Multinationals (EMNCs). With the deepening of internationalization, the strategic focus of EMNCs is shifting from efficiency to legitimacy. We assert that the large capital requirements, poor financial performance, inadequate resources, and capabilities at the first stage of internationalization constitute severe resource constraints on firms, which cause the neglect of CSP in Chinese MNCs rather than substantially improving them. As the resource constraints relaxed at the second stage of internationalization, CSP started to increase. In addition, government subsidies exerted a double-edged sword effect on this relationship, easing the downward trend of CSP at the first stage of internationalization and weakening the upward trend in CSP at the second stage. These findings extend our understanding of EMNCs' concerns and behaviors related to social responsibility and offer implications for business managers and policymakers in the global market.

6.1. The paradox between theory and practice: EMNCs' refusal to be socially responsible

Internationalization brings about institutional complexity, multiple stakeholders, and much more severe competition to MNCs, which might constitute an "extra burden" (Kang, 2013, p. 105) and make MNCs face the dual challenges of being profitable (efficiency) (e.g., Chen et al., 2016; Contractor, 2007; Xiao et al., 2013, 2019) and of being legitimate (legitimacy) (e.g., Attig et al., 2016; Kang, 2013; Marano et al., 2017; Mariotti & Marzano, 2019). Corporate social responsibility (CSR) is a typical non-market strategy which is driven by legitimacy reasons or external pressure, such as institutional requirements and stakeholder expectations (Attig et al., 2016; Chih et al., 2010; Ioannou & Serafeim, 2012; Kang, 2013; Marano et al., 2017; Surroca et al., 2013). However, when considering the emerging multinationals (EMNCs), the overwhelming focus on efficiency motivations might challenge the legitimacy reasons for being the firms' comprehensive logic.

This worry is not unfounded given that some EMNCs have shown resistance or avoidance to conformity demands in overseas institutional contexts while struggling to survive abroad, such as the labor rights disputes in the FUYAO group, recorded in the documentary American Factory, and the allegation of financial fraud by Muddy Waters Research against LUKIN Coffee in 2020. Perhaps the latter case can be explained by over-rapid international expansion without adequate preparation in both management and awareness. Still, the former is a multinational with years of overseas experience, doing business with companies from developed markets. In addition to the subjective reason of divergence in culture and personal values, is there an objective reason that is crucial and universal but to some extent overlooked supporting its founder's explicit refusal to integrate into the current labor protection system in the United States?

CSR is a broad concept that includes firms' concerns and performances in social areas, while corporate social performance (CSP) is the outcomes of CSR-related activities. CSP "integrates the principles of corporate social responsibility and the process of social responsiveness with the outcomes of social issues management" (Lerner and Fryxell, 1988: 951). Because we wish to explore the social responsibility outcomes of EMNCs during their internationalization process, we use CSP as the proper phrase in this paper.

To address this question, we identify the prerequisites for improving CSP by reviewing the relevant literature. We propose that CSP outcomes are determined by three types of constraints on firms: ①institutional constraints (willingness/pressure), ②resource

[86] This work was supported by the National Social Science Foundation of China [grant number 20&ZD072]

constraints, and ③ capability constraints. Each of these constraints addresses the "whether," "with what resources," and "how" issues related to corporate social involvement.

Regarding EMNCs' DOI-CSP relationships, we believe that the firms' resources are fundamental among the three factors by deciding whether they are "able" to invest and be involved in social-related activities. Although scholars have explained that CSP issues consider resource availability, such incidental attention has not yet been sufficient when it has moved to the context of EMNCs. As Jeong and Kim (2019) pointed out, when firms face severe conflicts between the pressures of efficiency and legitimacy and must make trade-offs due to limited resources, efficiency is the pressure that receives priority. That is, adequate resources are vital to firms' CSP improvement (Waddock & Graves, 1997)——without which, even if firms are "willing" to follow institutional requirements, they are "unable" to make actual progress in social performance.

Therefore, by emphasizing the resource constraints on EMNCs, this paper investigates the following:

1. The CSP change under the influence of internationalization at different stages: We propose a U-shaped model of the DOI-CSP relationship that reflects EMNCs' dominant logic change from efficiency to legitimacy with the deepening of internationalization.
2. Government subsidies: These subsidies as an effective external supplement to financial resources might decelerate the downward trend of CSP in the early stage of internationalization. However, will this positive influence continue to play a role in the later stage of internationalization or cause the relevant firms to fall into a "resource curse" trap?

This paper provides a detailed answer through theoretical analysis and rigorous empirical research based on the Chinese context. It could contribute to the related literature on CSP, international business strategy, and government subsidies. First, this study extends our understanding of the DOI-CSP relationship by initially proposing a nonlinear model and emphasizing resource constraints as the premise of CSP apart from institutional pressure, reconciling the misalignment between existing theory and practice. Second, this paper deepens our understanding of EMNCs' strategic responses to institutional pressures by adding evidence of their "resistance" or "avoidance" strategies against CSP. This study also enriches the existing literature about Chinese firms and supports the strategic perspective on corporate social responsibility. Third, this study provides new insights into the understanding of government subsidies by revealing their double-edged sword effect on firms, prompting policymakers to rethink and weigh the pros and cons of providing resources at the country level from the perspective of sustainability. In addition, this study reveals the CSP subcategory changes during internationalization, showing a contradiction between action and its potential economic consequences in prior research, which might be an inspiration for future studies.

6.2. Resource constraints: an underestimated prerequisite of CSR

6.2.1. Mixed Findings: How Does Internationalization Influence CSP?

Early studies of the impact of internationalization on CSP often use MNCs from developed markets as samples and find that their social performance overseas is not always satisfactory. Some EMNCs conduct internationalization in search of a "pollution paradise" (Dam & Scholtens, 2008) to avoid domestic stakeholder pressures (Surroca et al., 2013). Geographically dispersed supply chains tend to increase their management difficulties and render them vulnerable to the moral hazards of suppliers/subsidiaries (Amaeshi et al., 2008; Strike et al., 2006), leading to the decoupling of CSP-related practices between subsidiaries and their parent firms (Jamali, 2010; Rathert, 2016) and causing more substantial supervision and more disputes (Park, 2018).Recently, several studies have asserted that firms' global expansion is positively associated with CSP (Attig et al., 2016; Brammer et al., 2009; Cheung et al., 2015; Kang, 2013; Park, 2018). Scholars have pointed out that MNCs have an inherent need to improve CSP out of both institutional and economic considerations, such as obtaining legitimacy (Ioannou & Serafeim, 2012; Marano et al., 2017; Mithani, 2017), building competitive advantages (Branco & Rodrigues, 2006; Gugler & Shi, 2009), meeting stakeholders' demands, and reducing potential risks (Attig et al., 2016; Kang, 2013). For EMNCs, the unique liability of origin makes it more urgent to place additional effort on social fields to compensate for legitimate insufficiency in the global arena (Marano et al., 2017). In addition, some scholars have stated that the diffusion of social-related knowledge, expertise, and techniques in the internationalization market has enhanced Chinese MNCs' ability to improve CSP (Cheung et al., 2015). However, such a positive relationship does not seem robust given the harmful effects of decoupling and the controversies noted by some scholars (Park, 2018; Tashman et al., 2019).

6.2.2. Three Types of Constraints on CSP Outcomes

Rather than social responsibility reports, which firms can manipulate, we propose that CSP outcomes be determined by three types of constraints on firms: ①institutional constraints (willingness/pressure); ②resource constraints; and ③ capability constraints.

They each address "whether," "with what resources," and "how" issues related to corporate social involvement. The lack (or presence of too much) of any among these three constraints would lead to unsatisfactory outcomes. We list the existing findings according to the possible combination of the three factors in Table 6.1. Among the three factors, the lack of institutional constraints would lead to low CSP, irresponsibility transfer, or globally divergent practices; strong resource constraints would lead to low CSP or decoupling

between reporting and practicing, and strong capability constraints would lead to controversial social-related activities and managerial risks.

Table 6.1. Three types of constraints for CSP and DOI

Constraint	Issue Addressed	Combination		Possible Responses	Mainly Occurring in	Literature
Institutional constraints (willingness/ pressure)	Whether or not	Lack of willingness	Without pressure	Low CSP	Under-developed countries	
			With pressure	Transfer irresponsible practices/ Globally divergent practices	MNCs from developed countries	Dam and Scholtens (2008), Surroca et al. (2013)
Resource constraints	With what resources	Lack of resources		Lower CSP/Reporting and performance decoupled	EMNCs	Tashman et al. (2019)
Capability constraints	How to	Lack of capability		Controversial, management risks, supplier chain risks	MNCs and EMNCs	Park (2018), Strike et al. (2006), Surroca et al. (2020), Tashman et al. (2019)

Source: Authors of this chapter, based on their literature study.

The previous literature has focused on a single perspective and somewhat neglected the changes and interactions of all three features during the process of internationalization, resulting in a fragmented picture. For example, internationalization generally increases the pressure on firms to be socially responsible (Campbell, 2007; Ioannou & Serafeim, 2012; Kostova & Zaheer, 1999; Marano & Kostova, 2016) and motivates them to exert additional effort in promoting social responsibility (Attig et al., 2016; Kang, 2013). However, MNEs that lack willingness chooses to transfer their irresponsible practices overseas (Surroca et al., 2013), while a "talking the talk" phenomenon emerges in firms without sufficient resources and capability in course (Tashman et al., 2019). From a resource-based view, scholars believe that internationalization positively influences CSP by raising firms' willingness and addressing firms' incapability of practicing responsible policies to some extent (Branco & Rodrigues, 2006; Cheung et al., 2015). Nevertheless, the research has lacked consideration of the resources and capability shortages in the initial stage, which could raise more social-related controversies (Park, 2018). Objectively, geographical dispersion results in practical difficulties with internationalization upgrades, such as managing the risk of the global supply chain (Amaeshi et al., 2008), decoupling between headquarters and subsidiaries (Park, 2018), and the risk of manager entrenchment (Surroca & Tribó, 2008; Surroca et al., 2020). However, the final CSPs of different firms remain divergent since they are affected by the abundance of related capabilities and resources.

6.2.3. Resource Constraints as a Prerequisite for CSP

Resource constraints here mean that the firm's strategy implementation is restricted by its limited fundamental resources. It is an excellent lens to analyze the firm's actual strategic behaviors. Improving CSP is costly because it requires not only strong willingness but also plenty of resources, such as time, money, labor, communication, supervision, and management (King, 2007), as well as developing new techniques, adjusting strategies, and enduring long-term and uncertain economic returns (Jeong & Kim, 2019; Tashman et al., 2019; Wang et al., 2008). Against the background of debate over whether "firms do good after doing well" or "firms do good by doing well," Waddock and Graves (1997) initially tested the causal relationship between firms' social performance and financial performance by empirical research, confirming the former view that slack resource availability is more crucial for determining firms' CSP, not the other way round: *"Clearly, firms that are in financial troubles may have little ability to make discretionary investments in traditional CSP activities…"* (Waddock & Graves, 1997, p. 313). Soon afterward, an increasing number of studies proved that adequate and available resources and sound financial performance form firms' basis for adopting social responsibilities (Campbell, 2007; Chih et al., 2010; Chiu & Sharfman, 2011; Jeong & Kim, 2019). The term "slack resources" refers to the firms' financial surplus, and one or more of firms' performance, available capital, and cash reserves are considered indicators. Although the most critical part of resource constraints is the firm's financial condition, which is particularly investigated in this paper, other valuable inputs, such as time, labour, management skills, information, knowledge, and techniques, are also included in the resource category.

As a new player in the global market, EMNCs are usually at a disadvantage regarding all three constraints mentioned above due to their: ① original market lower institutional quality and stakeholder expectations; ② stronger resource constraints; and ③ less social-related expertise and fewer experiences compared to their peers from developed markets. Scholars believe that the first and third issues would be addressed during internationalization, which is the primary basis for supporting the positive relationship between DOI and CSP. In particular, the complexity of the institutional context and multiple stakeholder demands are likely to improve EMNCs' awareness and willingness and the pressures of social investments (Marano & Kostova, 2016; Marano et al., 2017). Knowledge of know-how is also diffused and transferred from MNEs that are experts in CSP activities to EMNCs, equipping the latter with capabilities (Cheung et al., 2015). However, things are different when we consider resource constraints. Based on the study of Jeong and Kim (2019), legitimacy has a lower priority than efficiency for for-profit firms, nor can the learning and development of capability be accomplished overnight (Musaji et al., 2020). In such cases, whether EMNCs' CSP improves immediately with the implementation of an internationalization strategy is considerably contingent on their resource constraints, which has not yet been thoroughly investigated considering its variation in different stages of internationalization and its crucial influence on CSP.

6.3. DOI and CSP: The U-Shaped Relationship

This section will illustrate the relationship between DOI and CSP and the moderating effect of government subsidy from the perspective of resource constraints. We conduct empirical tests based on a sample of Chinese listed multinational companies. The sensitivity of CSPs in the areas of primary and secondary stakeholders to DOI will also be tested.

6.3.1. Early Stage of Internationalization: With Strong Resource Constraints, Efficiency Dominates

In the early stage of internationalization, EMNCs face strong resource constraints determined by a combination of large capital requirements for overseas expansion, poor financial performance, and lack of CSP-related awareness and capabilities, confronting a compromise between social-related investments firm efficiency. In this case, (Jeong & Kim, 2019, p. 1603) pointed out that market logic is usually adopted before institutional logic when the two are incompatible: *"when firms face serious conflicts with their external audiences, they are likely to focus on dealing with immediate efficiency challenges in their core business and engage less in [CSR activities] …*". Generally, investing limited resources in social responsibilities and enduring long-term, uncertain returns are not economical for EMNCs in this stage. The rational approach is to cut CSP to an acceptable minimum to release more resources for efficiency and competency building in the international market.

Specifically, overseas expansion is costly. Whether firms adopt the FDI or incremental (Uppsala) model, the financial resource requirements are much greater than those firms that operate only locally. Many financial resources are required to acquire companies or land, build factories, negotiate cooperation agreements, and form/renovate management teams, regardless of FDI, through mergers and acquisitions, joint ventures, or greenfield investments (Lau et al., 2010). The Uppsala model with exportation in the first stage of internationalization has a relatively low initial resource requirement. Nevertheless, firms must undertake additional costs of doing business overseas (e.g., preparing import and export qualifications, hiring or training personnel, upgrading equipment to meet international standards) and capital-related risks in cross-border trade (e.g., advance payments, long period cash turnover, exchange rate fluctuations). In addition, this model implies the premise that firms can continuously upgrade their resource commitment overseas to promote internationalization (Johanson & Vahlne, 1977, 2009).

Second, poor financial performance in the first stage of internationalization exacerbates EMNCs' resource constraints. Although the relationship between internationalization and financial performance has remained debated in international business research (Chen et al., 2016), the integrated three-stage model proposed by Contractor (2007) shows strong explanatory power for EMNCs (Chen et al., 2016; Xiao et al., 2013, 2019). This model indicates that MNCs often perform poorly in the early stage of internationalization because they are outsiders and newcomers in the overseas market (Abdi & Aulakh, 2018; Contractor, 2007; Lu & Beamish, 2004; Xiao et al., 2013). Moreover, from the resource-based view, unlike their rivals from developed countries, which are abundant in capital reserves and can transfer unique ownership-location-integration (OLI) advantages abroad to promptly gain a competitive advantage in international markets (Dunning, 1977; Hymer, 1976), EMNCs usually lack firm-specific assets, such as global brands, advanced technologies, and talent (Ramamurti & Hillemann, 2017). This lack also aggravates their resource shortages at this stage since they are not able to access valuable resources in the global market (Eriksson et al., 1997; Xiao et al., 2019). Therefore, EMNCs often suffer pure losses for a considerably long period when implementing internationalization strategies (Chen et al., 2016; Xiao et al., 2013, 2019). Underperformance in the initial stage of internationalization is also in line with the perspective of organizational learning, which states that only when the accumulation of experience in and knowledge of new markets continues to increase and exceeds a certain threshold does MNCs' performance start to change from bad to good (Musaji et al., 2020).

In addition, China is categorized as one of the non-developed coordinated market economies[87] in which domestic CSP standards are underdeveloped (Surroca et al., 2020). As Matten and Moon (2008) stated, firms in collaborative market economies are typically satisfied with meeting the bottom line of legitimate domestic requirements. Chinese MNCs have relatively weak original awareness of social responsibility and lower legitimate domestic pressure. Therefore, it is very likely for them to treat social-related activities only as instruments to balance legitimacy and efficiency and to press the "pause" button of CSP without too much hesitation in the face of a serious efficiency crisis.

6.3.2. Later Stage of Internationalization: Relaxed Resource Constraints and Legitimacy Dominant

In the second stage of internationalization, the vital efficiency crisis is resolved, resource constraints are relaxed, and EMNCs have both incentives and resources to invest in CSP, coordinated with findings in the existing literature (Attig et al., 2016; Cheung et al., 2015; Kang, 2013; Park, 2018).

On the one hand, addressing the institutional requirement for being legitimate is an inherent need for MNCs (Kostova & Zaheer, 1999; Meyer & Rowan, 1977) — although their demand for efficiency outweighs their legitimacy when initially facing severe global

87 Hall & Soskice's (2001) framework of variety of capitalism categorize the world's main economies into two types, coordinated market economies and liberal market economies. The former refers to "a bank- or state-based financial system providing patient capital, strong internal labor markets based on employment protection, training systems that promote firm-specific skills…", with representatives as the US, UK. Liberal market economies are "characterized by a stock market-based financial system, fluid labor markets, education and training systems offering general skills…", with representatives as Japan and Germany. China is categorized as a nondeveloped coordinated economy (Surroca et al., 2020, p. 893-894).

competition, this pressure remains or even rises with the deepening of internationalization (Kang, 2013; Park, 2018; Tashman et al., 2019). In the later stage of internationalization, as EMNCs' global visibility improved, their multiple stakeholder demands and supervision from numerous organizations increased, leading to higher expectations and legitimate requirements, and the potential losses of violating standards also increased considerably (Chih et al., 2010; Kang, 2013; Park, 2018; Tashman et al., 2019). Multiple pressures jointly increase the conformity demands of EMNCs in the global institutional context.

On the other hand, the enhanced awareness, accumulated resources, and improved social-related capability of EMNCs in the later stage of internationalization make it more feasible to upgrade their CSP. After competing internationally for a period, EMNCs accomplished the costly process of overseas expansion and improved their financial performance by raising efficiency and achieving economies of scale (Chen et al., 2016; Xiao et al., 2013, 2019), significantly relaxing their resource constraints. At the same time, their consciousness, knowledge, techniques, experiences, and managerial know-how related to CSP grow and accumulate, and managers learn from their successful peers (Cheung et al., 2015; Laudal, 2011). The cost-benefit ratio of participating in CSP activities increases, making it more economical to respond to stakeholder demands, address institutional pressures, and control external risks by upgrading CSP.

In addition, firms improve their CSP at this stage for practical purposes. Good social performance is believed to be beneficial to firms' long-term development (Waddock & Graves, 1997). The potential benefits of being outstanding in CSP include accessing more valuable resources (e.g., techniques, capital, high-quality labor), increasing brand value and market share, avoiding managing risks, and sometimes gaining support from governments (Branco & Rodrigues, 2006; Flammer, 2018; Greening & Turban, 2000; Laudal, 2011; Mithani, 2017; Tashman et al., 2019; Vishwanathan et al., 2020). Thus, an improvement in CSP is necessary, feasible, economical, and perhaps profitable at this stage.

In summary, EMNCs experience a complex process of gaining a foothold in the international market, which is also the process of resource constraints turning from strong to weak. Correspondingly, their dominant logic undergoes a transformation from efficiency to legitimacy with the deepening of internationalization.

H1: For EMNCs, a U-shaped relationship between CSP and internationalization exists, with the slope being negative at a lower degree of internationalization but optimistic at a higher degree of internationalization.

6.3.3. Moderating Effect of Government Subsidy: Positive or Negative?

The Chinese government provides significant subsidies each year to firms in strategic emerging industries or firms participating in special activities, such as exports, R&D, and environmental protection. According to the disclosures in yearly reports of A-share listed firms, the Chinese government sent out a total amount of over USD29.36 billion subsidies to almost 97% of listed firms in 2019. In our sample, the proportion of subsidized firms every year during the research period is more than 98%. Although the subsidy is not for the specific purpose of CSP, it is commented on as providing firms "easy access to capital" by Haley and Haley (2013). Mariotti and Marzano (2019) also pointed out that EMNCs have a greater tolerance for short-term losses when the national resource backup is abundant, which can become a unique advantage for their international expansion. Many studies have considered the form of state ownership to investigate federal support, which overlaps with government subsidies to some extent, yet the difference should be noted. National support is not limited to financial backups, while government subsidies are not limited to state-owned enterprises.

At the initial stage of internationalization with strong resource constraints, the high cost of fulfilling social responsibilities constitutes a practical obstacle to upgrading CSP (Laudal, 2011, p. 21). National resource support in government subsidies alleviate resource scarcity when EMNEs are not yet sufficiently competitive to obtain sufficient resources by themselves in the global market. Therefore, government subsidies will supplement firms' financial capital and immediately relieve resource constraints. The more government subsidies a firm receives, the less it should be affected by resource constraints under the efficiency logic at the first stage of internationalization.

Will this positive effect be sustained at the second stage of internationalization? On the one hand, government subsidies could provide firms with more available resources to gain legitimacy in the global market by developing CSP-related practices so that the relevant firms can enter the institutional logic faster and outperform other firms in the social-related area. This possibility indicates that the positive influence of subsidies remains in the second stage of internationalization. On the other hand, according to Meyer and Rowan (1977), the more that an organization depends on a specific market, the more it is motivated to follow the logic of that market. Resources received from the home country government considerably weaken EMNEs' dependence on the international market. The higher degree of internationalization can neither represent a firm's strong international competitiveness nor reflect its accommodation of the institutional context of the global market. In this case, government subsidies can objectively hinder firms' rapid adaptation to the international market and be detrimental to their core competencies while protecting them from competitive pressure during the internationalization process so that the CSP cannot be improved substantially. We, therefore, propose a pair of competing hypotheses on the moderating effect of government subsidies.

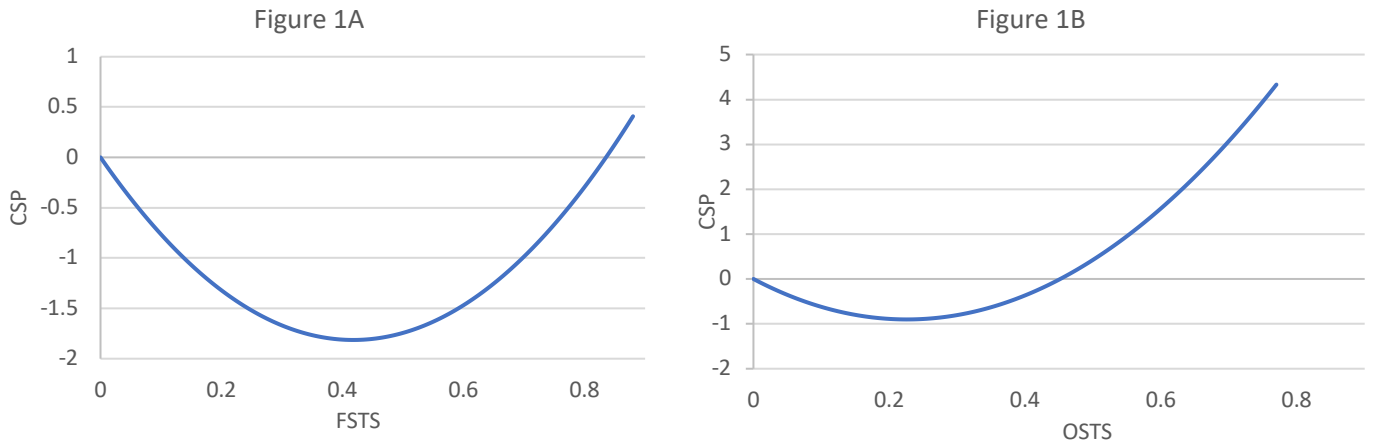
H2: Government subsidies moderate the U-shaped relationship of DOI-CSP.

H2a: The more subsidies firms receive, the flatter that the U-shape of their DOI-CSP relationship is, and the turning point shifts to the left (positive effect dominant).

H2b: The more subsidies firms receive, the flatter that the U-shape of their DOI-CSP relationship is, and the turning point shifts to the right (negative effect dominant).

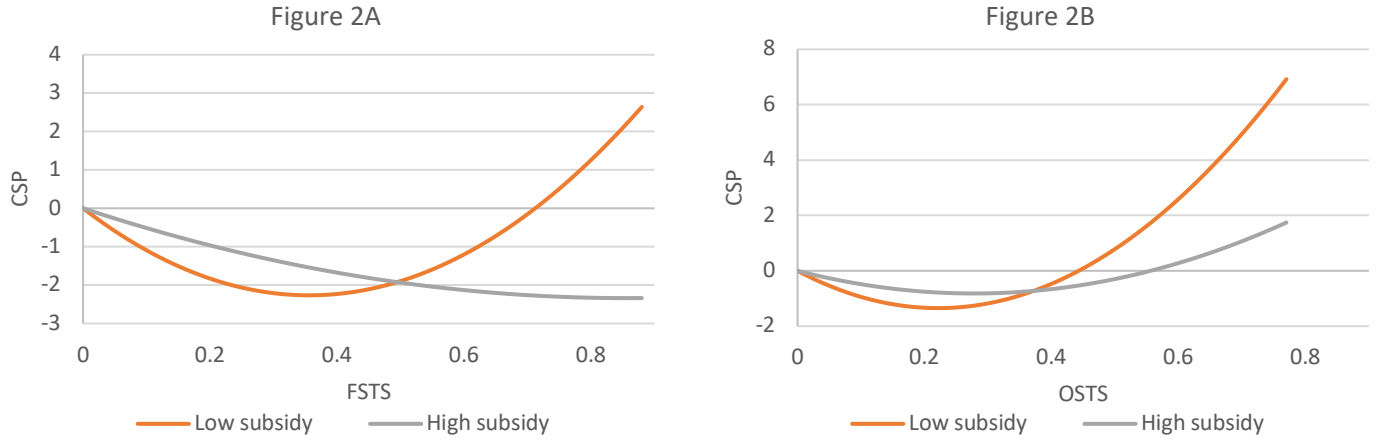
The empirical analysis takes China's listed multinational firms from 2010 to 2018 as a sample. The data comes from two widely used Chinese databases, Hexun.com and CSMAR. The results support H1 and H2b, as shown in Figure 6.1 and Figure 6.2.

Figure 6.1. U-shaped relationship of DOI—CSP



Note: FSTS stands for foreign sales to total sales, OSTS stands for overseas subsidiaries to full subsidiaries, both are used to measure DOI.
Source: Authors of this chapter, based on their empirical study by taking publicly listed Chinese MNCs in Shanghai and Shenzhen Stock Exchanges from 2010 to 2018 as the sample.

Figure 6.2. Moderating effect of government subsidies on DOI—CSP relationship



Source: Authors of this chapter, based on their empirical study by taking publicly listed Chinese MNCs in Shanghai and Shenzhen Stock Exchanges from 2010 to 2018 as the sample.

6.3.4. Corporate Social Sub-Performance Sensibility: Primary Stakeholders vs. Secondary Stakeholders

We have confirmed that, when facing the dilemma of legitimacy versus efficiency, firms prefer to maintain the latter at the cost of legitimacy. To further understand the firms' trade-offs among the legitimacy related to various groups, we use the sub-performance scores in five groups released by Hexun.com as the dependent variable to test the focal firm's CSP change in particular areas. Kumar et al. (2016) categorized stakeholders into primary stakeholders and secondary stakeholders. The primary stakeholders refer to groups that can directly influence firms' survival, while the secondary stakeholders are public stakeholders not directly engaged in firms' operations and activities. Following this standard, we divide these five groups into two categories: primary stakeholders include ①shareholders, ②employees, and ③suppliers, customers, and consumers; secondary stakeholders' expectations refer to ④environmental and ⑤charitable giving-related performance.

Generally, in the empirical test results, Chinese firms tend to manipulate the areas related to primary stakeholders rather than secondary stakeholders during the process of internationalization. This finding is somewhat contradictory to the study of Kumar et al. (2016). A reduction and weakness in primary stakeholder domains of CSP are detrimental to firms' financially; nevertheless, we believe that it is reasonable considering the variance of Chinese and US social contexts. Given the pervasive institutional voids and less developed financial system, listed Chinese MNEs usually enjoy greater market power domestically; therefore, they can exert some

pressure on primary stakeholders, who are tightly bound to and directly affected by firms, without fearing that they quickly lose them. In contrast, secondary stakeholders interact with firms loosely and irregularly so that the negative impacts of a decrease in related CSP could last a long time, restricting firms' motivations to manipulate them.

Our empirical work and findings are summarized in Table 6.2 as the basis of concluding the next section.

Table 6.2. Main empirical findings

	Hypothesis	Content (Finding)	Result
DOI—CSP	H1	U-shaped (first decreases and then increases)	Supported
Government subsidy	H2a (positive)	Weakens the downward trend, turning point moves to the left	Unsupported
	H2b (double-edged sword)	U-shape flattens, turning point moves to the right	Supported
Mechanism test	/	DOI raises the EMNEs' operational costs	confirmed
Primary stakeholders vs. secondary stakeholders	/	Stakeholders' sensibility to the DOI influence	Primary stakeholders CSP are more sensitive than secondary stakeholders

Source: Authors of this chapter, based on their empirical study by taking publicly listed Chinese MNEs in Shanghai and Shenzhen Stock Exchanges from 2010 to 2018 as the sample.

Their data were collected from the following three sources: Hexun.com, China Stock Market and Accounting Research (CSMAR), and the WIND database. Hexun.com is a third-party evaluator of corporate social responsibility and offers comprehensive scores for Chinese listed firms. CSMAR and WIND are the two leading global providers of Chinese financial market data, and all three databases are widely used in Chinese-related academic research.

6.4. Understanding the CSP determinants of EMNCs

Combining the three constraints mentioned in section 2 and the theoretical and empirical work, we summarize the different determinants of CSP in EMNCs and MNCs at various stages of internationalization in Table 6.3. In the first stage of internationalization, firms are less dependent on the global market and can manipulate their overseas institutional pressure by choosing particular needs when expanding globally. Their domestic institutional pressure plays a crucial role in deciding the CSP expectations, while their resource availability determines the "ceiling" of the real CSP outcomes. In the second stage of internationalization, firms from both developing and developed markets gain relatively high exposure to the public and considerable achievement in global market share, enhancing institutional pressure and relaxing resource and capability constraints; thus, the improved CSP outcomes are determined by their generally increased institutional demands.

Table 6.3. The determinants of CSP for MNCs and EMNCs at different stages of internationalization

Constraints		Early stage of internalization		Later stage of internalization	
		EMNCs	MNCs	EMNCs	MNCs
Institutional constraint	Domestic	Low	High	Low	High
	Overseas	Depends	Depends(√)	High (√)	High(√)
Resource constraints		Strong (√)	Weak	Weak	Weak
Capability constraint		Strong	Weak	Weak	Weak
Dominant logic		Efficiency		Legitimacy	
Overall CSP outcome		Lower	Depends	Improved	Improved

Note: The ticks mark the determining factors of the CSP outcomes in each stage of internationalization.
Source: Authors of this chapter, based on their study of related literature.

The results of this paper provide a more nuanced understanding of EMNCs' strategic responses in CSP during internationalization. Although institutional antecedents are still crucial for firms being socially responsible, as found in previous studies, this article emphasizes the essential role of resource availability, which limits EMNCs' efforts to make immediate progress when going global. This insight deepens our understanding of the premise and boundary of EMNCs' CSP improvement fills the gap between theory and practice and helps to reconcile the inconsistencies in the previous literature.

This study also supports the strategic perspective of corporate social responsibilities (Chiu & Sharfman, 2011; Vishwanathan et al., 2020). MNCs face a complexity of institutional pressure so that their strategic responses are pretty conspicuous in academia (Greenwood et al., 2011; Kostova & Zaheer, 1999; Marano & Kostova, 2016). Oliver (1991) proposed five strategic responses to institutional pressure: acquisition, compromise, avoidance, defiance, and manipulation. Scholars have found evidence of acquisition (Fiaschi et al., 2017; Marano et al., 2017), decoupling (Tashman et al., 2019), compromise, and manipulation (Gugler & Shi, 2009).

Nevertheless, it seems that few choices of "avoidance" or "defiance" occur for EMNCs, conflicting with their condition of limited resources, our intuition, and real-world cases. According to our findings, because of the institutional voids in the home country, it is easier for Chinese MNCs to hide their "irresponsibility" domestically in the initial stage of going global rather than transferring overseas like their MNC peers do (Dam & Scholtens, 2008; Surroca et al., 2013).

There are two implications of this for policymakers. Generally, EMNCs engage more in social responsibilities while being global, although they might experience a struggling period beforehand. Therefore, slightly more tolerance and patience are suitable for both EMNCs and the consumers in developed markets, considering the less expensive goods and more meaningful choices provided by EMNCs. Returning to the case of the FUYAO group, the founder donated more than USD 1.88 billion in total and was called "the first philanthropist" in China. We do not doubt that he will continue doing good when the firm is doing well. Still, it is worth noting that the way to be good is likely also divergent because of the various origins of corporate social responsibility (Matten & Moon, 2008, 2020).

Second, the Chinese government should be cautious in spending their subsidy on multinational firms. We found that subsidies might help Chinese multinationals cover more responsibilities in their early stage of internationalization, but discourage them from further improving social performance in their later stage of internationalization. In that way, the use of government subsidy is a double-edged sword in the relationship between DOI and CSP. In practice, the Chinese government should give more subsidies for young multinationals and less on mature multinationals.

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Chapter 7
Green Bonds: A Path to Greener Pastures for Emerging Countries

Gautam Jain, PhD, CFA, Research Fellow
Emerging Markets Institute, Cornell University, United States

Executive Summary

Annual investments of USD 6 trillion are needed over the next 15 years to prevent climate change from severely hampering global economic growth, according to various estimates. Green bonds, whose proceeds are ring-fenced for specific climate sustainability projects, are an ideal vehicle to finance low-carbon climate-resilient infrastructure. Indeed, the green bond market has grown substantially with a total of over USD 1.8 trillion issued since 2008. The issuance, however, has been concentrated in a few developed countries and China, which together account for USD 1.5 trillion or 87% of the total.

Although the sovereigns and other entities based in more than 50 emerging countries have sold green bonds, the amounts are small, and many countries have been left out. This is due to a combination of factors including the high cost of meeting green bond requirements, the lack of awareness of green bond benefits, and the lack of functioning domestic debt markets in some countries. Given that many of these developing countries face the worst of climate change and need the most financial and technological support in dealing with it, we suggest ways to help them tap the booming market including innovations in bond structuring to address some of the issuance challenges. Over time, as the size of this market grows, we expect EM green sovereign and corporate bond indices to be launched, which would add further momentum to the growth of the market and lead to a virtuous cycle

In this chapter, we start by explaining why the problem of climate change is acute in emerging countries. In the section that follows, we go over how green bonds can be an ideal mechanism to provide funding to support climate action. In the third section, we demonstrate the rapid growth of the green bond market. We also break down the supply of green bonds by issuer, country, and currency. As we do, it becomes clear that, except for China, emerging countries are a small part of the market. In the fourth section, we discuss the potential reasons why emerging countries have not issued as many green bonds and suggest possible solutions to address some of the problems they face. We conclude the chapter with a summary of our findings.

7.1. Emerging Markets: Epicenter of Climate Change

In the first part of its sixth assessment report (IPCC, August 2021), the United Nations' Intergovernmental Panel on Climate Change (IPCC) delivered a set of stark warnings:

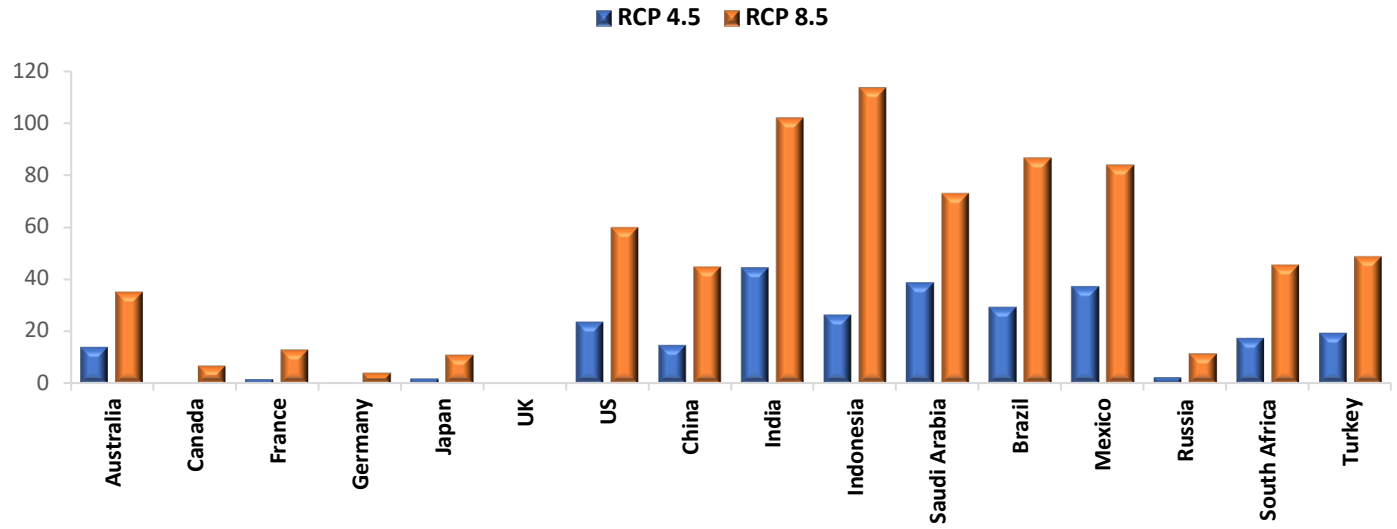
- The human influence on the warming of the planet is unequivocal.
- The scale of climate change is unprecedented with the world 1.1^{o}C warmer than the pre-industrial era (1850-1900).
- Global temperatures will continue to rise until at least the mid-century under all emission scenarios.
- Temperatures will rise by at least 1.5-2.0^{o}C compared with pre-industrial times by the end of the century unless there are deep cuts in carbon dioxide (CO_2), methane, and other greenhouse gas emissions.
- The frequency and intensity of extreme weather conditions, including flooding and drought, will increase.
- While negative emissions via removal of CO_2 from the atmosphere could help reduce temperatures, some of the changes that have occurred or will occur are irreversible, especially the melting of polar ice caps, snow cover, and permafrost and the resulting rise in global sea level.

7.1.1. Climate Impact on Emerging Countries

Although these dire predictions affect the world as a whole, emerging nations are particularly vulnerable and stand to suffer disproportionately from weather variability and rising temperatures and sea levels. A study conducted by Woodwell Climate Research Center (WCRC) on behalf of Wellington Management (Dunne et al., September 2020) projects that within the next few decades, days of extreme heat will rise sharply in developing countries, more so than in the industrialized world, which is corroborated by data from Climate Impact Lab (see Figure 7.1). This in turn could lead to an increase in deadly heatwaves, which is

defined as three or more consecutive days of wet-bulb temperatures when the high heat and humidity levels prevent the human body from cooling itself.

Figure 7.1. Expected Additional Days Per Year with Temperature Above 35°C in 2080-99 vs 1986-2005



Source: Climate Impact Lab; Note: The number of days correspond to the 50th percentile of the projected distributions; RCP or Representative Concentration Pathways are greenhouse gas concentration trajectories adopted by the IPCC with RCP 8.5 corresponding to the worst-case scenario of rising emissions throughout the 21st century while RCP 4.5 is an intermediate scenario with emissions peaking in 2040. https://impactlab.org/.

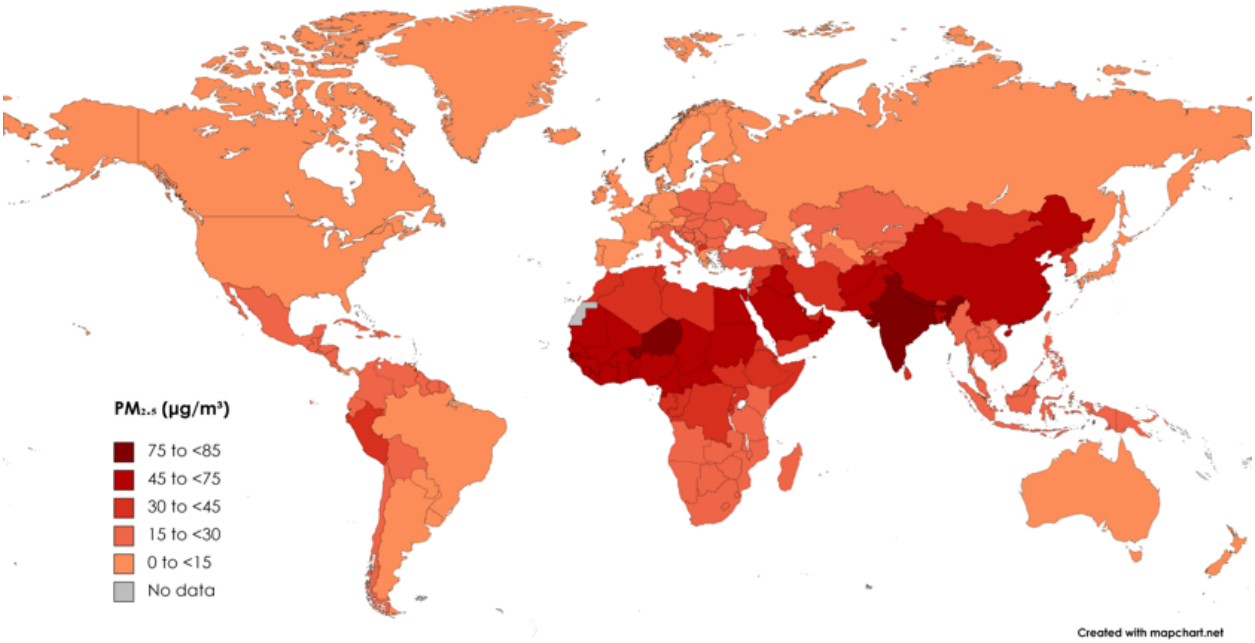
7.1.2. Economic Impact of Climate Change on Emerging Countries

A study by Pictet Asset Management (2020) goes a step further as it details the impact of climate change on the potential economic output of developed and emerging countries under a set of scenarios derived from IPCC's "shared socioeconomic pathways" (SSP). The economic impact is likely to be much greater for emerging economies than high-income countries for several reasons:

- The vulnerability of emerging countries is particularly acute because of the high share of GDP and employment tied to the agriculture sector. According to 2019 World Bank data, agriculture contributes 8% of GDP for low- and middle-income countries on average but only about 1% for high-income countries. Crop yields suffer from variability in temperature and rainfall patterns, hurting agriculture-dependent societies.
- Limiting carbon emissions will require lower usage of oil, gas, and coal, which would hurt the economic growth in emerging countries as they are much more reliant on fossil fuels. While the access to renewable energy sources is increasing rapidly for emerging countries, it still comprises a lower share than industrialized economies. Of the USD 249 billion invested in clean energy capacity in 2019, 58% was in emerging economies. However, coal, oil, and gas still account for over two-thirds of the power produced in emerging countries versus just over half in the developed world (BloombergNEF, 2020).
- The lack of infrastructure to deal with weather extremes in less developed countries can cause an increase in mortality and morbidity, leading to a drop in productivity. Compounding the problem, the number of deaths caused by air pollution is the highest in emerging countries (RBC Emerging Markets Equity Team, August 2020) as these countries have the largest concentration of ambient fine particles, PM2.5, which refer to particles measuring less than 2.5 micrometers in aerodynamic diameter (see Figure 7.2).
- Conflicts and population displacement, whether from coastal or agricultural areas, resulting from extreme weather events can add to the economic costs. Hsiang et al. (2013) estimate that for each one standard deviation change in climate toward warmer temperatures or more extreme rainfall, the frequency of interpersonal violence rises 4% and the frequency of intergroup conflict rises 14%. Colmer (2018) estimates that in the absence of labor reallocation to non-agricultural sectors, the aggregate consequences of temperature increases would be up to 40% higher.
- Large segments of populations in emerging countries live in water-stressed areas, including coastal regions and areas susceptible to flooding and drought. An estimated 97% of the world's fishermen live in developing countries and fishing is their major source of food and income (United Nations, 2017).

In the extreme scenario where no action is taken to address climate change, Pictet Asset Management (2020) estimates that the global GDP per capita could drop 45% by 2100 compared to a scenario with no further climate change – damages that could amount to between USD 90 trillion to USD 500 trillion depending on economic growth and population assumptions. In comparison, the GDP per capita in some of the large emerging countries, such as Brazil, India, and Indonesia, could drop even more – 59% by 2021 in the same extreme scenario.

Figure 7.2. Global Map of Population-Weighted Annual Average $PM_{2.5}$ Concentration in 2019



Source: State of Global Air 2020, Health Effects Institute, and IHME. https://www.stateofglobalair.org/.

Developing economies face a climate investment trap when climate-related investments remain chronically insufficient (Ameli et al., June 2021). It is imperative, therefore, that emerging countries get access to green financing to mitigate the impact of climate change. On the flip side, sustainable investment in emerging markets should grow rapidly, providing excellent opportunities for investors and a possible win-win-win solution for issuers, investors, and the planet.

7.2. Green Bonds: A Bridge to Sustainable Development

One of the cleanest and best ways to finance climate investments is via green bonds. The first green bond was issued in 2008 by the World Bank in response to a specific demand from Scandinavian pension funds (The World Bank, March 2019). The idea behind green bonds was to mobilize private capital towards sustainable economic development to meet well-recognized environmental goals such as those established at the United Nations Framework Convention on Climate Change (UNFCCC) Paris Agreement (Donova and Bardalai, May 2018). The range of entities issuing green bonds has expanded over time, starting with multilateral institutions, municipalities, and national development banks to more commonly by corporates and sovereigns now.

7.2.1. What Makes a Bond Green?

The key feature distinguishing green bonds from other fixed income instruments is that the proceeds are ring-fenced for specific climate sustainability projects (Reichelt and Keenan, December 2017). Green bonds differ from sustainability-linked bonds which are not tied to specific projects and have no restrictions on how the proceeds are used as long as certain prespecified sustainability targets are met (S&P Global Market Intelligence blog, June 2021; Coldeweijer and Hsu, May 2021). Bonds are labeled green if they meet certain conditions, including providing investors with the eligibility criteria of the projects they would fund and reporting back on the projects eventually supported.

7.2.2. Issues and Greenwashing Risk

Although the benefits of green bonds are clear, they have not been without issues. The lack of standardization, for example, has been identified as a major hurdle. To address this issue, the World Bank led the effort to create a harmonized framework (The World Bank, November 2015). This framework encompasses 16 core principles and recommendations, including issuers reporting on both the use of green bond proceeds as well as the expected environmental impacts at least on an annual basis.

These efforts at standardization have led to the emergence of the Green Bond Principles (GBP), a self-regulatory initiative designed to promote transparency and disclosure in the green bond market that was developed under the auspices of the International Capital Markets Association (ICMA) (OECD and Bloomberg Philanthropies, December 2015). For assurance, GBP recommends second-party reviews and consultation, audits, and third-party certifications (OECD, 2017). CBI and HSBC (2015) find that a majority of issuers officially secure a second-party review, while the rest use a proxy of a second-party review or an audit.

Despite the emergence of GBP and the Climate Bond Standards developed under the auspices of the Climate Bonds Initiative (CBI), the quest for standardization continues as creating universally acceptable definitions for green bond eligibility is complex. As Reichelt

and Keenan (December 2017) discuss, the scope of projects that fall under sustainable finance is so broad that it is difficult to cover them all with a simple set of standards. First, there is no universal agreement on what is "green". Also, the standards need to incorporate a country's context.

Adding further complexity, the GBP guidelines are voluntary and do not mandate any specific threshold of environmental benefits. This can lead to the risk of "greenwashing", whereby the issuer can use the proceeds for activities that have little or no environmental benefits, especially since investors lack any legal mechanisms for enforcement.

7.2.3. Benefits and Green Bond Premium

Nevertheless, Fatica and Panzica (2020) find evidence that green bond issuers display a decrease in carbon emissions after issuance. Lu (2021) labels it as the "green bonding hypothesis", whereby green-bond issuers subject themselves to intensified scrutiny from the media and investors, which along with periodic reporting makes it costly for issuers to deviate from their environmental commitments. These findings suggest that the issuance of green bonds acts as a credible indicator of an issuer's intent to engage in behavior that benefits the environment.

In addition to being an ideal tool for facilitating the transition to a carbon-neutral world, green bonds may provide financial incentives to companies and sovereigns as well. Specifically, several studies have found that green bonds generally trade at a premium to conventional bonds.

In one such study, Dorfleitner et al. (February 2021) conclude that investors reward green bonds of issuers who appoint independent external reviewers documenting and giving validity to the bond's green purposes. Indeed, the premium of green bonds in the form of lower relative yields may help offset some of the costs associated with the external reviews and following the recommendations of GBP to disclose details regarding the following:

- Use of proceeds including targeted projects
- Clear eligibility criteria and process for project selection
- Explicit process of distributing proceeds to projects
- Periodically reporting back on the progress of funded projects

Löffler et al. (February 2021) strengthen these arguments as they estimate that the yields for green bonds are on average 15-20 basis points lower than that of conventional bonds. In addition to the pro-environmental preference of investors, they assign the premium to the external reviews and regular monitoring which reinforce the long-term credit outlook of the issuer, thus lowering its risk perception and probability of default. Moreover, the fact that the issuer is spending on sustainable development may itself improve its long-term viability in the eyes of the investors.

To conclude, despite the myriad issues, green bonds are an ideal tool to finance low-carbon climate-resilient (LCR) projects and infrastructure, which OECD (2017) estimates will need annual investments of USD 6 trillion over the next 15 years to prevent climate change from severely hampering global economic growth. Indeed, the market for green bonds has exploded in size as we discuss in the next section.

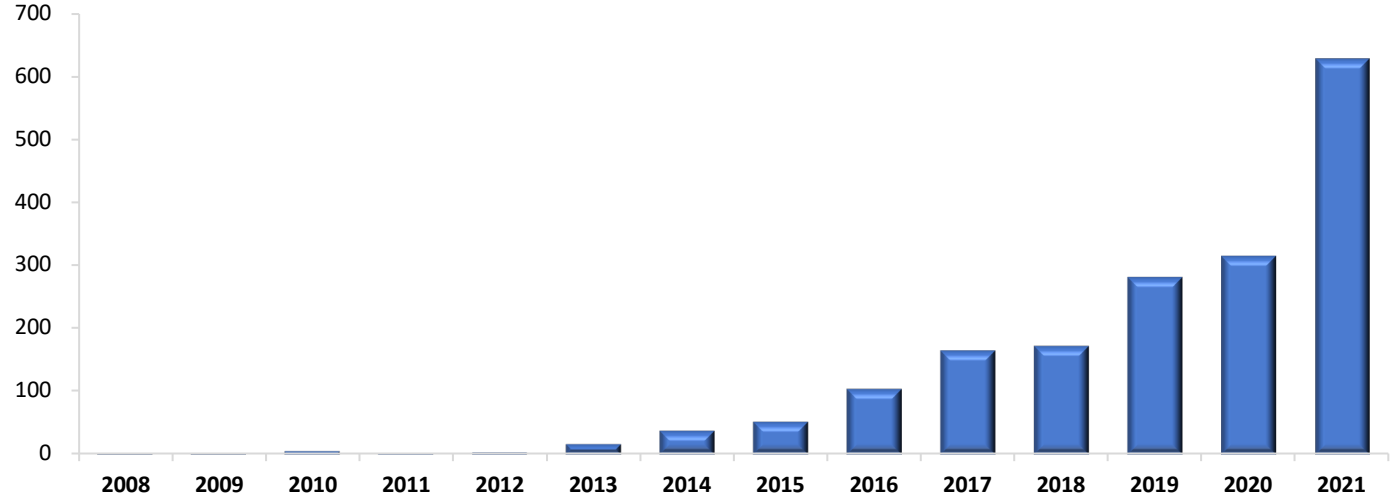
7.3. Green Bonds Supply: Missing Emerging Markets

The World Bank pioneered the first green bond in collaboration with Skandinaviska Enskilda Banken (SEB) in 2008 (Reichelt and Keenan, December 2017). Following the novel issuance, it took a few years for investors – pension funds, insurance companies, and asset managers – and issuers – governments, government agencies, development banks, multilateral agencies, and corporates – along with other organizations – regulators, rating agencies, capital market associations, and international climate negotiators – to become engaged with the market and set up the stage for its rapid growth starting in 2013.

7.3.1. Rapid Growth of Green Bond Market

Since 2008, a total of USD 1.78 trillion of green bonds have been issued by governments, government agencies, multilateral agencies, and corporates spanning over more than 70 countries. Annual issuance has increased at the rate of 87% per annum over the past decade and 43% per annum over the past 5 years (Figure 7.3). The total supply of green bonds in 2021 was over USD 600 billion, twice that of the previous year's record issuance of just over USD 300 billion. Green bond issuance is expected to reach USD 1 trillion in 2022 according to a survey by Climate Bonds Initiative (2021).

Figure 7.3. Annual Green Bond Issuance (USD bn)

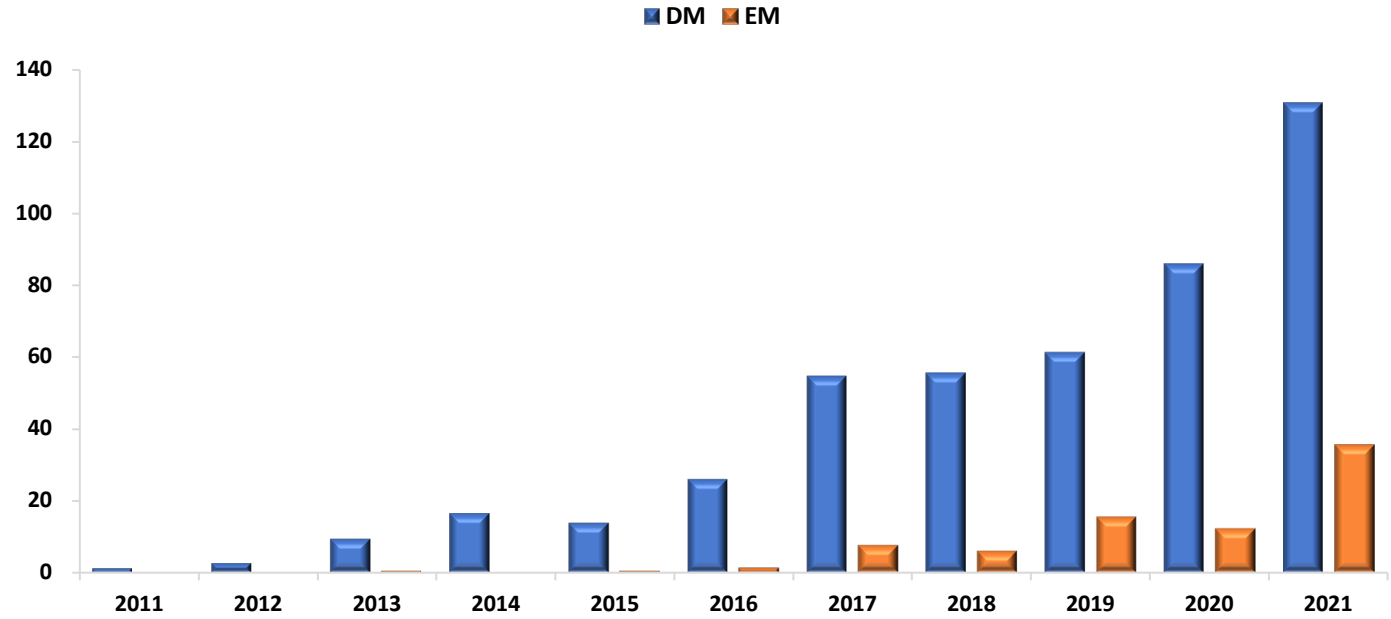


Data Source: Refinitiv, Bloomberg; Data as of Dec 31, 2021

The initial impetus to the market was given by multilateral agencies. In addition to the World Bank, the European Investment Bank, the African Development Bank, the Asian Development Bank, and the International Bank of Reconstruction and Development (IBRD) among others played a leading role in the early years. As the market matured and became a viable option, issuance from governments, government agencies, and corporates picked up.

In 2021, the total issuance by governments and government agencies along with multilateral agencies, which account for a much smaller portion of the total issuance now, was close to USD 170 billion (Figure 7.4). The issuance by governments spans developed and emerging countries. However, emerging market sovereigns and quasi-sovereigns typically account for only about 10-20% of the annual issuance by governments.

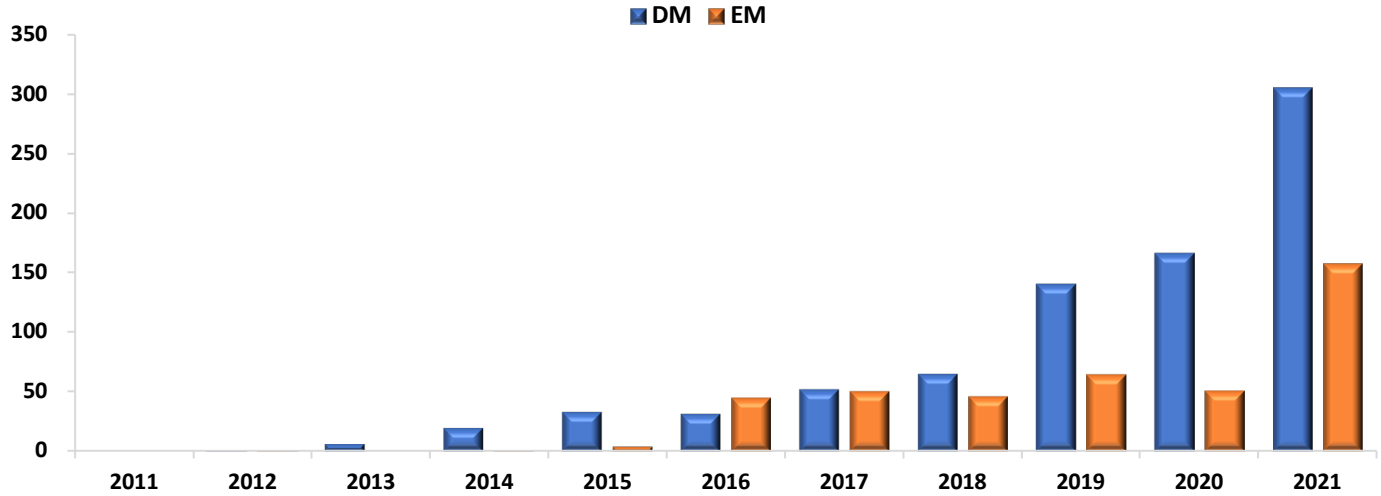
Figure 7.4. Annual Green Bond Issuance by Governments and Multilateral Agencies (USD bn)



Data Source: Refinitiv, Bloomberg; Note: DM = OECD countries except Chile, Colombia, Mexico, and Turkey, EM = rest of the countries, Data as of Dec 31, 2021.

The green bond market took off as the involvement of corporates, both financial and non-financial, increased. Currently, corporates account for two-thirds to three-quarters of the total annual issuance (Figure 7.5). Of the total corporate issuance, typically a third is by EM companies.

Figure 7.5. Annual Green Bond Issuance by DM and EM Corporates (USD bn)

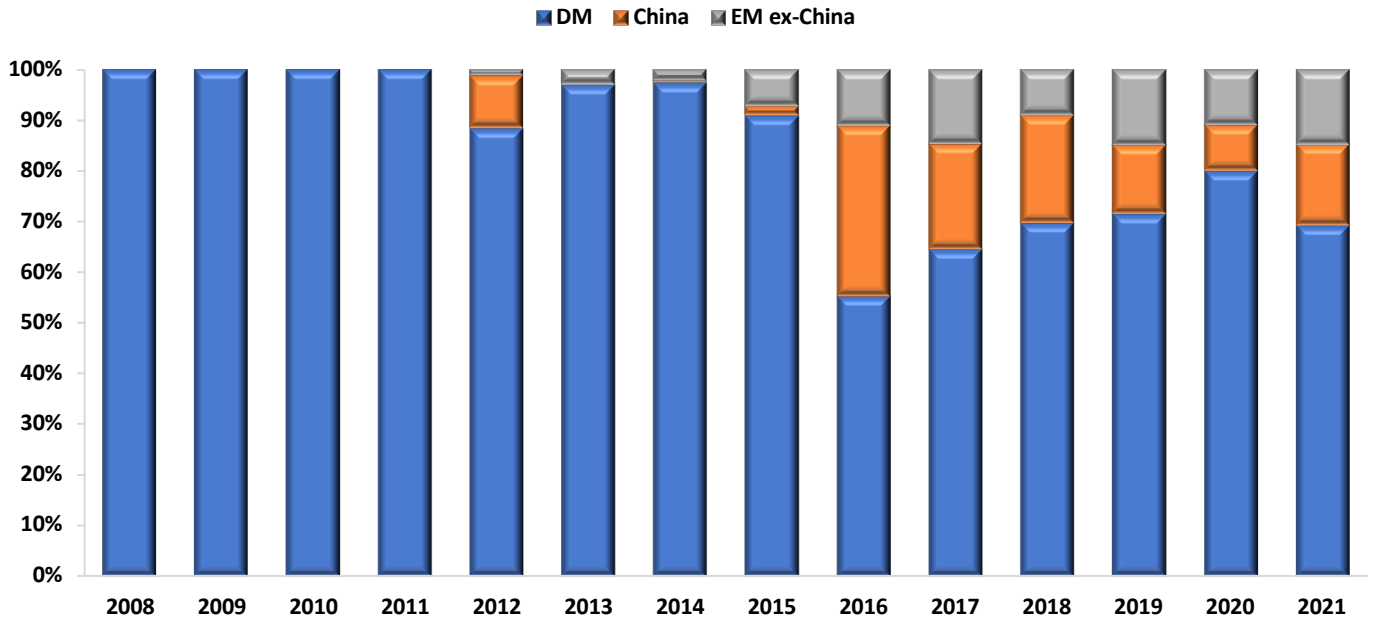


Data Source: Refinitiv, Bloomberg; Note: DM = OECD countries except Chile, Colombia, Mexico, and Turkey, EM = rest of the countries, Data as of Dec 31, 2021.

7.3.2. Low Share of EM Green Bonds

While the share of EM within corporate green bond issuance is better than in sovereign issuance, emerging countries still make only a small share of the total issuance. While the share of emerging countries in the total green bond issuance was high in 2016, since then its share has averaged less than 30% of which China alone accounts for more than half (Figure 7.6). Going back to our discussion in Session 7.1, emerging countries need greater investments than the developed world in sustainable development as the climate crisis is forecasted to be more severe in those countries. It is, therefore, imperative to see the share of EM rise to at least 50% of the total green bond supply, with countries besides China becoming more active.

Figure 7.6. Low Share (%) of EM in Annual Green Bond Issuance

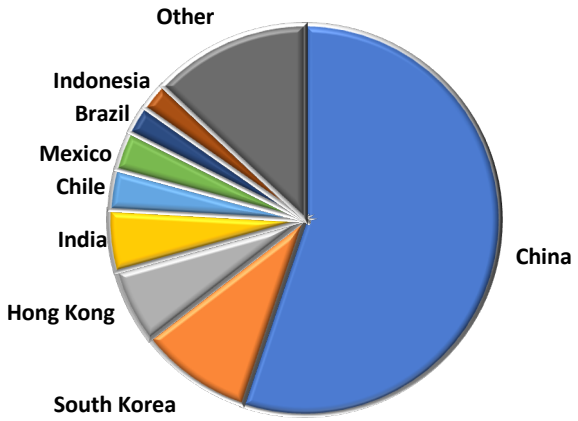


Data Source: Refinitiv, Bloomberg; Note: DM = OECD countries except Chile, Colombia, Mexico, and Turkey, EM = rest of the countries, Data as of Dec 31, 2021.

7.3.3. China: Largest Issuer Globally

Among emerging nations, China has made huge strides in developing its green bond capital market. Not surprisingly, therefore, China makes up the lion's share among emerging countries as it accounts for 55% of the total EM issuance of USD 500 billion (Figure 7.7). Indeed, with USD 276 billion of total issuance, China has issued the highest amount of green bonds in the world, exceeding the other major players including Germany (USD 188 billion), France (USD 183 billion), the United States (USD 156 billion), the Netherlands (USD 131 billion) and the sum of all the multilateral institutions (USD 164 billion).

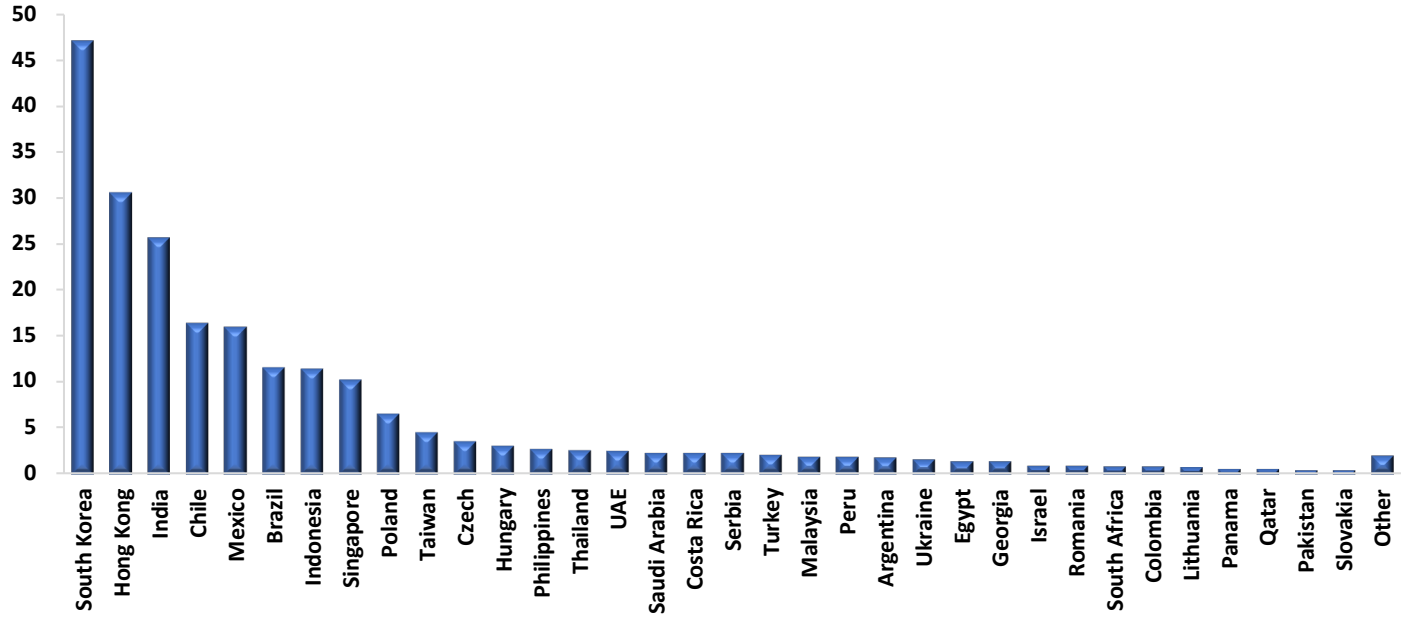
Figure 7.7. Country Share of Total EM Green Bond Issuance since 2008



Data Source: Refinitiv, Bloomberg; Note: DM = OECD countries except Chile, Colombia, Mexico, and Turkey, EM = rest of the countries, Data as of Dec 31, 2021.

Within EM, South Korea follows China as the second-largest issuer of green bonds with USD 47 billion (Figure 7.8). Other countries with more than USD 10 billion of green bond supply are Hong Kong (USD 31 billion), India (USD 26 billion), Chile (USD 17 billion), Mexico (USD 16 billion), Brazil (USD 12 billion), Indonesia (USD 11 billion), and Singapore (USD 10 billion). While the fact that there are almost 50 emerging countries that have issued green bonds is encouraging, the market sizes of most countries are quite small.

Figure 7.8. EM ex-China Green Bond Total Issuance since 2008 by Country (USD bn)

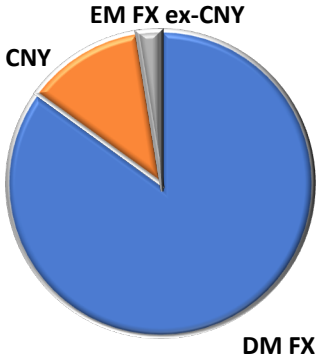


Data Source: Refinitiv, Bloomberg; Note: DM = OECD countries except Chile, Colombia, Mexico, and Turkey, EM = rest of the countries, Data as of Dec 31, 2021.

7.3.4. China Dominates Within EM Currencies

Not surprisingly, 70% of the green bonds issued have been denominated in either the euro (42% or USD 753 billion) or the US dollar (27% or USD 485 billion). Issuance in the Chinese renminbi makes up just over 12% of the total with USD 222 billion. Although more than 30 emerging countries have issued green bonds in their local currencies, a large chunk of EM issuance has been in the euro or the dollar. As a result, EM local currency green bonds, which are not denominated in the Chinese renminbi, make up less than 3% of the total (Figure 7.9).

Figure 7.9. Low Share of EM ex-China Local Currency Green Bonds in the Total Issuance since 2008

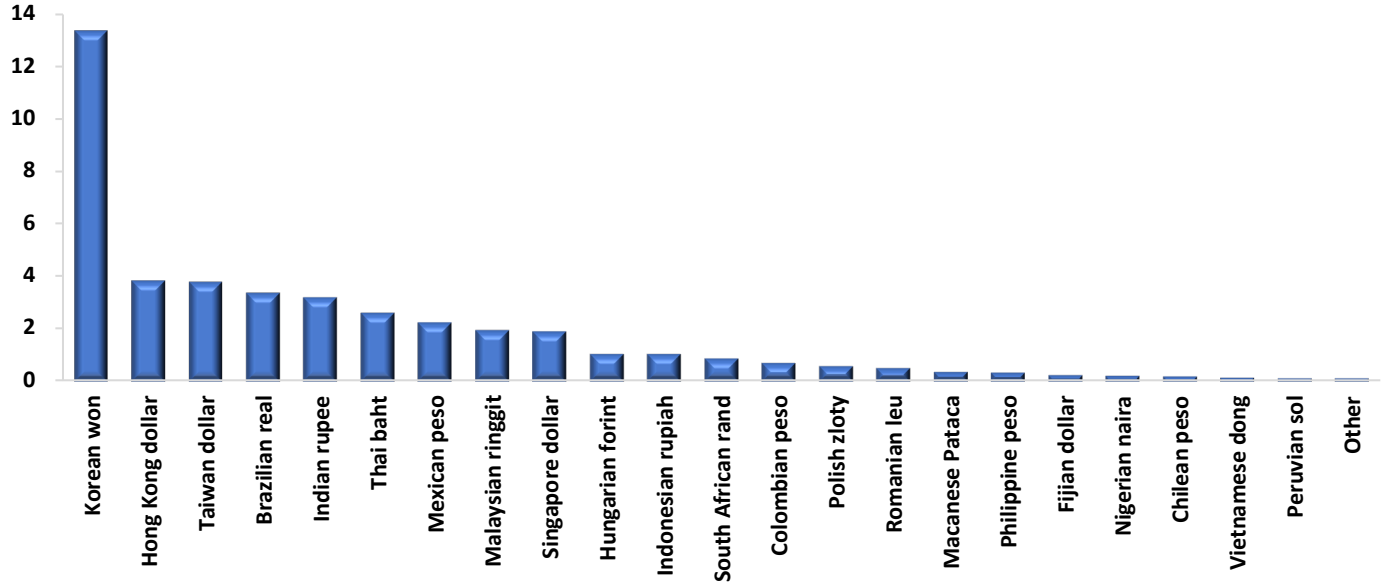


Data Source: Refinitiv, Bloomberg; Note: DM FX = Currencies of OECD countries except Chile, Colombia, Mexico, and Turkey, CNY = Chinese renminbi, EM FX ex-CNY = currencies of the rest of the countries, Data as of Dec 31, 2021.

To be precise, outside of China, the total local currency issuance among emerging countries has amounted to only USD 43 billion or less than 2.5% of the total (see Figure 7.10). Issuing in the dollar or the euro can potentially create problems for these countries down the road, as has happened in the past. If and when the ultra-low rates in the developed countries start rising, then the dollar or the euro could appreciate against the currencies of the issuing emerging country, increasing their debt burden in the process. Issuing in local currencies should be the preferred option because issuing in the dollar or the euro may result in replacing one problem (climate change) with another (high external debt).

In the next section, we discuss the potential reasons behind the low issuance from emerging countries, especially in their local currencies, and possible ways to alleviate the problem. We focus on the supply side as the demand for investments in renewable energy remains strong. According to a survey by the Octopus Group (2020), institutional investors plan to raise their portfolio allocation to renewables from 4.2% at the end of 2020 to 10.8% over the next 10 years, with most of this increase expected in the next 5 years.

Figure 7.10. Total Green Bond Issuance since 2008 in EM currencies ex-Chinese renminbi (USD bn)



Data Source: Refinitiv, Bloomberg; Note: DM = OECD countries except Chile, Colombia, Mexico, and Turkey, EM = rest of the countries, Data as of Dec 31, 2021.

7.4. Addressing Issuance Challenges Faced by Emerging Countries

In addition to the ones we already discussed in the second section, Emerging market issuers face further barriers including the following (OECD, 2017):

- Perceived high cost of meeting green bond requirements as elaborated in Section 7.2.3
- Lack of awareness of the green bonds market and its benefits
- Underdeveloped and/or illiquid domestic debt markets
- Regulatory and other hurdles faced by foreign investors when accessing domestic markets
- Lack of dedicated indices and coverage by rating agencies, especially in comparison with bonds issued by developed countries

It is likely that because of the above-mentioned reasons, many emerging market issuers are opting for the illiquid and more expensive green loans market. As such, it may be worthwhile to find ways to address these issues. In addition to the work being done by the multilateral institutions and climate experts to educate and support potential issuers, we provide some possible ways to ameliorate these issues.

7.4.1. Managing the Cost

Besides China, Chile is another country that has succeeded in green financing. Chile issued its first sovereign green bond in June 2019. Between then and May 2021, the Chilean government has issued USD 16bn of green, social, and sustainable bonds, which amounts to 16.6% of the total government debt stock (Boitreaud et al., 2021). One of the motivations has been the savings of 5-10 bp achieved by issuing green bonds (Bloomberg News, February 2020). The success achieved by Chile owes to the country establishing a Green Bond Framework, following in the footsteps of GBP (Boitreaud et al., 2021). The framework provides clear guidelines for the use of proceeds, the definition of green sectors, the definition of eligible green expenditures, and specifying the sectors and projects that are excluded from being funded.

Instead of counting on a green bond trading at a premium to conventional bonds to generate cost savings, the bond structure could be modified to directly transfer benefits in the form of a lower cost to the issuer. Sustainability-linked bonds (SLB) – which unlike green bonds are not tied to specific projects but whose financial structure can vary depending on whether the issuer achieves predefined sustainability or ESG objectives (Coldeweijer and Hsu, May 2021) – may offer ideas in that regard. Mexico's auto parts maker, Nemak, for example, sold USD 500 million of an SLB, which has a bond structure with a coupon that rises if specific emission targets are not met (Bloomberg News, July 2021). While a step-up coupon may create a moral hazard for investors as they will benefit from sustainability goals not being met, an alternative could be to do the reverse. In other words, the bond's coupon could drop if the projects within the purview of the green bond meet certain requirements that could be specified upfront.

7.4.2. Developing Domestic Markets and Attracting Investors

As we pointed out in Section 7.3.3, the total EM green bond issuance ex-China amounts to just over USD 200 billion. Also, most of the EM ex-China issuance is in hard currencies, typically the US dollar or the euro, with only around US 40 billion in local currencies. A major reason behind this is many emerging countries lack fully developed domestic capital markets, making it difficult for bond investors, local or foreign, to buy their debt. While the goal should be to eventually develop domestic bond markets, this could be a tediously slow process even as the need to tackle climate change is urgent.

A short-term solution could be to issue global bonds denominated in local currencies such that the coupon and principal payments settle in dollars or euros based on the exchange rate at the time and the bonds can be cleared and settled using DTC, Euroclear, or Clearstream. This is the approach that was taken in the 2000s by several emerging countries who could see the demand for local-currency bonds from foreign investors, but local regulations, taxation, and other complexities such as setting up local accounts made it cumbersome and onerous to buy the bonds. As a result, Brazil, along with other countries, started issuing Global bonds denominated in the local currency (see, for example, SEC (2018) for details on BRL Global Bond 2028). These global bonds denominated in local currency allowed foreign ownership of local bonds in Brazil to rise rapidly. Over time, the country took additional steps, such as eliminating the financial tax (IOF) in 2013 (Reuters News, 2013) and easing up the process of setting up local accounts, which drove up foreign interest further. Global bonds allowed Brazil and other emerging countries a transition period for the local debt markets to evolve and made it easier for foreign participation. The same can be done in countries with underdeveloped markets for either the sovereign or corporates to issue green bonds denominated in the local currency.

7.4.3. Development of Benchmarks

Over the past three decades, EM fixed income markets have grown rapidly. One of the key drivers for this growth has been the inclusion of EM debt in global fixed income indices (e.g., FTSE World Government Bond Index or WGBI; see FTSE Russell, 2021) and the development of separate EM hard-currency and local-currency indices which have served as benchmarks. Examples include JP Morgan's EM bond indices (J.P. Morgan, 2021).

The market capitalization of the underlying bonds of the JP Morgan indices ranges from USD 500 billion to 1 trillion. However, when the original EMBI index was launched in 1992, the underlying market was much smaller as it covered only Brady bonds at the time. Currently, EM (including China) hard-currency sovereign and quasi-sovereign green bonds amount to USD 55 billion, EM hard-currency corporate green bonds amount to USD 180 billion, EM local-currency sovereign green bonds amount to USD 25 billion, and EM local-currency corporate green bonds amount to USD 240 billion. As such, if EM green bond issuance continues at the 50% per annum pace as it has since 2018, then it may become viable to create EM hard-currency sovereign and corporate green bonds indices possibly as early as two years. EM local-currency green bond index would likely take longer given its current small size. Once these indices are created and launched, the market would undoubtedly grow even more rapidly as new investors get pulled in because of the benchmarks, creating a virtuous cycle and drawing in other players including rating agencies.

7.5. The Future is Green

To conclude, we highlight the key points from this chapter:

- Unless there are deep cuts in carbon dioxide (CO2), methane, and other greenhouse gas emissions, global temperatures will continue to rise accompanied by extreme weather conditions and a rise in sea level.
- Developing countries stand to lose the most as they are likely to experience the worse of climate change which would then impact their economies as they depend more on agriculture and fossil fuels.
- Despite standardization issues, green bonds are ideal for financing the transition to a renewable and low-carbon future.
- Indeed, the green bond market has mushroomed in recent years with new issuance rising at the rate of over 40% per year.
- While substantial progress has been made with rising issuance from EM sovereigns and corporates, the bulk of supply has been from developed countries and China.
- Innovations in bond structuring to address the higher cost of meeting green bond requirements as well as demonstrating the benefits of green bonds to developing nations would undoubtedly lead more countries to follow the example of others.
- Indeed, as the size of these markets grows, we expect EM green bond sovereign and corporate indices to be launched in not too distant a future, which would add further momentum to the growth of the market and lead to a virtuous cycle.

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Chapter 8
An Analysis on Latin American ESG Implementation

Veneta Andonova, Associate Professor and Dean
Juana García, Associate Professor
Juan Pablo Borda, Student
Facultad de Administración, Universidad de los Andes, Bogotá, Colombia

Executive Summary

Since the advent of Corporate Social Responsibility (CSR), companies have implemented multiple approaches towards achieving a new balance between their financial, environmental, and social objectives with mixed results. Emerging markets are no exception. In Latin America, companies have further responsibility in this domain; given the enormous biodiversity richness, they need to protect the wellbeing of the entire world and the burning social needs across the region. A new framework named Environmental Social Governance (ESG) evolved from the need to solve problems that CSR could not resolve. This framework aims to quantify '' impact in the ecological, social, and corporate governance domains to change the way businesses behave. Arguably, implementing ESG philosophy and practices allows companies to improve their operations and have higher stock performance, while making substantial contributions to address burning societal and environmental issues. Latin American companies have an opportunity to leapfrog to the highest international standards using ESG, potentially becoming poster-children of effective implementation of this strategy. The opportunity is mainly because of the demands of preserving biodiversity, adapting to climate change, and resolving the burning issue of inequality that requires urgent innovations and adaptations to business strategy. In this chapter, we provide data on the adoption of ESG standards across Latin America and highlight several cases of mutilations (multinationals from Latin America) leading and paving the way for successful integration of the ESG dimensions into their strategies.

8.1. Introduction

ESG investing has continuously gained strength and acceptance, driven by the hypothesis that ESG factors have economic relevance (Kell, 2018). Many investors treat ESG information as essential for a clearer understanding of the corporate strategy and management vision. More generally, ESG investing is perceived as a litmus test for how societies, companies, and markets are evolving and how financial valuation adapts to broader societal changes. Evidence supports the idea that complementing financial aspects with environmental, social, and governance factors leads to better business results and improved societal outcomes.

The acceptance of the idea that investors obtain better results when they integrate environmental, social, and governance risks is growing globally. Still, it has been subject to specific local pressures in every region. In Latin America, significant challenges for the widespread acceptance of ESG investing relate to data availability and standardized reporting. What is frequently lacking is strategic thinking and training that goes beyond the financial parameters of doing business and the sophistication and sensitivity of consumers and investors to ESG-related aspects of the business.

8.2. The Advent of ESG in Latin America

The ESG approach to business strategy and investing has seen varying degrees of acceptance and implementation globally, and this heterogeneity applies to both developed and emerging economies. Emerging economies and regions have specific characteristics and challenges that influence how and when ESG principles are used. Latin America's stagnating economic development over the last ten years has resulted in exciting innovations and applications of ESG as an alternative to the traditional economic opportunities. Closely analyzing ESG initiatives in emerging markets is essential to predict and understand where these regions might be heading and how companies are leveraging ESG to improve performance.

Latin America presents a fascinating case study regarding ESG. Most Latin American economies are squeezed into the middle-income trap characterized by an apparent contradiction between economic stagnation and relatively good theoretical prospects for economic growth. In such circumstances, ESG initiatives can be an engine for innovation that circumvents long-standing institutional and societal gaps and put Latin American societies on a speedier lane towards achieving progress and wellbeing.

Unfortunately, in Latin America, lack of data and standardized reporting tools frequently leads to fragmented and partial information on company involvement with ESG dimensions. Given the relatively weak institutional setup of many Latin American countries and the difficulty of guaranteeing public services in vast territories of the subcontinent, many companies have long been engaged in corporate social responsibility initiatives playing a quasi-governmental role by financing education, healthcare, and security. In particular, philanthropic and shared value arrangements that affect corporate value chains and product and service designs geared towards underserved population segments have improved human and societal development (Porter and Kramer, 2011). Large Latin American multinationals recognized for their crucial role along ESG dimensions are included in the Dow Jones Sustainability Emerging Markets Index. Among them are Bancolombia (banking), Natura (households and personal products), Nutresa (food, beverages, and tobacco), and SURA (insurance and finance). As of November 2020, Brazil, Chile, Colombia, and Mexico were the only Latin American countries whose multinationals were included in the index. In Peru, only 5 percent of companies interested in social responsibility share a profound conviction that environmental and social priorities are good for business (Jáuregui, Ventura, and Gallardo, 2019).

To a varying degree, the competitive landscape and the very nature of doing business in Latin America have pushed a considerable number of corporations to create economic value through socially and environmentally responsible behavior. This is evident from a large number of BCorps from Argentina, Bolivia, Chile, Colombia, Ecuador, Guatemala, Haiti, Mexico, Nicaragua, Panama, Peru, and Venezuela. B corps are defined as businesses that meet the highest standards of verified social and environmental performance, public transparency, and legal accountability to balance profit and purpose. B Corps are accelerating a global culture shift to redefine success in business and build a more inclusive and sustainable economy. (https://bcorporation.net/about-b-corps). Corps and the Dow Jones Sustainability Emerging Markets Index companies stand out in a much larger pool of smaller and less sophisticated businesses that embrace one or several of the ESG dimensions. Still, they frequently lack the capacity, ability, or interest to communicate with them. A similar trend is evident globally: while about 80% of the ' 'world's largest corporations use the Global Reporting Initiative (GRI) standards and thus share a common language regarding ESG (Kell, 2018), most small and medium-sized organizations struggle with understanding and organizing for GRI. However, the rapid advancement of data availability and intelligent algorithms are likely to lead to the inclusion of non-financial information in assessing risks, strategies, and operational performance for all types of businesses at a progressively decreasing cost.

Another relevant challenge for the broader adoption of the ESG standards is business leaders' strategic thinking and training. Companies that want to pursue inclusive growth strategies must overcome the limitations of their accounting and control systems that prioritize only financial outcomes (Kaplan and McMillan, 2021). This process has only started in Latin America as businesses gradually drift away from traditional views of labor as a simple cost factor and pollution as a free externality towards a strategy that prioritizes healthier products and responsible consumption. In a study from 2018 among the board members of the largest Latin American companies conducted by Kearney and Universidad de Los Andes School of Management, only six percent reported that their expertise in the board was related to social responsibility. Another six percent - to human capital development and two percent - to environmental protection. At the same time, 40 percent perceived that their contribution is mainly related to the strategy process, 19 percent to the financial analysis, and 13 percent to legal questions. The gap between the critical competencies of the board members and the domains of most substantial pressures and most significant risks for the Latin American companies is evident from the ranking of the top reasons for crises. The top reasons for a problem from more to less severe are commonly linked to ESG risks and are as follows: If the company is involved in public debates that are politically relevant and have high media interest (29%); frequent shifts in the regulatory environment (19%); technological change (11%); impact on local communities (11%); and finally, reputational risks related to social media (8%). Except for technological change, all other vulnerabilities relate to social, environmental, or ethical dimensions of the business dealings. Therefore, the predominantly financial focus of business strategy in the Latin American boardrooms must be quickly complemented with a more holistic approach to management that considers the ESG risks. This can soon become an uncomfortable topic for political debate in the age of information technology and social media.

8.3. Data and Method

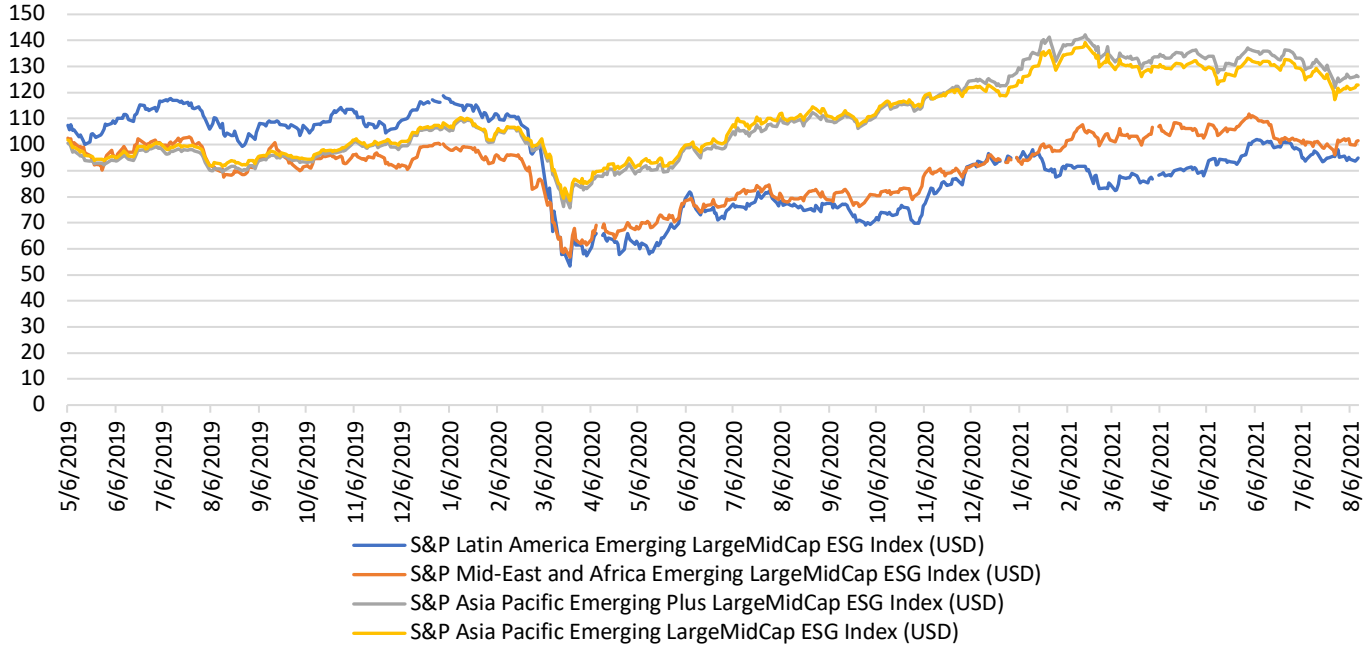
In this section we use the performance of the family of S&P ESG funds for emerging regions in order to analyze the performance of Latin American corporations and compare it to the performance of corporations from the Asia Pacific and Africa-Middle East. Companies used in this analysis have relatively high reporting standards and external vetting processes with S&P; their performance information is publicly available on the S&P website. Data on price returns and total returns of the respective regional indices were collected between May 6th, 2019, when the S&P ESG index was launched, and September 10th, 2021. Robustness checks were performed for different observation windows and the impact of the COVID-19 global pandemic on the stock performance (Table 8.1).

8.4. Results

Since the launch of the S&P Emerging ESG indices, the best regional performers have been the Asia Pacific and Asian Pacific Plus ESG emerging indices with a 3-year annualized price return of 6.41% and 7.4%, respectively (Figure 8.1). This performance has shown resilience to the effects of the global COVID-19 pandemic and turned into a massive stock surge that happened after the impact of COVID-19, which has continued to some degree until today. As of 2021, this positive performance contrasts with both price and total returns for the case of Africa and Latin America. Generally, price and total return performance are highly correlated for all regional S&P ESG indices, and Latin America is not a top performer in either case.

After its launch in 2019, the Latin American Index significantly outperformed all other emerging indexes, but the COVID-19 crisis impacted it the hardest. The index has not recovered to its initial levels from May 2019 and shows a 3-year annualized return of -1.8%. On the other hand, the African-Middle East Index showed the lowest performance before the pandemic and suffered a more remarkable fall during the initial phases of the COVID-19 crisis. It has declined to levels comparable to the Latin American Index and has a 3-year annualized return of -0.16%. The most recent performance of the regional indices shows a more optimistic state of affairs for both the Latin American and the African-Middle East Indexes. They significantly outperformed the Asian counterparts with values of 25.65% and 28.4% return on price versus 10.86% and 15.23% for Asian and Asian Plus, respectively, over the last calendar year. Nonetheless, the Latin American and African-Middle East ESG indexes have had better performances than some of the standard Indexes in the respective regions.

Figure 8.1. Price Return of ESG Emerging Market Index



Source: S&P DJ Indices.

Table 8.1. Returns of S&P Emerging Markets Indexes

3 Year Return Annualized	-1.80%	-0.16%	6.41%	7.40%
1 Year Return Before COVID (May 2019-Feb. 2020)	4.12%	-6.28%	6.03%	5.17%
1 Year Return (May 2019-May 2020)	-26.40%	-23.47%	-1.76%	-1.90%
2nd Year Return (May 2020-May 2021)	29.06%	40.50%	37.38%	31.73%
2 Year Return (May 2019-May 2021)	-5.01%	7.53%	34.96%	29.23%
Last Year Return (Aug. 2020-Aug. 2021)	25.65%	28.40%	15.23%	10.86%
Effective date	S&P Latin America Emerging LargeMidCap ESG Index (USD)	S&P Mid-East and Africa Emerging LargeMidCap ESG Index (USD)	S&P Asia Pacific Emerging Plus LargeMidCap ESG Index (USD)	S&P Asia Pacific Emerging LargeMidCap ESG Index (USD)

Source: Calculation by the authors using S&P data.

8.5. Between-country comparisons using the Latin America ESG Index

The S&P Latin America Emerging Large Midcap ESG Index was used to analyze performance per country (Brazil, Mexico, Colombia, Chile, Peru), relying on the complete list of participating corporations. All subsidiaries and companies with duplicate tickers were deleted from the analysis, retaining only the company with the highest market cap for each ticker. Data for the stock prices of each company in the index was downloaded using S&P Capital IQ. Stock price data was collected for 3-day intervals during the whole period of observation. The company data was aggregated by country, and a weighted average of the country ESG stocks was calculated based on the market capitalization of the relative impact of each company in the composite ESG index. The performances of each

participating country were compared using the indices of reference for each country as a basis for the comparison: BOVESPA (Brazil), S&P/BMV IPC (Mexico), COLCAP (Colombia), S&P IPSA (Chile), and S&P/BVL Peru General Index.

By disentangling the Latin American Index performance into its country components, the variations between countries and the heterogeneity of the ESG phenomenon become evident (Table 8.2). Chile and Colombia show the weakest performance among all five countries in the index, arguably due to the systemic risks related to social protests and long-lasting strikes experienced by both countries during the observation period. Peru has an average performance, but it isn't easy to draw country-specific conclusions with only three companies included in the index. The best performers are Mexico and Brazil, with positive returns for all observation windows except for the period characterized by the initial COVID-19 impact (Figure 8.2).

Similarly, the general stock indexes for each of the five Latin American countries were analyzed in order to compare the performance of the ESG companies of each country with the average stock market return. As in the case of the ESG indices, the overall market performance in Chile and Colombia exhibit the lowest returns in the range of -18.47 to 14.63 and -32.88 to 22.66 percent, respectively. Peru follows closely with relatively modest average results in the field of -27.94 and 38.37 percent. Both Mexico and Brazil have the strongest performances, championed by Brazil in the range of -17.96 to 37.52 percent (Table 8.3).

When comparing the performance of the general stock market indices to that of the respective ESG listings on a country basis (Table 8.2 and Table 8.3), there are new insights. In Table 8.2 in yellow is the country/time observation for which the general stock market outperforms the respective ' 'country's ESG listings. The country/time observation is in green, for which the ' 'country's ESG listings exceed the individual general stock. Table 8.3 contains the overall stock market performance of the respective 'countries' significant indices for the same period used as a benchmark for the color coding in Table 8.2.

The ESG listings exhibit a consistently better performance for all observation windows, compared to the overall stock market for Mexico and Peru. On a similar trend, Colombian ESG stock performance is higher for some observation windows but not for all. Chile and Brazil ESG stock performance are consistently lower, with only occasional exceptions. It is remarkable that during the period September 2020 – September 2021 in all five Latin American countries, all ESG stocks outperform the general stock market, and in some cases by a significant amount (Figure 8.2 and Figure 8.3).

Table 8.2. Price Return of Countries ESG Companies of the Latin American ESG Index

ESG	Return				
Country	1 Year Return (May 2019- February 2020) Pre Covid	1 Year Return (May 2019- May 2020)	2nd Year Return (May 2020 - May 2021)	2 Year Performance	Last Year Return (August 2020 - August 2021)
Brazil	6.68%	-21.93%	31.82%	9.78%	22.40%
Mexico	9.22%	-16.11%	49.16%	36.67%	56.25%
Colombia	12.17%	-24.03%	2.57%	-12.59%	10.57%
Chile	-14.18%	-29.11%	18.02%	-28.19%	12.58%
Peru	5.08%	-4.40%	61.52%	62.25%	30.81%
S&P Latin America Emerging LargeMidCap ESG Index (USD)	4.12%	-26.40%	29.06%	-5.01%	25.65%

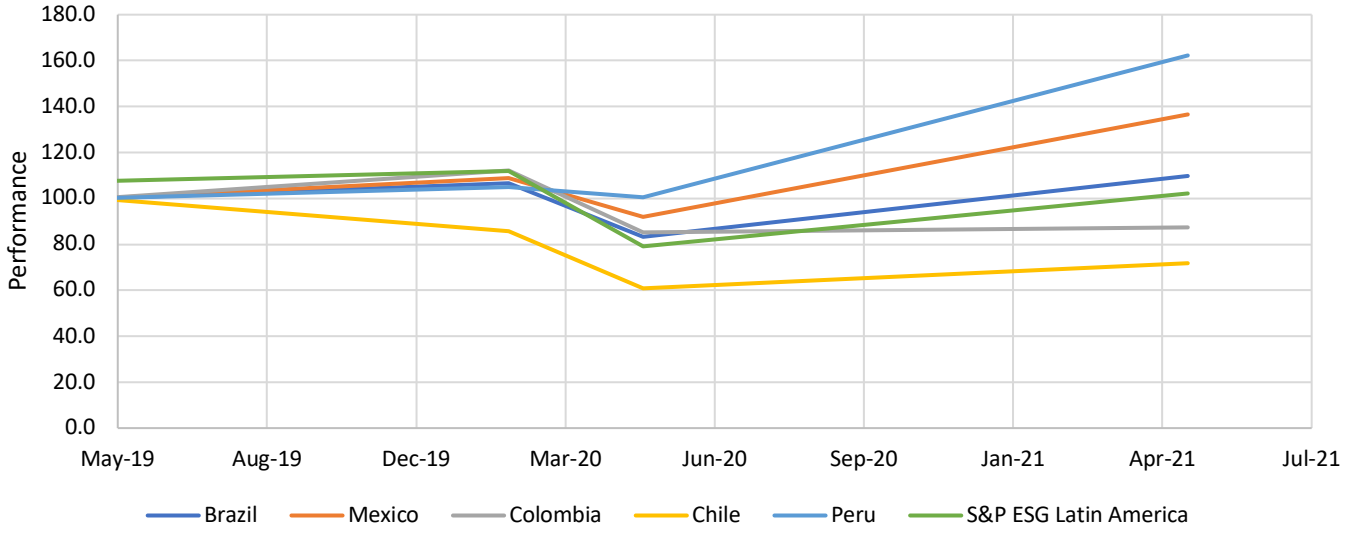
Source: Calculated by authors using S&P Capital IQ Stock Data

Table 8.3. Price Return of Major Indexes in Latin America

	Return				
Index	1 Year Return (May 2019- February 2020) Pre Covid	1 Year Return (May 2019- May 2020)	2nd Year Return (May 2020 - May 2021)	2 Year Performance	Last Year Return (August 2020 - August 2021)
Brazil Stock Market Index	20.02%	-17.96%	37.52%	35.40%	20.74%
Mexico S&P/BMV IPC	2.77%	-18.42%	34.83%	13.04%	30.80%
Colombia Stock Exgange Index COLCAP	7.19%	-32.88%	22.66%	-11.75%	9.97%
Chile Stock Exchange Index S&P IPSA	-10.64%	-18.47%	14.63%	-16.48%	3.98%
Peru Stock Exhange S&P/BVL Peru General Index	-4.48%	-27.94%	38.37%	-4.77%	-11.81%
S&P Latin America Emerging LargeMidCap ESG Index (USD)	4.12%	-26.40%	29.06%	-5.01%	25.65%

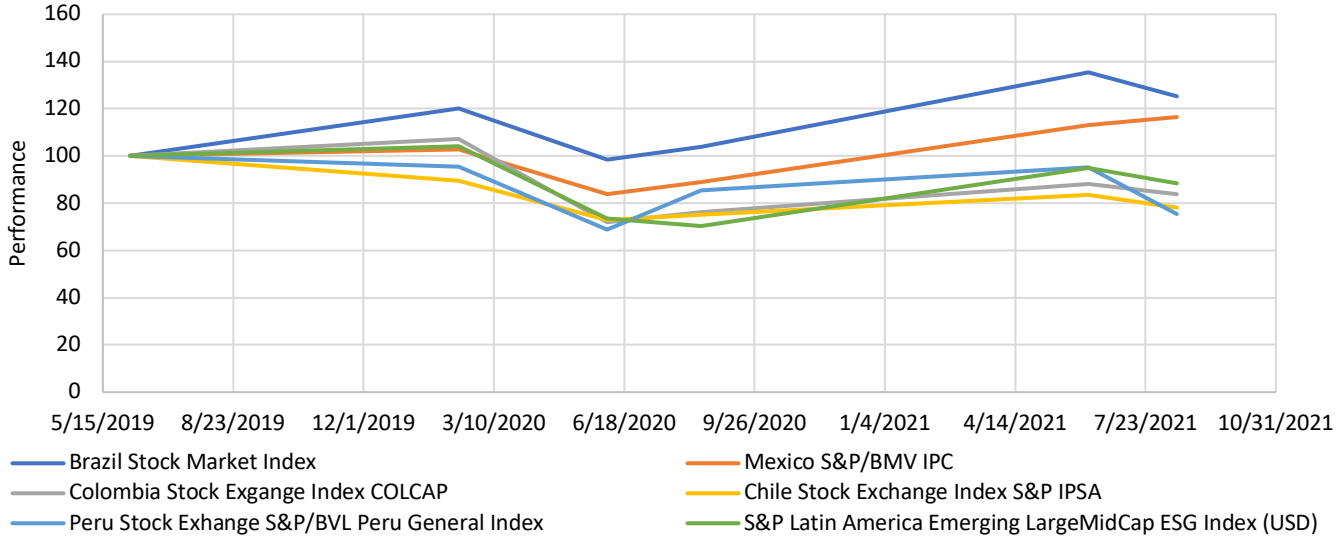
Source: Calculated by authors using S&P Capital IQ Stock Data

Figure 8.2. Performance of ESG companies by country



Source: Calculated by authors using S&P Capital IQ Stock Data

Figure 8.3. Performance of Countries Indexes over time



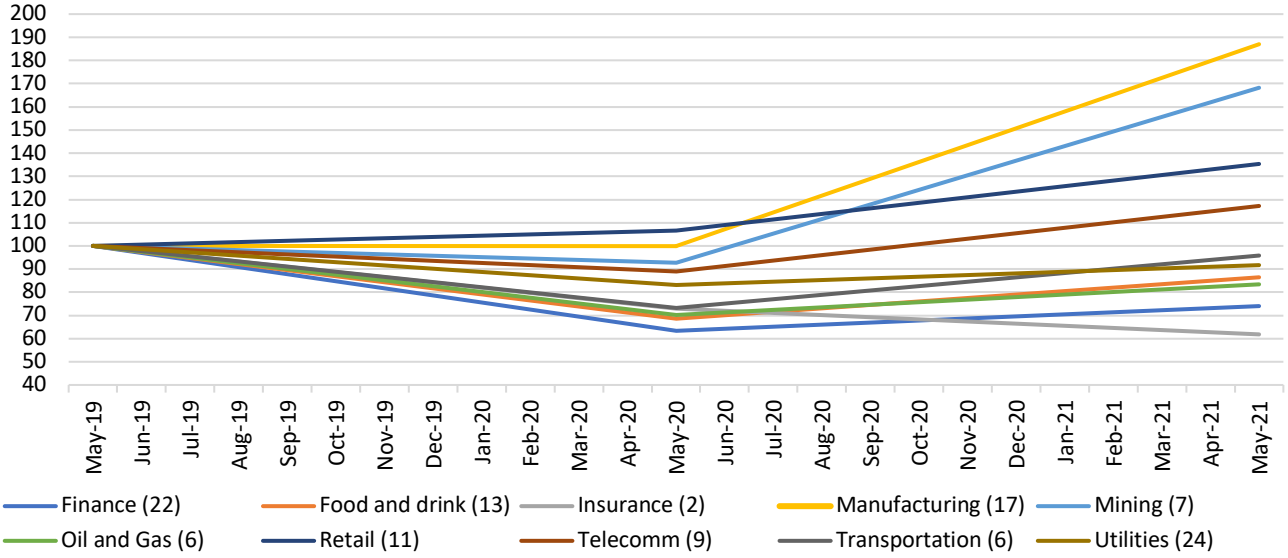
Source: Calculated by authors using S&P Capital IQ Stock Data

8.6. Industry Analysis using the Latin America ESG Index

The S&P Latin America Emerging Large Midcap ESG Index was also used to analyze performance per industry. Weighted averages based on the market cap of each company involved in ESG within its sector are used to assess the approximate performance of the industry as represented in ESG. Manufacturing and mining are the best performers during the observation period, showing solid upticks after the shock of the COVID-19 pandemic. Retail follows close, with telecoms having positive returns two years after the launch of the index. The hardest-hit industries are Insurance, Finance, and Oil and Gas, which have not recovered fully yet but showed signs of recovery.

In what follows, we provide short case studies of some of the top performers along ESG dimensions from Latin America.

Figure 8.4. Industry Performance (ESG) (Number of Companies in the sector)



Source: Calculated by the author using S&P Capital IQ Stock Data

8.7. Case Studies

8.7.1. Natura & Co.

Natura is a cosmetics and body care company based in Sao Paulo, Brazil. The company was founded in 1969 and since then has become one of the most notable companies in the cosmetics industry worldwide. The company entered the spotlight in 2004 when it was one of the first famous companies to have sustainability as one of the core components of its business strategy years before it became a must-have strategic direction, thus becoming one of the poster-children of sustainability. In 2017, the company transitioned towards a conglomerate called Natura Co. that included Natura, Body Shop, Aesop, and Avon and has since become one of the ' 'world's most giant certified B Corp in the world[88].

Natura Co. has been one of the signature mutilations that have attracted international attention and investment. The company has also been one of the leading promoters of ESG as a critical competitive advantage that allowed Natura to perform well in foreign markets such as Europe and the USA, where there is intense competition in the sector.

' 'Natura's first sustainability report was published in 2004, and the company expanded its efforts towards having its sustainability efforts recognized at a global level. In 2013, Natura entered the DJSI (Dow Jones Sustainability Index). Similarly, Natura entered several S&P ESG indexes, including the Latin American one from its launch in 2019. Natura was also a sustainability yearbook member in the S&P Global sustainability yearbook of 2021[89].

In its latest sustainability report, Natura Co. updated its goals and progress in its vital ESG objectives. One of its commitments is Life 2030. So far, Natura has focused on the environmental and governance components, especially regarding the Amazon Rainforest. As of 2021, it has protected more than 2 million hectares, reduced its emissions by 32% compared to 2020, and plans to become carbon neutral in the next decade. On the social side, Natura has almost erased the gender pay gap across the organization; 48% of leadership positions are women and aim to be the first company to reflect the customers accurately they serve[90].

Natura ' 'Co's latest focus is on increasing the breadth and depth of its ESG initiatives, continuing to leverage its trailblazer position, and implement the same sustainability standard to all its corporate brands.

8.7.2. Latam Airlines

Latam Airlines Group was founded in 2012 by several Latin American airlines, most prominently Latam Chile, based in 1929. Latam Airlines is the biggest airline in Latin America, currently operating in Chile, Brazil, Colombia, and Peru, among others, and its headquarters are in Santiago de Chile.

[88] Natura & Co | Certified B Corporation. (2020). B Corporation. https://bcorporation.net/directory/natura-co
[89] The Sustainability Yearbook 2021 | S&P Global. (2021). S&P Global. https://www.spglobal.com/esg/csa/yearbook/
[90] Natura & Co Annual Reports. (2020, July 13th). Natura & Co. https://ri.naturaeco.com/en/publications-and-documents/reports/

Latam is the first Latin American airline to establish itself as an actual global carrier in the Oneworld alliance since 2013. Furthermore, the company has attracted interest from international investors and has stimulated the sector's growth in the region.

Latam's first sustainability report was published in 2013. Since then, the company has increased its efforts to improve its performance regarding ESG. The company was included in the DJSI back in 2012 and entered the DJSI World in 2014, becoming the first airline from the region to achieve this milestone. Its ESG efforts continued in 2019 when Latam became part of the S&P ESG Latin American Index. Latam was awarded the Silver Class recognition in the S&P Sustainability Yearbook 2021, meaning that Latam is within a range of 1% and 5% of the top performers in the industry[91].

Latam has a wide array of initiatives along all the ESG pillars, focusing mainly on the ' 'SDG's 7, 8, 9, 12, 13, and 16. Latam is a member of the Carbon Offsetting and Reduction Scheme for International Aviation, which aims to reduce carbon emissions of international flights through carbon offsets and reduction of emissions. The company has developed a fuel efficiency program to reduce the usage of fuel in all its operations. This program has achieved an increase of 6.52% in fuel efficiency leading to the avoidance of 3.3 Million Tons of GHG emissions. Moreover, Latam has focused on sourcing its energy from renewable sources – 75% of its consumed in 2020 was from renewables. The company is also involved in the development and production of aviation biofuel in Brazil.[92]

The company has the potential to improve significantly along the social dimension. In 2020, women held 34% of management positions, and out of 9 members, just one was a woman. On the other hand, Latam has improved its salary equality — in 2020, due to a new compensation policy, ' 'women's average salary increased from 76% to 101% of ' 'men's average salary. Regarding governance, the company has strived to improve transparency in its financial policy and compensation and has improved health and safety standards in its operations[93].

8.7.3. Bancolombia

As the largest financial institution in Colombia, Bancolombia is part of the Grupo Bancolombia financial group, offering different banking products and services. The bank is a prominent multilatina and has subsidiaries in six other countries in the region. It is listed on the New York and Colombia Stock Exchanges (Bloomberg, n.d.). Bancolombia supports and promotes the Sistema B Movement in Latin America. In 2020, Bancolombia was classified in the Dow Jones sustainability report as the most sustainable bank in the world (Andonova and García, 2019).

Grupo Bancolombia Sustainability Model included advice about purchasing policies, human rights, climate change, financing, investment, relationships with stakeholders, and a series of social and environmental objectives. Thus, covering the governance, social and ecological dimensions of its operations. Bancolombia financial group declares that their business orientation is not based solely on obtaining profits but also on the generation of value for their stakeholders in the communities in which they are present. Hence, the bank emphasizes ' 'ESG's social aspects. The organization has declared its commitment to improving people's lives through building a prosperous economy, a healthy environment, and social wellbeing.

Through the Bancolombia Foundation, the organization has developed sustainability and inclusion initiatives in territories affected by the long-lasting armed conflict in Colombia. Its objectives include creating programs for unbanked communities in remote parts of the country and closing multiple development gaps between rural and urban areas, the agricultural sector, and youth. More specifically, Bancolombia is committed to contributing to the development of the territories where they operate, linking actors and sectors with a range of products and services so that their clients and partners are increasingly sustainable and positively impact the communities in which they are active.

In 2012, Bancolombia was invited to join the Dow Jones Sustainability Index. In 2020, for the second time, they obtained 89 points out of 100, ranking first worldwide, both in emerging markets and in MILA Pacific Alliance index (a float-adjusted market capitalization-weighted index that measures the performance of Chilean, Colombian, Mexican, and Peruvian companies selected with ESG criteria using a best-in-class approach). This consolidated its leadership position and ratified its commitment to sustainability.

In addition to innovating socially, it is a bank that has made a vital bet to report its ESG indicators with transparency.

8.8. Conclusions

Latin American companies have embraced the ESG framework. Multinational companies from the region have become more relevant in the global ESG landscape, and mutilations such as Natura and Bancolombia top some of the best-recognized indices, including the DJSI. Since creating the S&P ESG index for the five most major Latin American countries, ESG stocks have outperformed the general stock market, and in some cases by a significant amount. This is a critical signal that reveals the desire to adapt to the standards of

[91] The Sustainability Yearbook 2021 | S&P Global. (2021). S&P Global. https://www.spglobal.com/esg/csa/yearbook/
[92] Latam Airlines Group. (2021). Latam Integrated Report 2020. http://www.latamairlinesgroup.net/sustainability
[93] The Sustainability Yearbook 2021 | S&P Global. (2021). S&P Global. https://www.spglobal.com/esg/csa/yearbook/

responsible business behavior in the 21st century. Of course, cross-country and cross-industry variations are significant. Still, the region has embraced the ESG philosophy as a general trend, and some of the most competitive companies have successfully integrated ESG inspired initiatives into their strategies. This is a global trend, and the returns on the S&P ESG indices are on the rise for all other emerging regions such as the Middle East, Africa, and Asia-Pacific.

Across the world, investors and stakeholders want social prosperity, a healthier environment, and better governance. They are interested in considering these impacts when deciding to invest, work, partner, and buy. The ESG approach is vital, but it lacks consistency and comparability — and in the case of the most ESG-conscious multinationals in Latin America, it is evident that advancements in social, environmental, and governance dimensions are markedly asymmetric. In terms of ESG initiatives, the emphasis frequently falls on those more closely linked to business strategy and economic value generation. As reporting standards, regulations, and measurements mature, ESG must evolve too and bring a more holistic approach to business activity's impact. Some of the leading multilatinas are very well positioned to set the global industry trends in this process of continuous improvements of the standards because they have already started their transformation along the ESG dimensions and also because the economic, social, and environmental circumstances in Latin America put these companies under extreme pressure. The ' '1980's was a lost decade for Latin America, and there is a legitimate concern that it could happen again in the post-COVID-19 context; therefore, the impetus to innovate and create value in ways that matter to multiple and diverse stakeholders appears to be the way ahead, as these efforts become increasingly more recognized by investors. Therefore, using ESG to leapfrog more traditional business corporations might be conceived as a full-fledged opportunity for Latin American businesses that, driven by the vast complexity in their contexts, have started to experiment in these domains. Nailing down the business models of many of these efforts remains the biggest challenge. However, the changing expectations and sensitivities of investors and other stakeholders can rapidly shift the region's fortune for the better.

If Latin American companies continue to develop ESG initiatives and improve their performance, they will attract more investment from international investors, which will develop ESG investment criteria. This will allow these companies to reduce the gap between developed and emerging markets in terms of ESG, operations, and investment. As always, it will depend on the implementation and the support and promotion of such initiatives. Only time will tell the true impact ESG will eventually have worldwide and in emerging markets. The actual impact that will remain, regardless of who benefits the most, is the ever-increasing importance of ESG and how it has become the new standard for CSR, sustainability, and governance across industries and the globe.

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Chapter 9
Sustainable Finance and Developing Economies: trends, policies and lessons learned

Joseph Clements, Economic Affairs Officer
Yongfu Ouyang, Chief of the Investment Facilitation Section
James Zhan, Director of the Investment and Enterprise Division, and Editor-in-Chief of journal Transnational Corporations
United Nations Conference on Trade and Development (UNCTAD)[94], Geneva, Switzerland

Executive Summary

Building upon the work undertaken by the United Nations Conference on Trade and Development, this chapter maps the sustainable finance market - its products, policies and regulations. It assesses its impact on sustainable development as well as its contribution the SDGs, especially in developing economies, .and offers policy recommendations for further leveraging capital markets for sustainable development.

9.1. Introduction

The world of sustainable finance has come a long way in the last ten years. One only needs to look at the surging numbers of funds and assets under management or the policies and regulations dedicated to the sustainable finance market (both examined in this article). First, however, it is important to acknowledge the change of mindset.

In the past decade, the concept of sustainable finance itself has developed from a niche investment strategy to an imperative. It is now recognized not only that investable sectors, like energy, need to transition to sustainable alternatives to meet net zero commitments and help slow a rapidly heating planet (IPCC, 2021), but the entire financial market also needs to transition to a more sustainable footing (UNCTAD, 2021a). The economic and social consequences of the Covid pandemic and new modelling of the climate crisis have sharpened the attention of investors, companies and regulators who now view sustainability both as a material risk and a moral choice. They may well ask themselves, what is the point of growth in an environmentally volatile, economically unstable and socially divided world?

Halfway through the last decade, countries gave a boost to changing mindsets with the adoption of the Sustainable Development Goals (SDGs). The goals are meant to galvanize action on the widest possible spectrum of sustainable development issues – environmental, social, political – by bringing together the broadest coalition of stakeholders to achieve them. Although the goals are global in coverage, the needs remain greatest in developing economies: in 2014, UNCTAD first estimated the investment shortfall in developing countries at USD2.5 trillion per year to 2030 (UNCTAD, 2014). Today, the continued gaps in SDG financing puts their achievement by 2030 in doubt (UNCTAD, 2021b; Zhan and Paulino, 2021).

Achieving the SDGs, especially in developing economies, requires the mobilization of finance from domestic and foreign sources, public and private, as well as traditional and more innovative sources. Towards this end, international capital markets can play a crucial role in growing the level of finance dedicated to SDG themes and sectors and increasing its impact. Various mechanisms have been instrumental in this mobilization, including the growth of sustainability performance standards and benchmarks (of which the SDGs themselves is becoming one), the greater prevalence of sustainability disclosure and reporting, and the role of policies and regulations at a national and regional level to address concerns about transparency, accountability and credibility of sustainability performance and ratings.

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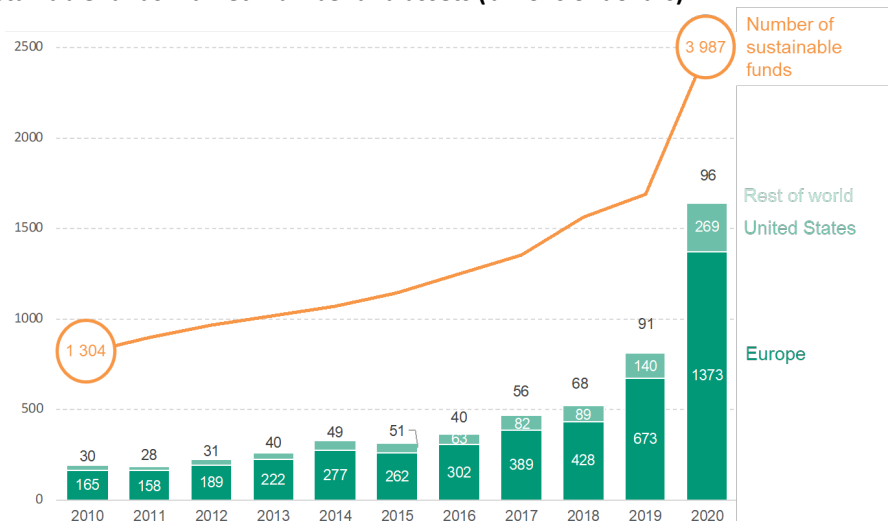
[94] The paper reflects the perspective of the authors, not the views of the United Nations or the United Nations Conference on Trade and Development (UNCTAD). All the authors work at UNCTAD: James X. Zhan is Director of the Investment and Enterprise Division, and Editor-in-Chief of journal Transnational Corporations; Yongfu Ouyang is Chief of the Investment Facilitation Section; and Joseph Clements is Economic Affairs Officer dealing with sustainable finance and related policy issues.
Correspondence: James X. Zhan, Palais des Nations, E10058, 1211 Geneva, Switzerland, e-mail: jamesunctad@gmail.com.

Accurate mapping of the sustainable finance market, standardization and harmonization of benchmarks as well as transparent disclosure are therefore essential for the success of the sustainable finance market in terms of its credibility and, by extension, its future growth. Addressing the factors that have limited the exposure of the sustainable finance market to developing and emerging economies will also be critical for the expansion of the market and its impact, including the enhancement of the productive capacity and the achievement of the SDGs (Zhan, 2021). This paper builds on work undertaken by UNCTAD to accurately map the sustainable finance market, in terms of products, policies and regulations, and to assess the real impact of the sustainable finance market on sustainable development and its contribution the SDGs, especially in developing and emerging market economies. Finally, the paper offers policy recommendations for further leveraging capital markets for sustainable development.

9.2. Current market trends

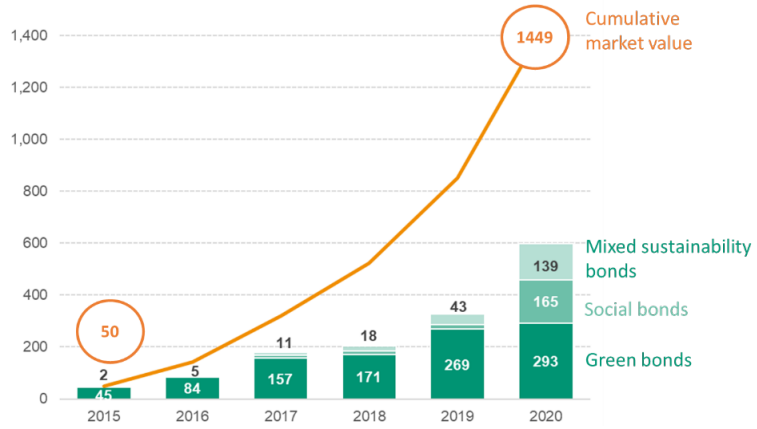
Globally, UNCTAD estimates that sustainability-dedicated investments – investment products targeting sustainable development-related themes or sectors – amounted to USD3.2 trillion in 2020, up over 80 per cent from 2019. These capital market investments consist mainly of sustainable funds (over USD 1.7 trillion), green bonds (over USD 1 trillion), social bonds (USD212 billion) and mixed-sustainability bonds (USD 218 billion) (Figure 9.1 and Figure 9.2) (UNCTAD, 2021a). Most of this investment is domiciled in developed countries and targeted at assets in developed markets with only a very small share exposed to developing and emerging economies. With respect to the sustainability credentials of this investment, especially funds, questions remain about greenwashing and its impact on sustainable development. Nevertheless, the sustainable investment market's rapid expansion indicates the potential for capital markets to help fill the financing gap to attain the SDGs.

Figure 9.1. The global sustainable funds market: number and assets (billions of dollars)



Source: UNCTAD.

Figure 9.2. The global sustainable bond market: new issuance and accumulated assets (billions of dollars)



Source: UNCTAD.

9.2.1. Sustainability-themed funds

Over the past five years, the fund industry has been rapidly embracing sustainability through the multiplication of funds and indexes dedicated to sustainability themes. In 2020 alone, sustainable funds surged, including mutual funds and exchange-traded funds (ETFs)

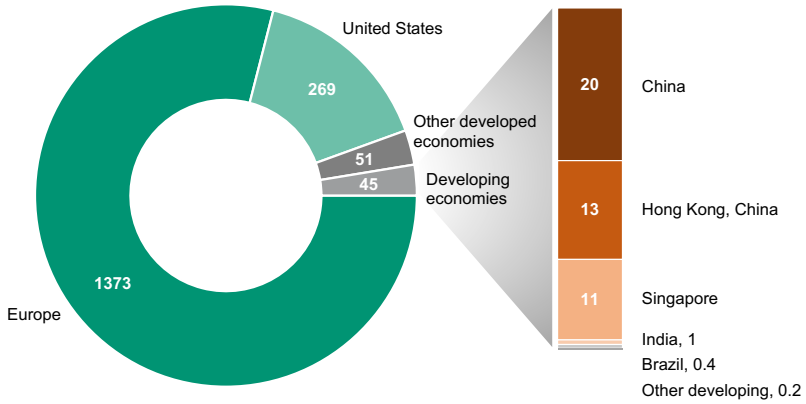
described in prospectuses or other filings as selecting assets that integrate sustainability, impact or environment, social and governance (ESG) factors. These funds now represent 3.3 per cent of the assets of all open-ended funds worldwide.[95]

The vast majority of sustainability-themed funds are domiciled in Europe (73 per cent), followed by North America (18 per cent). Emerging markets so far remain largely absent from the sustainable fund market. In total, they host about 8 per cent of the world's sustainable funds by number and less than 3 per cent by assets (Figure 9.3). This reflects the maturity of the market and the relatively advanced regulatory environment for sustainable investment in Europe (UNCTAD, 2020c).

The rapid rise of sustainability-themed funds is also a reflection of the accelerating adoption of sustainability criteria within the investment community, in particular in developed countries. Institutional investors, such as pension and insurance funds, are increasingly prioritizing sustainability in their investment decisions, particularly in view of their long-term obligations to beneficiaries and the material risks posed by climate change and other sustainability-related crises, such as the COVID-19 pandemic. They are also increasingly convinced that a pivot to sustainable investment does not necessarily entail an opportunity cost (Morgan Stanley, 2019). In the last two years, major fund providers and asset owners, such as BlackRock (United States) and Norway's Government Pension Fund, have stepped up their efforts to move towards sustainable investment, for example by announcing the divestment of carbon-related assets from their portfolios.[96] And in emerging markets, some leading economies have also become important players in a wide range of SDG sectors, such as pharmaceuticals, renewable energy and green bonds.

Despite the benefits of sustainable funds being mainly limited to developed economies, some emerging markets have seen robust growth in their sustainable fund industry in recent years. In China, the largest emerging market host economy, there were over 100 sustainable funds, with assets under management of nearly USD20 billion as of 2020. Most of them were created in the last five years. In terms of the number of funds, China has become the 8th largest sustainable fund market in the world in 2020 (UNCTAD, 2021c). Meanwhile, sustainable funds have also experienced rapid growth in other emerging markets such as Hong Kong (China), Singapore, India and Brazil, albeit from a relatively low level (Figure 9.3).

Figure 9.3. Domicile of sustainable funds (billions of dollars)



Source: UNCTAD based on Morningstar and national fund associations or stock exchanges.

This strong growth momentum is expected to continue, mainly due to two factors. First, most developing and emerging economies have integrated economic, social and environmental sustainability factors into their development plans (see Section C), which will offer huge opportunities for sustainable investment in a wide range of SDG sectors, such as pharmaceuticals, renewable energy, sustainable infrastructure, and affordable housing. Second, emerging markets are making significant progress in putting in place the necessary policy frameworks, standards, reporting measures and incentives to support the development of sustainable finance (see section C). Third, stock markets in developing and emerging economies account for roughly 23 per cent of global market capitalization, which suggest that these economies have the potential to significantly grow their fund markets, including their sustainable investment segments.

However, the sustainable fund market is still in its early growth stage. As long as these funds remain concentrated in developed country markets, the real impact of the global sustainable funds will be geographically limited. Meanwhile, the "self-labelled" nature of most sustainable funds and a lack of consist standards also raise concerns about "ESG or SDG washing". The global sustainable fund market therefore needs to address two fundamental issues to fully unleash its potential to finance sustainable development: (i) how to make sustainable funds contribute more to sustainable development in emerging markets, and (ii) how to improve their sustainability credentials and address ESG- or SDG-washing concerns.

[95] According to the quarterly statistics of the European Fund and Asset Management Association, the assets of regulated, open-ended funds worldwide (excluding funds of funds) were about USD54 trillion at the end of the second quarter of 2020 (http://efama.org).

[96] "World's biggest fund manager vows to divest from thermal coal", The Guardian, 14 January 2020; "World's biggest sovereign wealth fund to ditch fossil fuels", The Guardian, 12 June 2019.

9.2.2. Sustainable bond markets

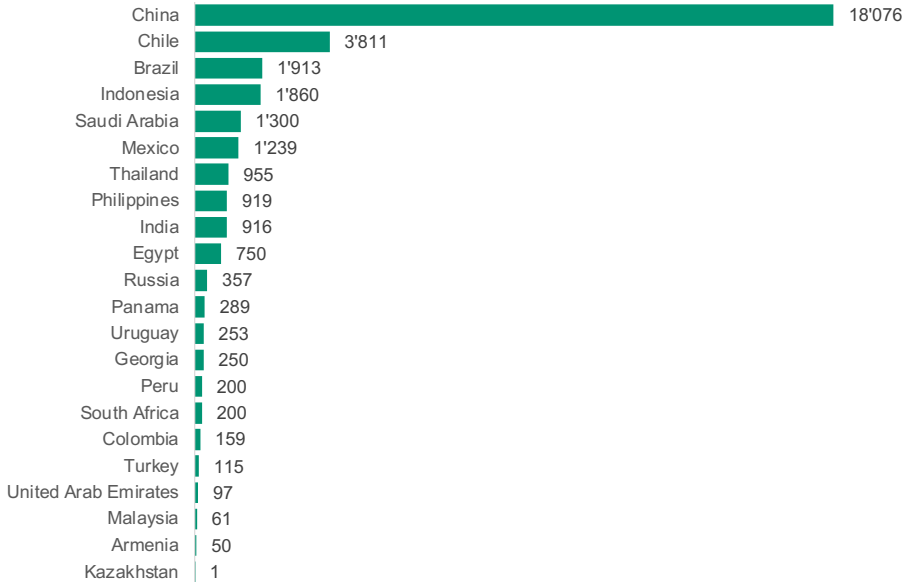
The global sustainable bond market exhibits a similar growth trajectory to the sustainable fund market: a surge was witnessed in recent years, but much of the growth has been concentrated in developed markets.

The sustainable bond market — including green bonds, social bonds and mixed-sustainability bonds (a mix of green and social) — has seen enormous growth since the first green bond was launched just over a decade ago.[97] Based on 2020's explosive growth rate as a direct result of responding to social and public health consequences of the COVID-19 pandemic, social and mixed-sustainability bonds are rapidly catching up with the green bond segment and becoming increasingly popular tools for financing SDG-related activities, including in developing and emerging economies. Cumulatively the total amount of outstanding sustainable bonds since 2015 is estimated to be USD 1.5 trillion, based on average maturity periods for these bonds.[98] The issuance of green bonds, social bonds and mixed-sustainability bonds reached USD 300 billion, USD 160 billion and USD 140 billion respectively in 2020 (UNCTAD, 2021a).

Since 2012, 43 emerging market economies have issued green bonds, registering cumulative issuance of USD226 billion (Amundi-IFC, 2021). Although less than the share of bond issuance in developed markets, green bonds have become an important vehicle for project finance in emerging markets, channeling much needed investment into public health, infrastructure and public utilities.

In 2020, China was the largest green bond issuer in emerging markets, with new issuance of USD 18 billion, despite a fall in issuance as a result of lockdowns and project delays due to COVID-19. Emerging market green bond issuance was resilient, increasing by 21 per cent to USD 22 billion. Chile, Brazil, and Indonesia were among the largest issuers in 2020, while a number of new players, such as Egypt, Kazakhstan and Saudi Arabia, entered the market. Among emerging markets, India has the second largest volume of outstanding green bonds (USD 10.8 billion) and has consistently been the second largest issuer after China. In 2020, however, India's green bond issuance dropped significantly to USD916 million from USD3.2 billion in 2019, affected by more attractive terms for green loans in the country, which more than doubled from USD 1.5 billion in 2019 to USD3.6 billion in 2020 (Amundi-IFC, 2021) (Figure 9.4).

Figure 9.4. Emerging Market Green Bond Issuance, 2020 (millions of dollars)



Source: Amundi-IFC, 2021.

In terms of target sectors, infrastructure and public utilities that are critical for the long-term development of emerging economies dominate: renewable energy, transport, water, building and waste account for over 90% of accumulated deployed proceeds of green bonds since 2012 (Amundi-IFC, 2021).

Partly in response to the COVID-19 pandemic, 2020 also witnessed a surge in the issuance of social and mixed-sustainability bonds (which mix social and environmental objectives and are defined by the ICMA Sustainability Bond Guidelines) in emerging markets. Supranational entities lead the development of Covid response bonds, primarily social bonds specifically developed to address the impacts of the pandemic. Multilateral development banks were able to react quickly as many already had frameworks in place to issue social and mixed-sustainability bonds. COVID-19 response bonds include the largest dollar-denominated social bond ever launched in international capital markets: the issuance of the USD3 billion "Fight COVID-19" social bond of the African Development Bank (AfDB) to help mitigate the economic and social impact of the pandemic on Africa's economies and livelihoods. The 'Fight COVID-19' bond was allocated to central banks and official institutions (53 per cent), bank treasuries (27 per cent) and asset managers (20 per cent).

[97] For the definition of green bonds, social bonds and mixed-sustainability bonds, seeUNCTAD, 2021a.

[98] Estimates for the average maturity of green bonds vary but include 8.75 years (Kapraun and Scheins, 2019) between 7 and 8 years (Ehlers and Packer, 2017) and five to ten years (CBI, 2021).

In Africa, 12 countries currently borrow funds from the AfDB that are financed by the Fight Covid-19 Social Bond. These countries' projects focus on different sectors and interventions, ranging from supporting the transition of production lines to health care materials, to providing bridge-finance for SMEs struggling with the effects of national lockdowns, to providing social support for vulnerable people.

Given the cross-cutting and interrelated nature of social and environmental issues, mixed-sustainability bonds are especially useful for raising funds for sustainable development projects. Development banks have taken the Sustainability Bond Guidelines as a guide for their sustainable development bonds frameworks. The World Bank Group has such a framework, and the proceeds of its bonds go to projects designed to achieve both positive social and environmental impacts and outcomes in line with the World Bank Group's twin goals of eliminating extreme poverty and promoting shared prosperity (World Bank, 2021).

In 2020, the World Bank Group reported that it has committed USD23.2 billion of proceeds from mixed-sustainability bonds to fund 100 new projects, of which 54 per cent were from lower-middle-income countries, 57 per cent had a gender focus and 31 per cent had climate co-benefits. When analysed by sector, the majority of proceeds went to projects that involved some infrastructure aspect, such as transportation, water and sanitation and energy. The region that benefitted the most was Latin America and the Caribbean, followed by East Asia and the Pacific and then Europe and Central Asia (World Bank, 2021).

Despite rapid growth of sustainable bonds in both developed and developing economies, the global sustainable bond market is still very much in its early growth stage, representing only about 1.26 per cent of the total global bond market of approximately USD 119 trillion.[99] This suggests enormous growth potential for this segment going forward. By 2025, the sustainable bond market could reach 5 per cent of the total global market, which would bring over USD6 trillion of new investments in key SDG sectors (UNCTAD 2021a). In order to benefit from this trend, developing and emerging economies need to significantly grow their domestic sustainable bond market, especially by putting the necessary policy framework and standards in place.

9.3. Latest developments in sustainable finance policies and regulations in emerging markets

While there is clearly an increasing demand for sustainability-themed investment products, much of the recent momentum has bypassed emerging markets. However, leading emerging market economies, such as Brazil, China, India, South Africa and ASEAN, have become important players in sustainable finance, and more emerging economies are entering the sustainability-dedicated bond or fund markets.

In this context, many emerging market economies have made notable progress in putting a sustainable finance framework in place, which may include national strategies, taxonomies and standards, sustainability disclosure and other measures, including fiscal incentives, to support sustainable finance. Such national frameworks may involve industry associations, such as the banking sector, capital market institutions such as stock exchanges, and government regulatory bodies. There is also a high level of participation in global frameworks and initiatives, such as the IFC-initiated Sustainable Banking Network (SBN), the International Platform on Sustainable Finance initiated by the European Union, the PRI, Equator Principles and the Global Compact.

9.3.1. National strategies or action plans

A well-developed strategy and related action plans are imperative in setting national goals and galvanizing efforts to support the growth of sustainable finance. Until recently, sustainable finance was primarily private sector driven, as exemplified by the proliferation of self-labelled products and industry voluntary standards at national or international levels. Governments have stepped up their efforts to integrate sustainable investment in their development strategies or take steps to launch strategies and action plans to support the development of sustainable finance. A notable example is the launching of the European Green Deal, for which the European Commission adopted a set of proposals to align the European Union's climate, energy, transport and taxation policies with its climate goals.

In emerging markets, China is taking a lead in this area. After announcing its intention to achieve carbon peak by 2030 and carbon neutrality by 2060, China adopted a national action plan in October 2021. The plan sets out specific targets for the reduction in fossil fuel energy consumption and CO2 emissions per unit of GDP. It also sets out goals for new installed capacity for wind, solar and hydro power, and proposes supportive measures regarding carbon emission trading mechanisms and other fiscal and financial incentives.[100]

In response to the 2030 development agenda and the recent economic and social shocks resulting from the pandemic, many governments in developing and emerging economies have recognized the need to focus on economic resilience and have started including climate mitigation and adaptation measures and green investment targets in their national recovery plans (Zhan, 2021). For example, South Africa's National Economic Reconstruction and Recovery Plan includes sustainability, resilience, and inclusion as key priorities; and, Indonesia's 2020-2024 National Medium-Term Development Plan supports climate change mitigation and adaptation measures, environmental sustainability, and green recovery (Amundi-IFC, 2021).

[99] Q1 2021 estimate by the Securities Industry and Financial Markets Association (SIFMA).
[100] e-Gov.org.cn (2021). http://www.e-gov.org.cn/article-178900.html

These national strategies are helpful in creating demand for sustainable investment. However, they need to be complemented by targeted policy measures and standards that can help build an enabling ecosystem for the sustainable investment market to function. Key components of such a strategy should include market mechanisms to internalize the negative externalities of economic activities and adopt necessary price discovery tools for carbon emissions or pollution, for example, through carbon emissions trading or a tax on carbon. Although, there is discussion about universal carbon emissions pricing (for example in the European Union), developing and emerging economies will need to tailor their strategies to their own economic and social circumstances, and carefully plan the pace and sequencing of a transition to a low-carbon economy.

9.3.2. Taxonomies and labelling

Another building block of an enabling ecosystem for sustainable finance is the development of relevant taxonomies - a system to clarify what economic activities are considered as environmentally or socially sustainable for investment purposes. Taxonomies are an important policy tool to help bring more clarity, credibility and transparency to the sustainable investment market. For investors, taxonomies can help them identify sustainable financial products; for issuers, they clarify the requirements and standards they must meet in order for their financial products to be considered as sustainable and reduce unfair competition from misleading products. In addition, taxonomies are important for the development of mandatory labeling for sustainable investment products, which will help the market to solve the issue of self-claiming products that lack of consistent standards.

Until now, in addition to the EU, a number of developing and emerging economies, such as China and India, already have some form of sustainable investment taxonomy in place (IPSF, 2020). In China, the first Green Bond Endorsed Projects Catalogue was issued in 2015 and updated by the People's Bank of China (PBoC) in June 2020. The 2020 draft Catalogue constitutes a significant step forward for China because it excludes solid fossil fuels from eligibility. Already in 2019, the National Development and Reform Commission (NDRC) and other government entities published the Green Industry Guiding Catalogue that aimed to become the basis for a consistent set of standards for green loans, bonds and other green assets. Both catalogues have been widely used as important reference points for the issuance of green bonds, green funds and green loans in China. However, unlike the EU green taxonomy, both catalogues don't set technical thresholds or criteria for specific green activities.

India's green finance taxonomy covers eight eligible sectors at a broad level but does not require them to fulfill specified performance targets. The taxonomy is linked to the disclosure of the proceeds of green bonds issued according to guidelines set by the securities regulator. Issuers have to provide disclosures at the time of issuance and on a continuous basis to demonstrate use of the guidelines in funding eligible projects. They also have to disclose qualitative performance indicators and, where feasible, quantitative performance measures of the environmental impact of the project(s) and/or asset(s) (IPSF, 2020). The Securities and Exchange Board of India (SEBI) has also implemented sustainability reporting and disclosure regulations, which include mandatory disclosure for the top 100 listed entities, by market capitalization, on the Bombay Stock Exchange (S. Ghosh, S. Nath and A. Ranjan, 2021).

Other developing and emerging economies that have developed some form of green taxonomies include Bangladesh, Colombia, Kenya, Mongolia, and Thailand. Meanwhile, a number of developing and emerging economies, including Russia, South African and some ASEAN countries (such as Malaysia and Singapore), are in the process of developing taxonomies on green finance (Amundi-IFC, 2021; Green Finance Platform, 2021). However, whilst the development of taxonomies is a positive step, a concern remains about their proliferation leading to a fragmentation of standards across countries, and hence a certain level of alignment and coordination is needed.

9.3.3. Sustainability disclosure

As developing and emerging economies increasingly tap into the potential of sustainability-dedicated financial instruments, the challenges related to the quality and availability of data become more urgent. Many developing and emerging economies have started to take actions to keep pace with market developments by transitioning from voluntary sustainability disclosure to mandatory disclosure, with the aim to provide more reliable information to identify, measure and track sustainable investment vehicles and enhance investor confidence.

According to the UN Sustainable Stock Exchange (SSE) initiative, over the last decade, the number of stock markets with mandatory ESG disclosure rules have increased from 2 to 25, listing more than 16,000 companies, valued at over USD 18 trillion. Among these 25 markets, 16 are developing and emerging economies (UNCTAD, 2021a).

As in developed markets, the spectrum of approaches to the reporting on ESG performance and data is focused on a few key reporting instruments. An overwhelming number of guidance documents reference the instruments of the Global Reporting Initiative (GRI), followed by those of the Sustainability Accounting Standards Board (SASB) and the International Integrated Reporting Council (IIRC). In the area of climate-specific reporting, instruments such as the recommendations of the Financial Stability Board's Taskforce on Climate-related Financial Disclosure (TCFD) and the Carbon Disclosure Standards Board (CDSB) are the most widely referenced (UNCTAD, 2021a). However, in the area of sustainable finance, the next step is to move from reporting by companies on sustainability performance to an increasing focus on reporting by funds and asset managers (UNCTAD, 2021a).

9.3.4. Measures to support sustainable finance

In addition to industry policies that support sustainability-aligned sectors or economic activities (such as the development and adoption of clean tech), developing and emerging economies are increasingly using fiscal and other policy instruments to incentivize the development of sustainable finance.

The most popular policy tool is the provision of incentives for the issuance of sustainable bonds. For example, in Brazil, tax incentives, such as the Low-Carbon Agriculture (ABC) Plan with low-interest credit, are provided for the issuance of green bonds (FiBraS, 2020). Singapore and Malaysia have also introduced incentive mechanisms for green bond issuances. The Monetary Authority of Singapore (MAS) launched the Sustainable Bond Grant scheme in June 2017 to catalyze the green, social and sustainable bond market in the country, which now accounts for nearly 50% of the whole ASEAN green bond and loan market. In 2019, MAS announced USD2 billion for the Green Investment Program to be invested with asset managers who were committed to driving regional green efforts (Aloysius Fua, 2021). In Malaysia, a tax deduction of issuance costs for issuers and tax exemptions for investors were in place until 2020 for socially responsible sukuk and green sukuk[101] (IPSF, 2020).

In addition to supply side measures to increase the pool of products available for investment, developing and emerging economies can also introduce demand side measures to help mobilize more investment in sustainability-dedicated products, such as green and social bonds. For example, governments could reduce barriers, amend fiduciary rules or offer incentives to institutional investors such as pension funds, banks and insurance companies to encourage investment in sustainable products.

9.4. Conclusion

Capital markets can have a decisive impact on the level and direction of sustainable finance and can contribute towards filling the investment gap for the SDGs, especially in developing economies. There has been a proliferation of sustainability-themed financial products in recent years, including sustainability-themed funds, bonds, and debt instruments. Nevertheless, these sustainability-dedicated products have not been able to effectively channel much needed investment into key SDG sectors at scale in developing and emerging economies. In this context, governments in these economies should step up efforts to leverage sustainable finance for development and investment in the SDGs. A number of them have made notable progress in putting in place the necessary frameworks, standards, policies and regulations. However, the regulatory and policy framework in most countries remain patchy, and in many cases the process is very recent.

To continue growing and ensure concrete impacts in developing and emerging economies over the long term, the sustainable investment market needs to address “a triple challenge”:

1. Magnitude: sustainable finance in emerging markets is still at a very early stage and remains negligible as a share of the global sustainable finance market.
2. Quality: a lack of standards and limited availability of high-quality data raise concerns about the credibility of ESG/SDG products and impact, which are more acute in emerging markets than in developed ones, and this is deterring investment in particular by international investors.
3. Market fragmentation risk: the limited size of the capital market in many developing and emerging economies means the development of sustainable finance in these countries is heavily reliant on regional or global markets. Additionally, the fragmentation in standards and policies across countries has been and will continue to be a constraint on the long-term growth of sustainable investment in these economies.

There is no “one size fits all” solution to these challenges. Each economy needs to develop a sustainable finance strategy and framework that suits its development level. However, the key building blocks for an enabling ecosystem for sustainable finance are the same for both developing and developed economies, which could include a national strategy, taxonomies and labeling rules, policies and regulations for disclosure and reporting, and incentives on the demand and supply sides to support product and market development.

Building on their successful experiences in growing the green bond market, developing and emerging economies, first and foremost, need to put in place a viable regulatory framework and an enabling ecosystem in order to jumpstart and grow their sustainable finance market. This includes rules and guidelines to establish industry standards and governance requirements that can bring transparency, predictability and credibility to the market. A solid regulatory framework and well-defined industry standards can provide investors with necessary protection and make them more confident about investing in sustainable investment products. At the same time, both supply and demand side measures need to be put in place to incentivize the transition to more sustainable investment. More broadly, sustainable finance needs to be integrated into national development strategies, which is key to growing sustainable investment from a market niche to market norm.

At the international level, coordination of industry standards and policies is imperative, and international organizations and regional groupings such as the United Nations, the G20, ASEAN, and the African Union could play a leading role.

[101] A sukuk is an Islamic financial certificate, similar to a bond in Western finance, that complies with Islamic religious law commonly known as Sharia.

Beyond sustainable finance, a major related challenge for policymakers in developing and emerging markets is how to tap into the vast potential of institutional investment and other sources of finance for enhancing the productive capacity of developing and emerging markets and facilitating their participation in the global value chains, thereby contributing to the SDGs on the ground (Zhan and Kresnadi, 2020). In this respect, there is a need for more consistently conceived and carefully crafted investment policies and promotion strategies for sustainable development.

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OPINION PIECES

Bringing the Four Principles of ESGD to Emerging Markets: IndexAmericas as a Pioneer Tool in Latin America and the Caribbean

Erica Chicola, Operations Senior Analyst, Office of Outreach and Partnership's Resource Mobilization Division
Tony Carranza, Operations Associate, Office of Outreach and Partnership's Resource Mobilization Division
Inter-American Development Bank, Washington, United States

Latin America and the Caribbean: Ripe for Private Sector-Led Recovery

Latin America and the Caribbean (LAC) is a paradox. On one hand, it is a region that struggles with persisting development challenges, including chronic low growth over the past decade, severe inequality, and a vulnerability to shocks that was clearly exemplified by the COVID-19 pandemic. Indeed, the region was badly bruised by the health, social and economic implications of the crisis, experiencing a historic GDP contraction of 7 percent – the sharpest in the world. At the same time, however, the region is a land of opportunity. It has unparalleled natural bounty that, given a transition to a net-zero economy, could generate 15 million new jobs by 2030. Its human capital and increasing regional integration offer significant investment and business opportunities for firms interested in nearshoring and in expanding into the LAC market. And its corporate sustainability landscape reveals an increasingly robust private sector that is dedicated to delivering the region quality goods and services, to creating jobs, and to operating sustainably. By some assessments, corporate sustainability in Latin America is leading this trend, surpassing North American companies in terms of their sustainability performance.

In a nutshell, what we see here is a region with a strong, dynamic, pioneering private sector, but where development challenges persist; a region in which the private sector could harness its operations to spark recovery, protect the environment, and improve quality of life. With this in mind, the IDB Group's approach to sustainable development looks to the private sector as an ally, as a key force for filling development gaps and leading the region out of this crisis and into a more prosperous decade. This approach puts the private sector at the heart of "Vision 2025: Reinvest in the Americas," our five-pillar strategy for driving recovery and economic growth in LAC by seizing opportunities in regional integration, the digital economy, support to SMEs, gender and diversity, and action on climate change. And it motivates us to work with the private sector in a two-pronged manner. On one side, the institution has worked with investors to explore innovative financing instruments that minimize risks and facilitate investment in the region. On the other, the IDB Group has worked with companies to look beyond profit and integrate an ESG and development focus into their operations, to design projects that align social and environmental wellbeing with their core business, and to channel their resources – their financing, knowledge, and innovation – to the region as a means of making it a better place to live, work, and do business.

Introducing IndexAmericas

As part of this two-pronged effort to inspire private sector SDG action, in 2017 the IDB Group created IndexAmericas as an initiative that bridges the worlds of investing and corporate sustainability. A corporate sustainability index that recognizes the performance of publicly traded companies operating in LAC, IndexAmericas takes its analysis beyond the traditional framework of environmental, social, and corporate governance (ESG) indicators and assesses a fourth component as well: the contribution of companies to the region's sustainable development. The initial goal of IndexAmericas was to reward and celebrate corporate sustainability champions in the region, to improve practices and standards related to development and ESG, to foster sustainability behaviors and innovation that can transform companies and communities, and to raise the bar for all companies operating in Latin America and the Caribbean so that sustainability would be the norm, not the aspiration.

IndexAmericas has since achieved many firsts. It is the first sustainability index created by a multilateral development bank; the first in LAC to add a fourth component on sustainable development to ESG analyses; the first corporate sustainability index in LAC to achieve full alignment with the SDGs; and the first IDB knowledge product, developed using a unique and proprietary IDB Group methodology, to be transformed into a revenue-generating financial product.

A look at the four dimensions of *IndexAmericas*			
Environment	**Society**	**Corporate Governance**	**Development**
IndexAmericas holds that natural capital and environmental wellbeing drive competitiveness, profit, and improved quality of life. As such, IndexAmericas evaluates the degree to which companies integrate environmental considerations into their activities.	*IndexAmericas* applies social indicators to evaluate corporate activities that reduce poverty, improve social wellbeing, and advance equitable employment opportunities with a special focus on vulnerable groups like women, indigenous communities, and other minority groups.	Strong corporate governance helps companies boost efficiency, attract capital, enhance transparency, and foster investor confidence and positive stakeholder engagement. That's why *IndexAmericas* assesses the corporate governance of eligible companies along such indicators as corporate integrity, transparency, and leadership and employee diversity.	*IndexAmericas* considers development a critical component of sustainability and therefore uses unique IDB-IDB Invest indicators to measure corporate activities related to small and vulnerable countries, inclusive supply chains, and other development priorities highlighted in the IDB Group's institutional strategy.

Looking Behind the Curtain: The Making of IndexAmericas

IndexAmericas, which is itself a celebration of how development can be accelerated if all stakeholders come together, is a product of partnership. It was created by the IDB and its private sector arm, IDB Invest, in partnership with S-Network Global Indexes, a firm with significant expertise designing and structuring indexes. It is powered by data on ESG indicators provided by Refinitiv and receives academic support from the Earth Institute at Columbia University.

As a means of making index results more easily comparable with other assessments of corporate sustainability, it was designed with a focus on traditional ESG indicators. However, IndexAmericas takes its assessment a step further to look at fourth dimension: the contributions of firms to the region's development. As such, the index is guided by the four dimensions of ESGD, in complete alignment with the goals outlined in the United Nations 2030 Agenda.

Building on these indicators, IndexAmericas structures its indexes using the following methodology:

1. IndexAmericas analyzes the universe of companies eligible for inclusion in its indexes classified under 10 business sectors, those 7,000 + publicly traded companies featured in Refinitiv's ESG database.
2. This universe of companies is then filtered according to the IDB Group's exclusion criteria, which eliminates those companies that engage in activities featured on the IDB Group's list of excluded activities and/or firms that have been sanctioned by the IDB's Sanctions Committee.
3. The remaining companies are later assessed based on the size of their footprint in LAC.
4. Using data provided by Refinitiv and proprietary IDB Group indicators, this assessed universe is then evaluated along 188+ indicators. While environment, society, and corporate governance criteria accounts for eighty percent of a company's assessment score, IndexAmericas applies IDB-IDB Invest development criteria to finalize results.

To date, the initiative has developed multiple editions of a Top 100 Index, which showcases global companies operating in LAC that demonstrate leadership across the four dimensions of ESGD –which includes an average of 20% of companies from the LAC region. It has also published several iterations of a Multilatinas Index, which assesses the performance of homegrown companies from LAC along these same lines, an index recognizing corporate leaders on gender equity, as well as an index showcasing the most sustainable firms listed in the United States with a relevant presence in the LAC.

Moving Beyond Index Development: The Evolution of IndexAmericas

While corporate sustainability is alive, well, and growing in Latin America and the Caribbean, the IDB Group quickly realized that IndexAmericas could be used to fill critical gaps in this space.

One such gap is related to the knowledge and technical capacity of local stakeholders to promote corporate sustainability on the ground. To this end, the IDB and IDB Invest designed and delivered the Sustainable Capital Markets Training in Seoul, Korea as an extension of IndexAmericas. Organized in collaboration with the Korea Exchange (KRX), this high-level program sought to expand the skillsets of sustainability leaders and participants in LAC's capital markets, who attended a week-long series of lectures and shared experiences on ESG investment, evaluation, indices development, sustainability, and corporate transparency. In addition, given its

recognition as a landmark corporate sustainability initiative, IndexAmericas was featured as a case study in a new leading book on the topic, The Financial Ecosystem: The Role of Finance in Achieving Sustainability, published by Palgrave Studies in Impact Finance.

There is also a growing desire in the region to integrate sustainability into capital markets. As such, the IDB Group has joined forces with stock exchanges across the region to use the IndexAmericas methodology as the basis for national-level corporate sustainability indexes. For example, in 2018, we partnered with Bolsas y Mercados Argentinos (BYMA), the Argentine stock exchange, to launch that country's first corporate sustainability index and the first in the region to be completely aligned with the Sustainable Development Goals. The IndexAmericas team provided BYMA with technical assistance to structure its and launch this national-level index, building off the proprietary methodology piloted by its own indexes to take this great step forward in promoting corporate sustainability within Argentina's capital. Since then, it has had conversations with other key partners in the region to this end, providing assistance, expertise, and technical knowhow to regional stakeholders to empower them as agents of change working toward a more sustainable region.

Recognizing a need for greater recognition of corporate sustainability champions, the IndexAmericas' methodology again served as the basis for the LatinTrade IndexAmericas Sustainability Awards, presented by the media outlet LatinTrade to corporate sustainability pioneers. Now in their fourth year, the awards provide a high-level platform for celebrating leading firms and continually raising the bar for others, thereby helping to create a corporate culture that assigns great importance to the ESGD performance of companies in the region.

Fusing Finance and Sustainability

Beyond its significance as a knowledge product, IndexAmericas has leveraged its deep knowledge of development and the region's private sector to pioneer innovative finance mechanisms linked to sustainability principles. In 2021, the initiative inspired Scotiabank Mexico to launch a USD35 million notional MXN-denominated structured note linked to IndexAmericas. The transaction is the result of a collaborative initiative by BNP Paribas and Scotiabank to bring the index to the Mexican market. BNP Paribas Sales and Structuring built a tailor-made version of the original IndexAmericas to meet Scotiabank's specific needs for the Mexican market and bring efficient diversification to their clientele through this unique investment solution.

ESG Reporting: Key Challenges and the Way Forward

Dr. Tatiana Krylova, PhD, accounting and reporting
National Council on Financial Reporting Standards of Russian Federation and Former Head of Enterprise Branch at UNCTAD

On November 3, 2021, during the 26th UN Climate Change Conference of the Parties (COP26), the International Financial Reporting Standards (IFRS) Foundation Trustees announced the creation of a new body – the International Sustainability Standards Board (ISSB) — to develop a comprehensive global baseline of sustainability reporting standards for companies. Such a fundamental development can be seen as no less than a 4th Accounting Revolution, following the invention of a dual entry in the 12th Century, the establishment of the mandatory public audit requirements in the US after the stock market crash in 1929, and the acceptance of the IFRS by the International Organization of Securities Commissions (IOSCO) and the European Commission for cross border listings in 2000. This announcement was a culmination of long-standing debates on the issue of sustainability, as ESG reporting gradually intensified during the past decade — in particular after the adoption of the 2030 Agenda for Sustainable Development by the United Nations Member States in 2015. It also signifies a recognition of the growing importance of ESG reporting practices.

Over the past few years, ESG reporting has clearly become mainstream. Investment decision makers have become increasingly focused on the potential financial risks posed by climate change and other environmental, social, and governance considerations. However, reliable, relevant, and comparable ESG data at a company level is still lacking. One of the long-lasting complaints from companies and investors is the existing 'alphabet soup' of ESG standards and reporting frameworks that create confusion and prevent informed decision-making. In this regard, the establishment of the ISSB is a critical step towards the convergence of reporting frameworks.

The transition of the ESG/sustainability reporting standard setting under the auspices of the IFRS Foundation can significantly contribute to advancing the ESG agenda. Firstly, the IFRS Foundation has a long experience and solid expertise in financial reporting, which is critical to ensure coherence of the ESG/sustainability reporting with financial reporting principles. Secondly, such an arrangement will facilitate the integration of ESG issues into companies' reports. And thirdly, having one organization dealing with corporate reporting as a whole, including its financial and ESG/sustainability components, creates an important institutional basis to ensure that both aspects of corporate reporting are dealt with on an equal footing. In addition, ISSB will have a multi-location structure and respect geographical balance in its composition. This should help ensure that standards are developed while taking into account diverse regional needs, including those of developing and emerging countries.

To successfully achieve the objectives of such an unprecedented reform in the international accounting standard setting, however, several issues need to be addressed. One relates to the multistakeholder and cross cutting nature of the ESG reporting — which is well reflected in the history of its evolution. Many different players from both the private and public sectors were involved in this area for decades, representing, among others, companies, investors, professional bodies, and regulators. While accounting bodies were significantly involved in the debates, the area was dominated by non-accounting players, some of which were approaching ESG reporting as a public relations issue rather than an accounting topic. Another important challenge of ESG reporting relates to the fact that to a significant extent, it deals with the use of public goods (such as natural resources) by private entities — which clearly provides an additional perspective to the issue of materiality. Finally, ESG reporting is an integral part of the accounting and reporting infrastructure. A successful implementation of ESG standards requires proper regulatory and institutional frameworks and solid technical expertise. This has often been missing, especially in the first decade of this century, significantly delaying the IFRS reforms in most countries, including emerging economies. The painful lessons learned in this process must be considered to achieve progress in the implementation of international sustainability standards.

These issues are examined in more detail in the following.

Multistakeholder evolution of the ESG/sustainability reporting agenda

The issues of environmental and social accounting and good corporate governance are not new. Both social and environmental accounting attracted interest in the late 1970s, most notably in the United States, followed by the UK, Netherlands, and Denmark[102]. The corporate governance disclosure area was significantly affected by the OECD Principles of Corporate Governance first published in 1999 and attracted significant attention after the 2001 Enron scandal with the Sarbanes-Oxley Act of 2002, one of most prominent pronouncements affecting corporate governance requirements.

At the international policy-making level, the Intergovernmental Working Group of Experts on International Standards of Accounting and Reporting (ISAR) played a pioneering role. Established by the UN Economic and Social Council (ECOSOC) in 1983 and coordinated by UNCTAD since 1995, ISAR is the focal body in the United Nations system for enterprise accounting and reporting. ISAR addressed the issues of environmental accounting in 1990 and during the following decade published a number of guidelines and papers on the matter, including its "Guidance on Eco-efficiency indicators and Position Paper on Environmental Costs and Liabilities." The work on

[102] See for example D. Crowther, Social and Environmental Accounting (London: Financial Times Prentice Hall, 2000)

sustainability reporting was further advanced with the creation of the Global Reporting Initiative (GRI) in 1997. However, from the start, the two organizations took different approaches. ISAR aimed at defining a limited set of indicators to facilitate harmonization of reporting requirements, while GRI took the view that a long list of indicators would be more useful, allowing companies to choose the indicators most appropriate to their circumstances. Many other initiatives evolved over the years, but the most prominent ones became known as the Big Five, which include the GRI, Carbon Disclosure Protocol (founded in 2002), Climate Disclosure Standards Board (2007), International integrated Reporting Council (2010), and Sustainability Accounting Standards Board (2011)[103]. While these organizations had different focuses, they all have played an important role in raising awareness of the phenomenon and its key challenges and providing guidance on different aspects of sustainability reporting.

Another significant influencer on the sustainability reporting agenda was the United Nations system. Besides the ISAR, several UN entities have made a significant contribution to sustainability reporting. This includes, among others, the United Nations Environmental Program (UNEP) and its Financial Initiative, UNEP FI (launched in 1992); the United Nations Global Compact (2000); and UN DESA and its Global Investors for Sustainable Development Alliance initiative (2019). In the United Nations 2030 Agenda for Sustainable Development, the role of sustainability reporting in achieving the Sustainable Development Goals (SDGs) was explicitly acknowledged under Goal 12, "Responsible consumption and production," and its target 12.6 "Encourage companies, especially large and transnational companies to adopt sustainable practices and to integrate sustainability information into their reporting cycle." Ensuing discussions stressed the importance of harmonizing sustainability reporting, and raised additional issues related to aligning such reporting with the SDGs monitoring requirements. With this in mind, in 2016 ISAR began working on Core Indicators (GCI) for entity reporting on contribution towards the SDGs. 33 core indicators were selected, and a guidance on such core indicators was published in 2018. Aligned with the SDG macro indicators, and applicable at a company level, they cover key areas common to any business, such as use of water, energy, pollution, waste generation, as well as social protection, gender equality, and anti-corruption practices among others[104].

The EU, IOSCO, and the Task Force on Climate-related Financial Disclosures (TCFD)[105] also had a significant impact on sustainability reporting promotion. In 2017, the TCFD developed its recommendations for voluntary climate-related financial disclosures for companies. As of October 2021, the Task Force had over 2,600 supporters — including 1,069 financial institutions, responsible for assets of $194 trillion – and spanned 89 countries and jurisdictions. TCFD outlined five fundamental principles for strong transition plans: alignment with business strategy, use of quantitative metrics and targets, insight into governance processes, actionable initiatives to drive plan forward, and disclosure of limitations, constraints and uncertainties in the plan.

The EU remains the leading region on sustainability disclosures. In April 2021, the Commission adopted a proposal for a Corporate Sustainability Reporting Directive (CRSD) on EU sustainability reporting standards to be developed by the European Financial Reporting Advisory Group (EFRAG). The first set of standards would be adopted by October 2022. The proposal extends the scope to all large companies and all companies listed on regulated markets (except listed micro-enterprises), and introduces, among others, more detailed reporting requirements. EU sustainability standards are also necessary to ensure consistency of reporting rules at the heart of the EU's Sustainable finance agenda.

Materiality: financial materiality vs double/dual materiality

One of the major issues in ESG reporting is the concept of materiality. For decades it has been a key factor in the consideration of what issues are relevant to investors and should be included in IFRS financial statements. According to the International Financial Reporting Standards Foundation, information is material if omitting it or misstating it could influence decisions that users make on the basis of financial information about a specific reporting entity.

In the ESG reporting context, the application of the materiality principle is key. However, there is no consensus on how it should be defined. In this regard two main lines of thought have emerged, one related to the concept of enterprise value creation and the other to the double materiality concept. The "enterprise value creation" concept focuses on so-called financial materiality and on identifying the information that is material from a financial standpoint. The main advocates of such an approach are SASB/VCF and the IFRS Foundation. However, many other key players in the ESG area strongly believe that the double materiality concept is the right approach. Double materiality includes both financial materiality (which considers the firm's financial performance and has investors as the primary audience) and environmental and social materiality (which considers the impact of a company's activities and has consumers, civil society, employees and a growing number of investors as the primary audience). The double-materiality approach is promoted by the European Commission and is the focus of the EU's current work to develop its own standards.

There is also a third group of experts suggesting that a gradual approach is needed to eventually align the two concepts and incorporate double materiality on a broader basis. Some stakeholders also believe that environmental and societal issues will become increasingly

103 In June 2021 the IIRC and SASB announced their merger and creation a joint Value Creation Foundation (VCF).

104 https://unctad.org/en/PublicationsLibrary/diae2019d1_en.pdf

105 TCFD is an initiative launched in December 2015 by the FSB (Financial Stability Board), an international body founded, with support from G20 members, to promote international financial stability. The purpose of the TCFD is to help identify the information needed by investors, lenders, and insurance underwriters to appropriately assess and price climate-related risks and opportunities, and to make recommendations for consistent company disclosures that will help financial market participants understand their climate-related risks.

important to investors and therefore material within the enterprise value concept. Despite current divergences, experts predict that the global standard will evolve over time, eventually incorporating double materiality-focused disclosure requirements.

Conceptually, there should be no contradiction between a company value creation approach and dual materiality. For example, considering the risks and impacts of climate change in today's world, it is not clear how a company can create value if it does not address its impact on society and the environment. In addition, investors are part of society; they cannot neglect the potentially negative impacts of their investees' activities on the environment in which they live. The two concepts hence have to merge from the very beginning to ensure consistency in the reporting system. This is why, when ISAR was developing its core indicators for corporate sustainability reporting in 2016-2018, the concept of double materiality was key in selecting them. The approach was based on the notion that the SDGs monitoring framework and its indicators reflected the consensus already reached by the UN Member States, based on a dialogue with the private sector on requirements and indicators for sustainable development at a macro level. ISAR built upon these consensus-based indicators from the SDG monitoring framework to establish its list of core indicators for corporate reporting.

Implementation issues, technical expertise and capacity building

Advancing the ESG agenda greatly depends on the implementation of the ISSB pronouncements and capacity building efforts at all levels. For example, after the core indicators were launched in 2018, more than 25 case studies were conducted by ISAR in large and small companie across different industries and regions — including in emerging economies — to validate the approach and demonstrate that any company can provide data on these 33 universal indicators. Lack of technical expertise was highlighted in virtually all cases. UNCTAD addressed this challenge by developing training manuals on the GCI application, allowing many companies to provide data on most of the core indicators. While many companies still experienced challenges, there was no single indicator that could not be reported by all the companies participating in the research[106].

In this regard, many guiding documents recently produced by the TCFD, CDSB, and many other organizations will definitely help companies to develop technical expertise.

The way forward

There are many other important issues to be considered to ensure the ISSB success. These include the standard setting governance process, ISSB coordination with the IASB/IFRS on past and future standards, coordination with the EU that has been at forefront of ESG agenda, and coordination and cooperation with national standard setters and stakeholders. Some technical issues, such as consolidated reporting vs. legal entity reporting, are also key challenges to address.

In conclusion, a systemic approach is needed to develop an enabling ESG accounting and reporting infrastructure as an integral part of the broader accounting and reporting infrastructure. This includes regulatory capacity, institutional building — including standards formulation, enforcement, supervision and incentives — and the development of human resources and technical expertise. The good news is that many of these issues have already been addressed during the more than 20 years process of capacity building for the IFRS implementation. Hence, the new stage of global accounting reform has a blueprint to build upon.

[106] https://isar.unctad.org/case-studies

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