OECD Development Pathways

Production Transformation Policy Review of Bangladesh

INVESTING IN THE FUTURE OF A TRADING NATION

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Foreword

The current global economic and political landscape is marked by turbulence, complexity, and rapid change. Governments, businesses and societies are striving to comprehend the ongoing technological, digital, and industrial reorganisation processes and their profound potential impacts on the economy and society. In a time where it is evident that growth is a necessary but not sufficient condition for development, and incentives are required to ensure inclusive and sustainable growth, the planning and execution of strategies for economic transformation are of paramount importance.

The Production Transformation Policy Reviews (PTPRs) serve as a vital OECD policy assessment and guidance tool, aiding policy makers in crafting and implementing improved strategies for economic transformation. These reviews are enriched by international peer dialogues and discussions under the OECD Initiative for Policy Dialogue on Global Value Chains, Production Transformation, and Development. Adding perspective to the OECD Development Pathways Series, the PTPRs shed light on economic transformation and governance for change.

The PTPR of Bangladesh represents the first assessment carried out in a Least Developed Country (LDC), at the behest of the Ministry of Commerce and with financial support from the European Commission. Co-authored with the United Nations Conference on Trade and Development (UNCTAD), it benefits from close co-operation with the United Nations Committee for Development Policy (CDP), UNDESA, and the UN Technology Bank for the LDCs.

The PTPR of Bangladesh included an extensive process of consultation with multiple stakeholders in Bangladesh and abroad. It also involved the participation of several representatives of countries, the private sector and international organisations in a Peer Learning Group that steers each PTPR process.

Half a century after independence, Bangladesh has achieved impressive progress. The country has transformed from one of the poorest nations into a global textile manufacturing hub and country that is capable of meeting its medical needs almost entirely through domestic pharmaceutical production. The country will graduate from the LDC category in 2026 and aspires to be a high-income nation through industrialisation by 2041. Meeting this challenge requires accelerating economic transformation through diversification and innovation. It calls for leveraging digitalisation to address persistent fragilities and it advocates for a new pact based on shared responsibilities between the national government, the private sector and international partners to shift to a new development phase and ensure a sustainable, smooth and irreversible graduation.

Acknowledgements

The Production Transformation Policy Review (PTPR) of Bangladesh is the result of an in-depth policy review and consensus-building process. The PTPR process was co-ordinated by the OECD Development Centre. It benefitted from co-operation with the United Nations Conference on Trade and Development (UNCTAD). Ragnheiður Elín Árnadóttir, Director of the OECD Development Centre, Paul Akiwumi Director, Division for Africa, LDCs and Special Programmes, and Richard Kozul-Wright, Director, Division on Globalization and Development Strategies at UNCTAD oversaw the partnership that guided the implementation of the PTPR process.

The PTPR process and the report were conducted under the strategic guidance of Annalisa Primi, Head of the Economic Transformation and Development Division at the OECD Development Centre. Manuel Toselli, PTPR Coordinator in the Economic Transformation and Development Division, was the lead economist for this PTPR, benefitting from the collaboration of Giovanni Valensisi from UNCTAD's Division for Africa, LDC and special programmes. The report was drafted by Annalisa Primi, Manuel Toselli, Vasiliki Mavroeidi and Giovanni Valensisi. Antonio Vicencio supported the project's implementation through data collection and analysis. Abdul-Fahd Fofona, Edoardo Pontecorvi. Harry Mathers from the OECD Development Centre and Piergiuseppe Fortunato and Fareha Raida Islam from UNCTAD contributed to the research and the implementation of project-related activities. Mereseini Bower, Inter-regional Adviser in the UN Secretariat of the Committee for Development Policy, UNDESA, Daniel Gay, former policy analyst at the OECD Development Centre, and Roni Mazed, Development Coordinator and Economist at the UN Resident Coordinator Office in Bangladesh, joined the PTPR field missions and contributed to shape the analytical content of the report. Several colleagues from different international organisations provided useful comments and suggestions, including Lorenzo Pavone from the OECD Development Centre, Stephen Thomsen, Fernando Mistura and Katharina Bohm from the OECD Directorate for Financial and Enterprise Affairs, Bejraoui Aussama from OECD Development Co-operation Directorate, Anders Isaksson from UNIDO, and Annalisa Prizzon from the Overseas Development Institute. Delphine Grandrieux oversaw the publication process. The report benefitted from editing by Andrew Brenner.

This PTPR benefitted from two international peers. We are grateful to Taffere Tesfachew, Acting Managing Director, UN Technology Bank for the LDCs, for the support and wisdom that enhanced the rigour and breadth of the PTPR process, and to Tran Toan Thang, Director of the Department of Industrial Forecast and Enterprise Development, National Center for Economic Forecast and Information, Viet Nam, for his inputs and perspectives from Viet Nam.

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As this was the first PTPR implemented in an LDC, we are grateful to José Antonio Ocampo, former Minister of Finance of Colombia and former chair of the CDP, Keith Nurse member of the CDP and Roland Mollerus, Chief of Secretariat of the CDP (UNDESA) for the strategic discussions on how to make the PTPR process relevant in the global LDC context. We are also grateful to Hang Tran, Senior Coordinator at the Enhanced Integrated Framework (EIF/WTO) for sharing her knowledge and facilitating co-ordination with the Ministry of Commerce in Bangladesh and the ongoing trade diagnostics studies.

Valuable inputs for this PTPR report originated from the PTPR Peer Learning Group hosted (online) in September 2022, with the participation of 14 high-level delegations representing countries from Africa, Asia, Latin America, and the OECD (10 OECD member countries and 4 non-OECD member countries), and 9 international organisations. We are thankful to Zeaul Alam Paa, Senior Secretary of Information and Communication Technology Division, Bangladesh; Mounssif Aderkaoui, Director of Studies and Financial Planning Ministry of Economy and Finance, Morocco; Ariful Haque, Director, Bangladesh Investment Development Authority (BIDA), Bangladesh; Arvind Gupta, Head & Co-Founder, Digital India Foundation, India; Karl-Christian Göthner, Senior Expert, German National Metrology Institute (PTB), Germany; Hyo Yon Lee, Director, Invest Korea, KOTRA, Korea; Enrico Nunziata, Ambassador, Embassy of Italy in Bangladesh, Italy; Khairul Amin, Additional Secretary, Information and Communication Technology (ICT) Division, Bangladesh; Adrian Kuah, Director, Futures Office, National University of Singapore, Singapore; Alessandro Zucchi, President, Association of Italian Textile Machinery Manufacturers (ACIMIT).

The PTPR is the result of an extensive and open consultation with diverse stakeholders during two country visits to Bangladesh in May and October 2022, which included the following activities:

- Two roundtables for production transformation in Bangladesh. Participants discussed strategies, policy tools, and partnerships needed for sustaining the electronics and pharmaceutical industries at two separate roundtables. Both events brought together 50 representatives of private and public sectors who have been key in sharing their views about the future and shaping the content of this report.
- One consensus-building event steered the PTPR process. The meeting was co-organised with the Ministry of Commerce with the contribution of UNCTAD and UNDESA. In total, 30 participants from the domestic private and public sectors and foreign delegations to Bangladesh contributed to enrich the discussion on three essential topics discussed in the review: regional integration as a driver of diversification; cushioning fragilities to develop a sustainable transformation; and fostering innovation for production transformation.
- Two meetings with foreign delegations in Bangladesh contributed to and supported the analytical work. In particular, we thank the Ambassadors and Delegates of the following countries: Canada, Denmark, France, Germany, Italy, Japan, Korea, the Netherlands, Norway, Spain, Sweden, Switzerland, Türkiye, the United Kingdom, and the United States.

- The participation in the seventh EU-Bangladesh Business Climate Dialogue hosted in June 2022. The dialogue hosted annually gathers the Heads of EU Diplomatic Mission to Dhaka together with representatives of the Bangladeshi Government as well as representatives of the EU and the country's private sector.
- Semi-structured interviews with more than 50 experts from business, government, academia, and think tanks in Bangladesh have been extremely relevant in shaping the report. We acknowledge the time and contributions of the following representatives of various stakeholders (in institutional alphabetical order): Bangladesh Computer Samity; Bangladesh Economic Zones Authority; Bangladesh Foreign Trade Institute; Bangladesh Garment Manufacturers & Exporters Association; Bangladesh Hi-Tech Park Authority; Bangladesh Investment Development Authority; Bangladesh Knitwear Manufacturers & Exporters Association; Bangladesh Trade & Tariff Commission, Ministry of Commerce; Bangladesh Association of Software and Information Services; Beximco Pharmaceuticals; Bangladesh Knitwear Manufacturers and Exporters Association; BRAC; Bangladesh Telecommunication Regulatory Commission; Building Initiative Leading Development; Centre for Policy Dialogue; Dhaka Chamber of Commerce & Industry; Domestic; Economic Relations Division; Fatullah Apparels; Finance Division, Ministry of Finance; Hatil Furniture; Infrastructure Development Company Limited; Indian Industries Chamber of Commerce and Industry Bangladesh; Incepta Pharmaceuticals; Information and Communication Technology Division, Ministry of Posts, Telecommunications and Information Technology; MB Knit Fashion Limited; Ministry of Industries; National Board of Revenue; Policy Research Institute; Prime Minister's Office; Rangpur Chamber of Commerce; Royal Danish Embassy; Square Pharmaceuticals Ltd.; Startup Bangladesh Ltd; the Federation of Bangladesh Chambers of Commerce and Industry; Trade and Investment Facilitation Cell; University of Dhaka; Walton.

This PTPR also benefitted from engagement in multilateral fora. We are grateful to the Office of the High Representative for Least Developed Countries, Landlocked Developing Countries, and Small Island Developing States (OHRLLS) for the discussions at the fifth United Nations Conference on the Least Developed Countries, LDC5, hosted by the Government of Qatar in Doha, 5–9 March 2023, and in particular to Susanna Wolf for her support. The LDC5 has been a key occasion to share and test the PTPR results and commend Bangladesh on its progress, while continuing to highlight the relevance of the PTPR tool for graduating LDCs and beyond, through its inclusion in i-GRAD as part of the Doha Program of Action. We are also grateful to Taufiquir Rhaman at the WTO for the invitation to share progress on the report with the WTO LDC Sub Committee in May 2023.

This report would not have been possible without the financial contribution of the General Directorate for International Partnership of the European Commission.

Editorial

In March 2023, at the Fifth United Nations Conference on the Least Developed Countries (LDC5) in Qatar, development partners reaffirmed their commitment to lift LDCs from the cycle of extreme poverty, instability and vulnerability that limits their development prospects. The Doha Programme of Action outlines a ten-year plan to support LDC development efforts through enhanced international partnerships. LDC5 also marked a special milestone: it will be the last UN LDC conference in which Bangladesh participates as an LDC.

Bangladesh is the largest country graduating from the LDC category, with graduation scheduled for the end of 2026. The country was granted an extended preparatory period of five years to enable it to recover from and reverse the socio-economic damage incurred by COVID-19 and other external shocks.

Bangladesh's impressive economic growth and social progress, achieved amidst a multitude of challenges, are commendable. The country has turned into a global garment manufacturing hub and is now also among the few developing nations, and the only LDC, capable of meeting its essential pharmaceutical needs through domestic production.

In doing so, Bangladesh has also demonstrated its adaptability and willingness to address pressing concerns. Advancements in workers' safety and rights have been made through a combination of legislative reforms and improvements in private-sector practices. Bangladesh is also transforming its economy and society through information and communications technology.

Notwithstanding, significant challenges remain. The constraints facing developing economies that are not LDCs are in some areas even tighter and will need close attention from policy makers and international partners.

Bangladesh needs to diversify its economy and export structure. Climate change, including rising sea levels and extreme weather events, will affect socio-economic development. Furthermore, strengthening institutional productive capacities, boosting resource mobilisation, and enhancing the business environment will be essential to achieve the nation's ambition to graduate successfully and reach high-income status by 2041.

This timely report contributes to identifying challenges that, if left unattended, could undermine further progress towards sustained development. It also acts as a call for the government, the private sector, and their international partners to rise to the challenge, invest in change and unleash Bangladesh's full potential for the benefit of all its people.

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Table of contents

Foreword 3

Acknowledgements 4

Editorial 7

Abbreviations and acronyms 11

Executive summary 13

1 Assessment and recommendations 15
- Bangladesh has achieved remarkable progress to date 16
- The current development model is under pressure due to global and domestic factors 22
- To continue succeeding, Bangladesh needs to update its business mindset and the policy approach 24

2 Bangladesh: A journey of economic transformation 33
- Introduction 34
- Bangladesh has deeply transformed its economy and society 35
- Deep fragilities risk to hampering future progress 47
- Bangladesh needs to update its economic model to further its successes 52
- Conclusions 63
- References 64
- Annex 2.A. Magnitude of GVCs participation 67
- Notes 68

3 Looking forward: Bangladesh's next development phase 69
- Introduction 70
- Bangladesh aspires to become a high-income country by 2041 70
- The country is committed to diversifying its economy 81
- Meeting Bangladesh's ambitions requires shifting gears and sharing responsibilities 91
- Conclusions 98
- References 99
- Annex 3.A. Export incentives 103
- Notes 104

4 Transforming industries: Perspectives from electronics and pharmaceuticals in Bangladesh 105
Introduction 106
The electronics industry in Bangladesh is still maturing 106
The country is nurturing local manufacturing capacities in electronics 111
International partnerships and innovation will underpin the future of electronics 117
Bangladesh has been nurturing domestic pharmaceutical manufacturing since the 1980s 121
The pharmaceutical industry in Bangladesh is evolving 128
Investing in R&D, innovation and regulatory upgrades will be key after graduation 130
Conclusion 133
References 134
Note 136

FIGURES

Figure 1.1. Bangladesh average annual GDP growth has outpaced the South-Asia average since 2010 16
Figure 1.2. 20 RMG products account for 84% of all Bangladesh's exports 17
Figure 1.3. To sustain RMG exports Bangladesh largely depend on foreign inputs 18
Figure 1.4. Digitalisation has advanced, but gaps remain 20
Figure 1.5. Dhaka is one of the emerging start-up hub in Asia, 2022 21
Figure 1.6. Trade in digital services is growing but lags behind other countries 22
Figure 1.7. Firms in Bangladesh invest little in R&D, even in pharma 26
Figure 1.8. FDI could do more for Bangladesh diversification and innovation efforts 28
Figure 1.9. Bangladesh needs to update the current policy approach to transform the economy 30
Figure 2.1. Bangladesh average annual GDP growth has outpaced the South-Asia average since 2010 36
Figure 2.2. Manufacturing employment and value added dominated by garments and textiles 37
Figure 2.3. RMG account for 84% of Bangladeshi exports 39
Figure 2.4. Importing from Asia to export to Europe and North America 40
Figure 2.5. Imports are key to sustaining Bangladesh RMG exports, and are determinant for food and energy security 41
Figure 2.6. Digitalisation has advanced, but international gaps remain significant 42
Figure 2.7. Dhaka has emerged as an important hub in Asia 43
Figure 2.8. Design and electronics are among the top start-up sectors in Bangladesh 44
Figure 2.9. Bangladesh's venture capital investments focus on seed and early-stage deals 45
Figure 2.10. Bangladesh has started to export digital services 46
Figure 2.11. Labour productivity gap with the frontier persists 49
Figure 2.12. Bangladesh is among the most exposed countries to natural disasters in the world 51
Figure 2.13. Bangladesh participation in global value chains, 2020 53
Figure 2.14. Bangladesh trade with Asia is relatively more diversified than its global trade 56
Figure 2.15. Non-tariff barriers also hamper regional integration opportunities for Bangladesh 58
Figure 2.16. Remittances and ODA matter more than FDI for Bangladesh 61
Figure 2.17. The US remains the leading investor in Bangladesh, while new players are coming along 62
Figure 2.18. Global FDI are going green and tech 63
Figure 3.1. Institutional governance for production transformation in Bangladesh, 2023 75
Figure 3.2. Public budget and fiscal space, Bangladesh 2018-23 77
Figure 3.3. Breakdown of total budget by operational and development expenditure, 2022-23 78
Figure 3.4. More than 75% of ODA for economic transformation targets infrastructure and energy 79
Figure 3.5. Overview of Bangladesh's approach to transforming the economy, 2022-23 82
Figure 3.6. Effectively applied tariff rates are coming down 88
Figure 3.7. Elements of NQI for economic diversification and upgrading 91
Figure 4.1. Structure of E&E industry by employment, Bangladesh and Viet Nam, 2018 107
Figure 4.2. Input origins and output destination of the Bangladeshi E&E industry 107
Figure 4.3. Bangladesh top 10 export destinations and import sources for E&E, 2019-2021 108
Figure 4.4. E&E exports from Bangladesh and Viet Nam, by value chain segment, 2019-21 109
Figure 4.5. Domestic market shares of top 3 firms in Bangladesh by E&E product 110
Figure 4.6. Preferential trade agreements with Bangladesh and Viet Nam as parties, 2023 116

Figure 4.7. Global relocations in Asia by source, sector and final destination, 2013-20 118
Figure 4.8. The Bangladesh pharmaceutical industry accounts for 2% of national manufacturing 123
Figure 4.9. Trade in pharmaceuticals, by category and flow, Bangladesh and India, 2019-2021 124
Figure 4.10. Foreign value added accounts for 25% of the domestic demand in Bangladesh 125
Figure 4.11. Bangladesh's pharmaceutical firms invest little in R&D 126
Figure 4.12. Publications in Pharmacology, Toxicology and Pharmaceutics, Bangladesh and selected countries, 1996-2022 127
Figure 4.13. GMP certificate, Bangladesh and selected countries, 2023 128

Annex Figure 2.A.1. Foreign value-added share of total gross exports *(Magnitude),* 2020 67

TABLES

Table 2.1. Building resilience to natural and industrial hazards 52
Table 2.2. The private sector in Bangladesh invests little in innovation 54
Table 2.3. Tapping into regional markets to foster economic transformation 56
Table 2.4. Impact on LDC graduation in selected regional markets under alternative trade arrangements 59
Table 3.1. Trade implications of LDC graduation 72
Table 3.2. Overview of main FDI related incentives by agency in Bangladesh as of May 2023 84
Table 3.3. Bangladesh is working to enhance its quality infrastructure system for industrial competitiveness 89
Table 3.4. Viet Nam's regional integration process 95
Table 4.1. Average custom duty tariffs and total tax incidence (TTI) on E&E products, 2011-2023 (%) 112
Table 4.2. Policy mix, E&E, Bangladesh and Viet Nam, 2023 113
Table 4.3. Institutions in pharmacology, toxicology and pharmaceutics, Bangladesh 127
Table 4.4. Top five destinations of Bangladeshi pharmaceutical exports 129
Table 4.5. Compliance of Bangladesh health, industrial and investment policies with the WTO regime for developing countries other than LDCs 131

Annex Table 3.A.1. Export incentives scheme, Bangladesh 2022-23 103

BOXES

Box 2.1. ACIMIT's Digital Ready certification: Pioneering standardisation in textile machinery 47
Box 2.2. Regional integration and LDC graduation: Navigating Bangladesh's transition 59
Box 3.1. What does graduation from LDC mean for Bangladesh? 71
Box 3.2. EU-Bangladesh Business Climate Dialogue: Strengthening trade and investment partnerships 81
Box 3.3. The role of the national quality infrastructure system as a driver of competitiveness 90
Box 3.4. The European Union General Data Protection Regulation (GDPR) 93
Box 3.5. From regional to global markets. The case of Viet Nam FTAs 95
Box 3.6. Attracting FDI in Malaysia 97
Box 4.1. Homegrown electronics brands are developing quickly 111
Box 4.2. Updating the policy toolkit to encourage learning: Examples from Southeast Asia in the E&E industry 120
Box 4.3. Enhancing intellectual property regulation in Bangladesh: The Bangladesh Patents Act, 2022 132

Abbreviations and acronyms

AANZFTA	ASEAN Australia New Zealand Free Trade Area
ADP	Annual Development Plans
AFTA	ASEAN Free Trade Agreement
AIFTA	ASEAN-India Free Trade Area
APMP	Asia Pacific Metrology Programme
ASEAN	Association of Southeast Asian Nations
ATIGA	ASEAN Trade in Goods Agreement
BAB	Bangladesh Accreditation Board
BEPZA	Bangladesh Export Processing Zones Authority
BERRP	Bangladesh Economic Recovery and Reform Program
BEZA	Bangladesh Economic Zones Authority
BHTC	Bangabandhu Hi-Tech City
BHTPA	Bangladesh Hi-Tech Park Authority
BIDA	Bangladesh Investment Development Authority
BIPS	Bangladesh Investment Promotion Scheme
BPDB	Bangladesh Power Development Board
BRICM	Bangladesh Reference Institute for Chemical Measurements
BSTI	Bangladesh Standards and Testing Institute
BTRC	Bangladesh Telecommunication Regulatory Commission
CPTPP	Comprehensive and Progressive Agreement for Trans-Pacific Partnership
CRS	Creditor Reporting System
DAC	Development Assistance Committee
DEC	Developing Economies' Committee
DTA	Domestic Tariff Area
EBA	Everything but Arms
ECNEC	Executive Committee of the National Economic Council
EDF	Export Development Fund
EM	Essential Medicines
EPZ	Export Processing Zones
EVFA	Europe-Vietnam Free Trade Agreement
FDI	Foreign direct investment
FTA	Free-trade agreements
FYP	Five-year plan
GDP	Gross Domestic Product
GNI	Gross National Income

GSP	Generalised Scheme of Preferences
GVC	Global Value Chain
GW	Gigawatt hour
ICT	Information and Communication Technology
LDCs	Least Developed Countries
LNG	Liquefied natural gas
MRA	Multilateral Recognition Arrangement
NAB	National Accreditation Bodies
NBR	National Board of Revenue
NEC	National Economic Council
NML	National Metrology Laboratory
NQI	National Quality Infrastructure
ODA	Official development assistance
PPP	Purchasing power parity
RBS	Responsible business conduct
RCEP	Regional Comprehensive Economic Partnership
RMG	Ready-made garments
SAARC	South Asian Association for Regional Cooperation
SCM	Subsidies and Countervailing Measures
SPS	Sanitary and Phytosanitary
TBT	Technical Barriers to Trade
VAT	Value Added Tax

Executive summary

Bangladesh, strategically located in South Asia, is a key Indo-Pacific player with considerable development potential. Since gaining independence in 1971, the country has achieved remarkable progress. With an average annual GDP growth of 6% since the 2000s, Bangladesh ranks among the fastest growing economies in the world and has demonstrated significant resilience to the global COVID-19 pandemic.

The country deeply transformed from a predominantly agrarian subsistence society into an economy where manufacturing accounts for 22% of GDP, up from 9% in the 1970s. Over this period, the ready-made garment (RMG) sector has grown to be the backbone of the Bangladeshi economy. Today, the sector accounts for 57% of the domestic value added in manufacturing and for 72% of jobs (80% of which are female workers). Twenty RMG products account for 84% of all Bangladeshi exports, making the country the world's second-biggest RMG exporter, after China. RMG in Bangladesh is highly import dependent – the country imports raw material from Asia to sell mass products to leading brands operating in Europe and North America. The European Union is currently Bangladesh's main trade partner, today accounting for 50% of exports, followed by the United States (15%).

Bangladesh has advanced in digitalising the country. To date, 4G coverage extends to 94% of the territory and internet usage rose from 3% to 25% of the population in the last decade. However, Bangladesh continues to lag behind other economies in the region, including Viet Nam where 70% of the population uses internet. Mobile download speed in Bangladesh – at 11 Mbps in 2022 – stands at only one-third of the global average and is eight times slower than in the fastest country in the region, Singapore.

Bangladesh has an untapped innovation potential. Only 1.2% of firms invest in R&D — less than half the rate invested by firms in India and only 2.6% of Bangladeshi companies employ technologies licensed from foreign counterparts. Foreign direct investment (FDI) could also play a bigger role in fostering diversification, learning and innovation. Although attracting FDI is among the government's top priorities, FDI to Bangladesh remains limited and concentrated in traditional sectors. FDI accounts for 0.7% of GDP in the country compared to 6% in Viet Nam. In the period between 2018-2022, the value of remittances received by Bangladesh was seven times higher than the volume of FDI.

Beyond the RMG sector, Bangladesh has a growing domestic-oriented, import-dependent industry, including high-tech sectors. This comprises electronics – of which 83% of the total output is marketed locally – and a pharmaceuticals industry focused on generic drugs manufacturing, which covers 98% of the country's needs in terms of essential drugs.

At this stage of its development, Bangladesh faces considerable challenges: the complex global economic landscape comprises a number of internal risk factors, including increasing exposure to natural disasters, limited domestic resource mobilisation capacity, substantial external financing dependence and overreliance on a single export sector. With graduation from LDC status set for 2026 – triggering a change in EU market access taking full effect in principle by the end of 2029 after a three-year transition period – and considering the challenging global economic outlook, Bangladesh is at a pivotal juncture to implement reforms to continue progressing. Updating its institutional arrangements, advancing in transparency and

accountability, and progressing in updating labour and digital regulations are essential steps in determining access to post LDC support, including access to the EU's GSP+ preferential trading scheme after 2029.

The upcoming LDC graduation is acting as an important incentive to modernise the country's policy making and a driver to update the country's international partnerships. Bangladesh is one of the least regionally integrated countries in Asia, with 75% of its merchandise imports coming from other Asian countries and only 16% of its exports going to the regional market. Developing a strategic network of trade and international partnerships, including by exploring the potential of regional integration is paramount for Bangladesh in preparation for LDC graduation.

To continue its success story Bangladesh needs to update its economic model, which has been grounded on price competitiveness, and overcome the duality of its industrial model with an export oriented RMG sector and highly protected industries operating for the domestic market. To do this, it needs to diversify its export base, develop a strategic network of international partnerships and foster a more innovation- and quality-based industrial development model.

Bangladesh also needs to future-ready the state to ensure transparency and accountability to respond to the evolving and increasingly complex demands of its society and the world economy. It needs to shift the current mindset of doing business and update its policy approach. The policy toolbox favours incumbent firms, protects the *status quo* and does not incentivise investing in innovation. It also limits foreign investors' appetite for investing in the country, despite its significant market potential and strategic geographic location.

Bangladesh needs to shift from focusing on market access and tariff management to more contemporary policy tools. It needs to craft a modern policy mix that encourages learning, risk-taking, and innovation while at the same time providing new business opportunities for new firms and sectors. It should develop a more co-ordinated approach between industrial, trade and FDI polices, simplify the institutional framework for attracting FDI, and modernise the incentives packages. Bangladesh should urgently work on further reducing red tape, enhance digital and physical infrastructure and simplify the complexities of conducting business within its borders. Despite progress made, including the online platform launched in 2021 to serve as a one-stop-shop for investors, Bangladesh remains a difficult country for foreign investors to operate in. Mostly because of the complex institutional arrangement, the continuing dominant role that personal networks play when dealing with government-business relations and the highly complex bureaucracy.

The government aspires to reach high-income status by 2041. To achieve this, Bangladesh has several assets: an ambitious vision supported by a committed and strong government leadership, its geostrategic location, a global economic potential powered by a growing and young workforce and business know-how that is embedded in local, homegrown firms. Bangladesh also has a track record of accomplishments and a proven capacity to implement reforms and address pitfalls.

The country can build on what has been achieved and should accelerate reforms necessary to continue succeeding. A private sector ready to innovate and international partners engaging on equal footing with local stakeholders are key factors in this process. Bangladesh's prosperous future depends as much on its own domestic efforts as it does on the readiness of international partners to share responsibilities to cushion the country's fragilities and to jointly craft a mutually beneficial way of managing openness and doing business. Success is doable, but requires completing the journey towards building a modern, value-based nation state and on shared responsibilities between the government, the private sector and international partners.

1 Assessment and recommendations

Since gaining independence in 1971, Bangladesh has achieved significant progress. Its economy has transformed from one of the poorest in the world to a growing South Asian economy, home to a global manufacturing hub of ready-made garments (RMG). However, Bangladesh's achievements should not lead to complacency. The country is grappling with multiple challenges, from mitigating the impacts of climate change to preparing for LDC graduation. To secure a prosperous future, Bangladesh needs to prioritise new drivers of growth. It should shift from a price-led competitiveness model to one grounded on quality and innovation. Bangladesh also needs to shift its business mindset and modernise its policy approach for industrial development. Advancing on digitalisation and updating international partnerships are key to sustaining future progress. Above all, Bangladesh needs to future-proof the state to make it work as a value-driven and rules-based system. Chief in this transition from nation to state building is the modernisation of its institutional arrangements and the empowering of institutions to effectively deliver policies and operate in a highly dynamic and interdependent world.

Bangladesh has achieved remarkable progress to date

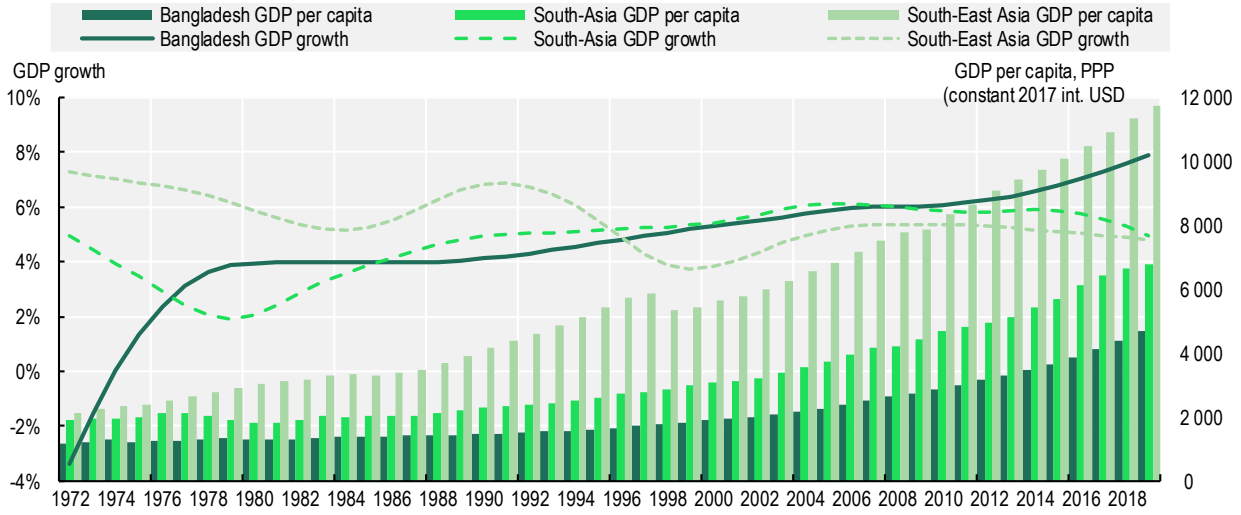
Sustained GDP growth and poverty reduction

Bangladesh, the eighth-most populous country in the world, with over 160 million citizens, and strategically located in South Asia, has considerable development potential. Since its independence in 1971, it has transformed from one of the poorest countries in the world into a South Asian growing economy home to a globally ready-made garments (RMG) manufacturing hub. Immediately after independence, Bangladesh was the world's ninth-poorest country, with a nominal income per capita of USD 95, infant mortality at 210 per 1 000 births, and an average life expectancy of 46.6 years. Today, Bangladesh with USD 460 billion is the 35th largest economy in the world by GDP size in current USD, with per capita GDP of USD 2 688 (current USD), and where infant mortality declined to 23 deaths per 1 000 births and life expectancy has risen to 72 years of age. The country has also gained international recognition as a model for poverty reduction. Considered by the United Nations to be a Least Developed Country (LDC) since 1975, it achieved lower-middle-income status in 2015 and today it is the largest graduating LDC, with graduation scheduled for 2026.

After negative growth rates in the immediate aftermath of independence, Bangladesh experienced annual average GDP growth of 4% until the 1990s. Albeit lower than in other economies in South and South-East Asia, this growth rate has sustained the country's progress. From the 2000s onwards, Bangladesh's annual GDP growth rate reached an average of 6%, and since 2010, the country's annual average growth outpaced the South-Asia average (Figure 1.1).

Figure 1.1. Bangladesh average annual GDP growth has outpaced the South-Asia average since 2010

Bangladesh GDP growth and GDP per capita, 1972-2019



Note: South Asia excludes Bangladesh. Regional aggregates follow UN classification. For GDP growth, HP filter was applied (lambda 54.12), according to OECD guidelines: http://dx.doi.org/10.1787/pdtvy-2016-en.
Source: Authors' elaboration based on data from Penn World Table (PWT) version 10.0. Real GDP at constant 2017 national prices (in mil. 2017 USD).

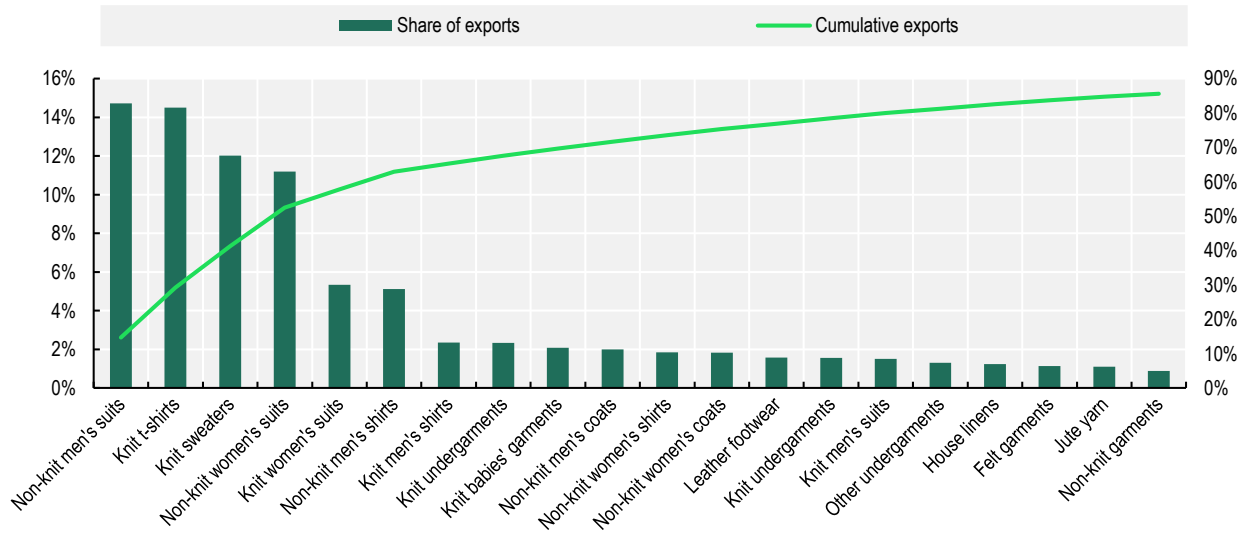
The establishment of a global garment manufacturing powerhouse

Since independence, Bangladesh has transformed from being a predominantly agrarian subsistence society into a global garments manufacturing hub. Industry accounts for more than 30% of GDP, with manufacturing representing 22% of GDP, up from 9% post-independence, while at the same time services rose to represent 50% of GDP, and agriculture declined from more than 60% to around 20% of the country's GDP. The European Union (EU) is the main trade partner for Bangladesh, accounting today for 50% of Bangladesh's exports, North America follows with 18%, of which 15% go to the US.

Born from a timely intuition to join the textile supply chain in the late 1970s the RMG industry has grown into the backbone of the Bangladeshi economy (Figure 1.2 and Figure 1.3). Today RMG accounts for 57% of the manufacturing domestic value added and for 72% of formal jobs in manufacturing. 20 RMG products represent 84% of all of Bangladesh's exports making the country the second-biggest RMG exporter in the world, following the People's Republic of China (hereafter "China"). RMG in Bangladesh is highly import dependent, and the country mostly imports intermediary inputs from Asia to make finished products that are then exported to leading brands in Europe and North America. Despite the growing quality of the items produced and an established reputation as a reliable business partner - corroborated by the improvements in responsible business conduct (RBC) after the 2013 Rana Plaza disaster - the success of the RMG business in Bangladesh ultimately continues to rely on extremely low business operational costs, including wages, which disproportionately impact women, who account for 80% of RMG workers. It also depends on targeted policies that support the industry.

Figure 1.2. 20 RMG products account for 84% of all Bangladesh's exports

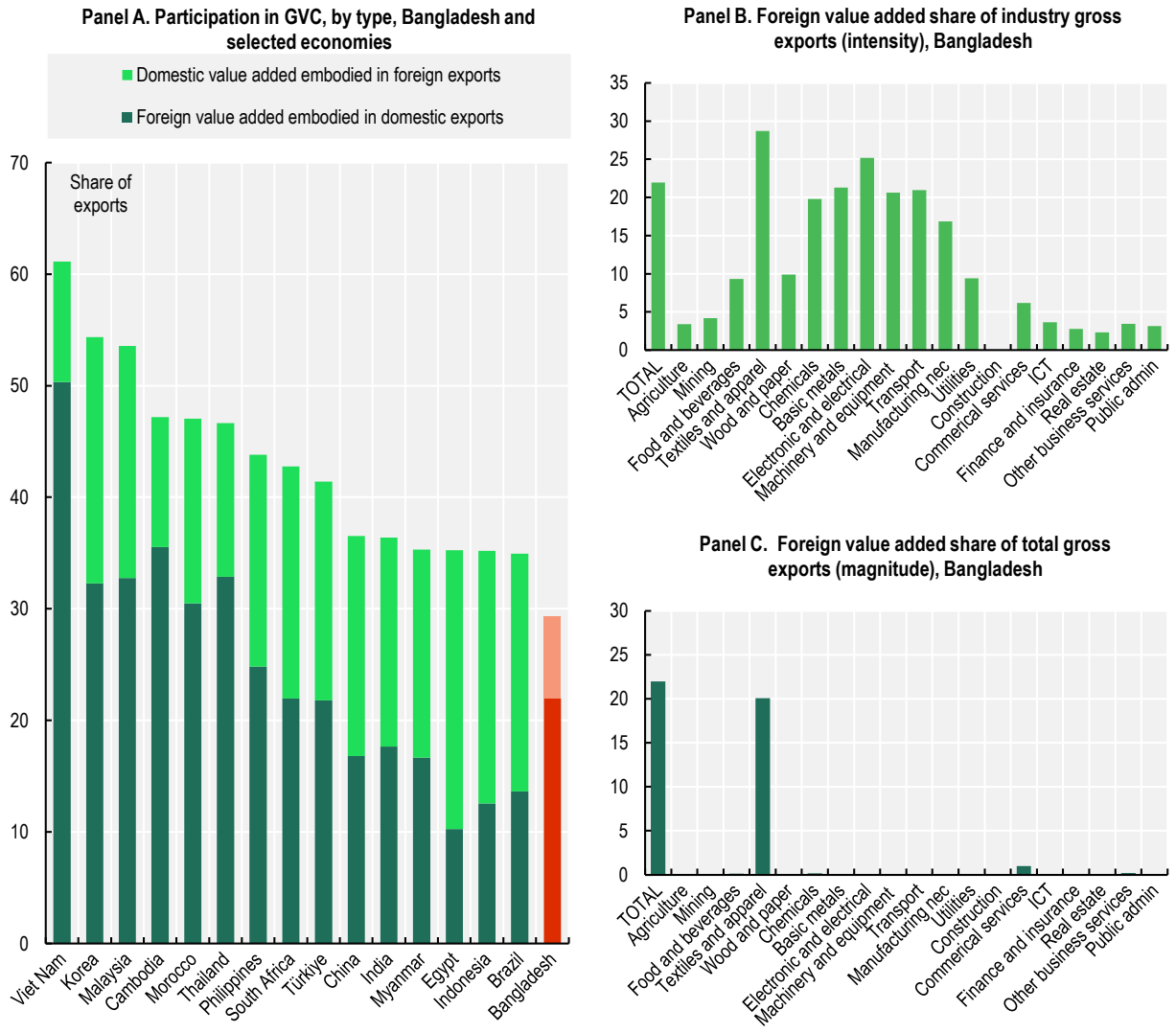
Top 20 exported products in total merchandise exports, Bangladesh 1998-2000 and 2018-2020



Note: CEPII developed a procedure that reconciles the declarations of the exporter and the importer, that may be different in the original data from COMTRADE

Source: Authors' elaboration based BACI HS 6 digits database, from CEPII http://www.cepii.fr, 2022.

Figure 1.3. To sustain RMG exports Bangladesh largely depend on foreign inputs



Source: Authors' elaboration based on OECD Trade in Value Added (TiVA) database, http://oe.cd/tiva.

Homegrown firms beyond RMG and incipient export diversification

Bangladesh remains anchored to an export-led growth model that relies on extremely competitive labour costs and a highly flexible business model capable of swiftly processing international orders. However, the country has also shown that it is quite capable of acquiring business know-how in more high-tech industries, including electronics and pharmaceuticals. Bangladesh has an incipient and growing electronics industry, of which 83% of the total output is marketed locally and a domestic pharmaceutical industry, focused on generic drugs manufacturing, which meets 98% of the country's essential pharmaceutical needs. Both industries target the domestic market, rely on domestic investment and local conglomerates and are heavily import-dependent. Targeted trade policies regulate the entry of foreign players and ease manufacturing costs for local producers by facilitating intermediary imports for domestic-oriented manufacturing activities. These two industries account for limited shares of manufacturing value added and even more limited shares in the country's exports, but both are growing and can play a key role in supporting Bangladesh's transition to a new development phase grounded in innovation and inclusiveness.

In global terms, Bangladesh's electronics sector is on par with that of Morocco and South Africa, accounting for around 0.07% of world manufacturing value added (MVA). It remains, however, smaller than the size of this industry in other Asian hubs such as Singapore (2.1%), Viet Nam (1%) and Malaysia (1.5%), where this sector is a major industry (48%, 27% and 24% respectively of their total MVA). Domestically, it accounts for 2% of MVA (i.e., approximately 0.3% of its GDP), and 1.2% of manufacturing employment. Production in Bangladesh is concentrated in lower-tech consumer products that are mostly sold on the domestic market. Home appliances – such as refrigerators and air conditioners – account for just over half (55%) of employment in the sector and a further 18% of the workforce is absorbed in the manufacturing of communication equipment, particularly mobile phones. By comparison, production in Viet Nam is relatively more diversified and oriented towards more technologically-intensive goods.

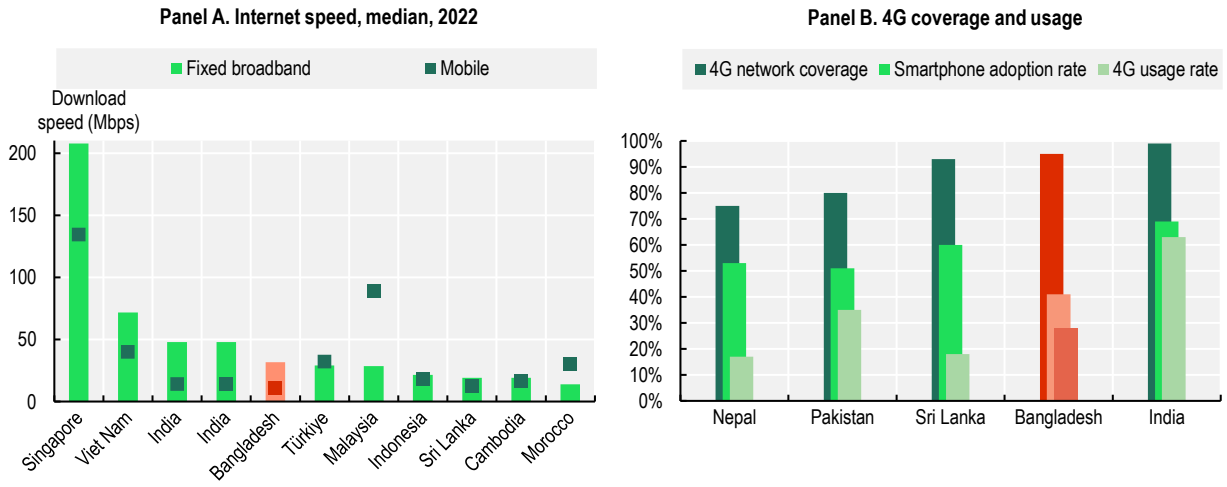
Globally, Bangladesh pharma accounts for 0.2% of the worldwide gross value added, comparable to countries like Egypt, Thailand, and Viet Nam, and trailing behind India, which accounts for 4%. Still Bangladesh is the only LDC operating in the pharmaceutical industry. Pharma represents 2% of Bangladesh total MVA and contributes 0.4% to its GDP. Drug companies employ 0.5% of the manufacturing workforce and offer salaries that are 2.6 times higher than the average manufacturing job in the country. Pharma in Bangladesh almost entirely relies on imports of sophisticated raw materials including active pharmaceutical ingredients (API), which account for 47% of all pharmaceutical imports. In fact, 90% of Bangladesh API demand is met by imports. Despite its international vocation, pharmaceuticals remain one of the least export-oriented manufacturing activities in Bangladesh. Pharma accounts for 1% of Bangladesh's exports (compared to the dominant RMG industry's 85%). Domestic exports have almost doubled over a decade, from USD 56 million in 2008-09 to USD 105 million in 2018-19, but they've grown at a rate of 6%, slower than total exports (9%).

About 90% of Bangladesh's exports are finished pharmaceuticals, but only 7% of the total value added generated by the pharmaceutical industry is exported, setting it apart from countries like South Africa and India, where a larger share of value added comes from export revenues. An updated industrial strategy can transform the pharmaceutical industry into an ally as the country continues to diversify and upgrade its socio-economic structure. Pharma is an industry with major industrial linkages and spillovers, from agrifood to chemicals. It is an industry that operates via international networks, which requires a sound local science and research and development base. It is also an industry with major social implications, from its capacity to ensure availability and affordability of essential drugs to its well-paid direct and indirect jobs. The COVID-19 pandemic has also shown the needs for more geographic diversity when it comes to pharmaceutical manufacturing. In addition, availability and affordability of essential drugs remain an unmet goal for over 2 billion people in the world, according to WHO estimates. A sound, trustworthy, innovative and effective pharmaceutical industry in Bangladesh is in the country's, and indeed the world's interests.

Progress towards digitalisation

Bangladesh had advanced in digitalisation. The government has prioritised bridging infrastructure gaps and promoting access to digital technologies, under the Digital Bangladesh Vision 2021, and is now focusing, under the Smart Bangladesh Vision 2041, on using digital technologies to upgrade business and government operations. The progress achieved has been remarkable. Today, 4G coverage extends to 94% of the territory and fixed broadband subscriptions per 100 inhabitants doubled from 3 to 6.1 between 2010 and 2021. However, multiple and gaps persist. While internet usage rose from 3% to 25% of the population in the last decade, the current share remains quite far from other economies in the region, including Viet Nam where 70% of the population uses the internet (Figure 1.4). In addition, mobile download speed in Bangladesh remains very low - 11 Mbps in 2022 - only 1/3 of the global average and eight times slower than the fastest country, Singapore. These gaps limit the capacity of the country to fully reap the benefits of digitalisation in government and business, hampering users' experiences in digital transactions and limiting the usability of the government services, of which 66% have been commendably digitalised in Bangladesh.

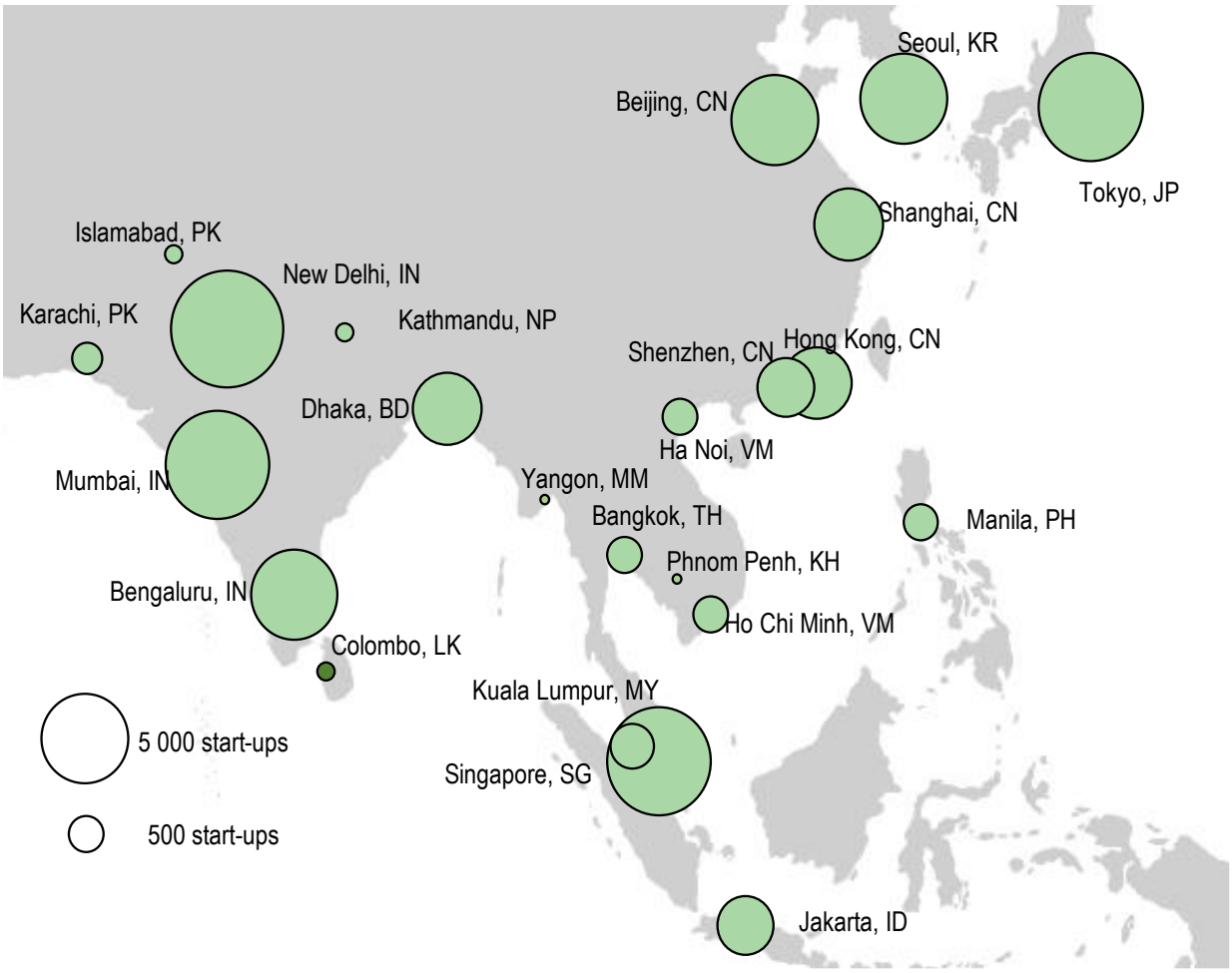
Figure 1.4. Digitalisation has advanced, but gaps remain



Note: Panel A. April 2022 median values (download speed in Mbps).
Source: Authors' elaboration based on Speedtest Global Index (Ookla), https://www.speedtest.net/it and GSMA (2021), "Achieving mobile-enabled digital inclusion in Bangladesh", https://www.gsma.com/mobilefordevelopment/resources/achieving-mobile-enabled-digital-inclusion-in-bangladesh/.

Digitalisation is contributing to enhance entrepreneurship and start-up creation. In 2022, Bangladesh was home to 2% of Asia's start-ups, up from almost zero around a decade ago. This 2%, even though small for a country the size of Bangladesh (India with a population 8 times larger is home to 23 times the number of start-ups, accounting for 40% of the region's total) puts the country on par with Viet Nam and Malaysia. Dhaka, the capital city, has grown into the 10th largest Asian start-up hub, home to 88% of all start-ups in Bangladesh or 12 start-ups per 100 000 people. This density is similar to emerging start-up hubs in the region, such as Shenzhen (China) and Ho Chi Minh (Viet Nam) (Figure 1.5).

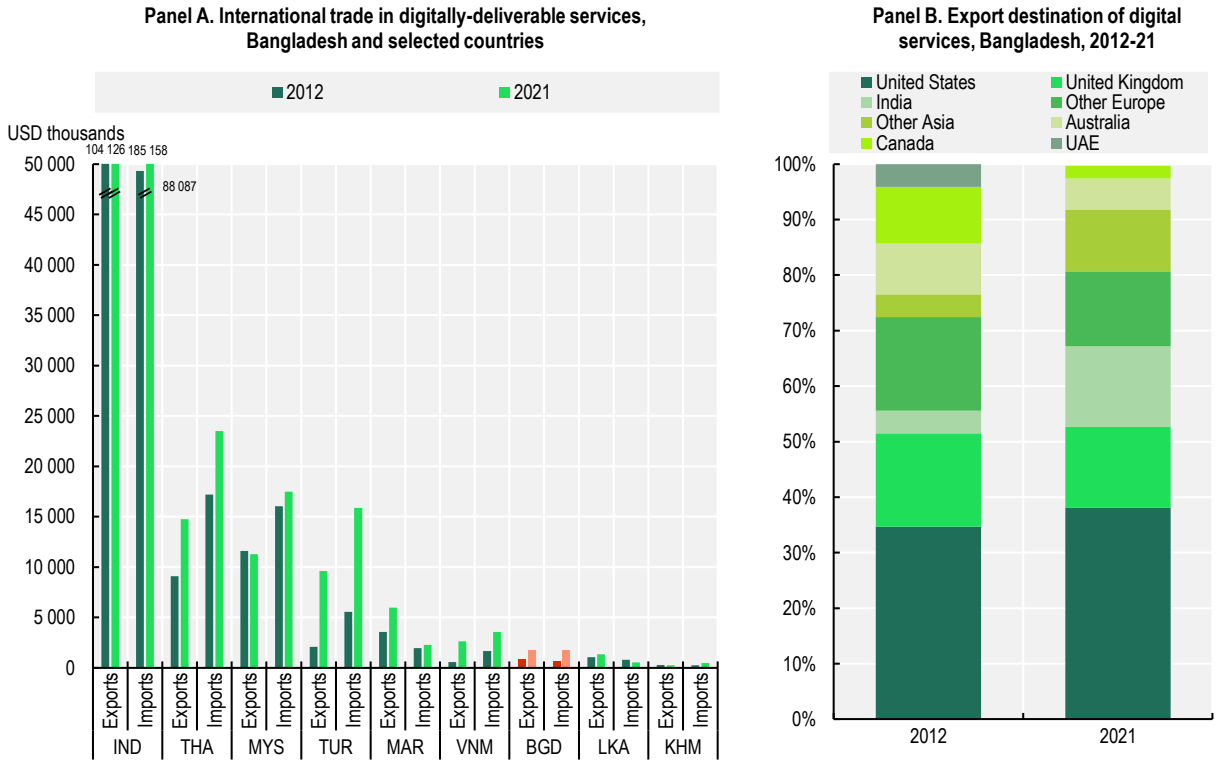
Figure 1.5. Dhaka is one of the emerging start-up hub in Asia, 2022



Source: Authors' elaboration based on Crunchbase (2023), database, https://www.crunchbase.com/.

Digitalisation is also contributing to diversifying Bangladesh's exports. The country's total exports of digital deliverable services grew from USD 780 million in 2012 to USD 1.73 billion in 2021, although this is still a far from its regional and global counterparts. Bangladesh has increased its exports of digital services to Asian markets, rising from 8% to 27% between 2012 and 2021 (Figure 1.6). While this sector promises economic potential, it also necessitates measures to address informality and ensure equitable working conditions.

Figure 1.6. Trade in digital services is growing but lags behind other countries



Note: Digitally-deliverable services are an aggregation of insurance and pension services, financial services, charges for the use of intellectual property, telecommunications, computer and information services, other business services and audio-visual and related services. The digitally-deliverable services series is based on the concept of potentially ICT-enabled services as developed by UNCTAD in a technical note in 2015 as well as in a report of the 47th United Nations Statistical Commission in 2016.
Source: Authors' elaboration based on UNCTADstat, https://unctadstat.unctad.org and Bangladesh Association of Software and Information (BASIS) annual report 2022, https://basis.org.bd/annual-report.

The current development model is under pressure due to global and domestic factors

Digitalisation and sustainability are reshaping global supply chains

The world is experiencing turbulent times, with escalating geopolitical tensions, mounting pressures arising from the exacerbation of climate change and an ongoing industrial transformation with digital technology profoundly impacting value creation appropriability and use. The industrial organisation model centred around global value chains and primarily driven by cost-competitiveness has reached its limits. In addition to global geopolitical tensions, there are two issues putting substantial pressure on supply chains globally and in Bangladesh: digitalisation and sustainability. Digitalisation is rapidly reshaping businesses and jobs, altering power dynamics, and affecting the generation, distribution, and capture of profits. Emerging technologies like the Internet of Things (IoT) and artificial intelligence (AI), coupled with evolving trade and investment trends, are changing work organisation, and diminishing the advantage of low labour costs. In addition, the acceleration of climate change is adding pressure to redefine work modes, production processes, consumption patterns, trade practices, and even overall societal and territorial structures to ensure economic practices align with the well-being of people and the planet.

Sustainability is also paramount for Bangladesh in relation to the future of RMG. Environmental concerns including groundwater pollution, airborne waste, soil degradation, and noise pollution require substantial attention and urgent action in Bangladesh. The garments industry's global carbon footprint is significant, accounting for 4-6% of carbon emissions and almost 20% of wastewater generation. Collaborative efforts and shared and transparent responsibility across the value chain, standardised practices and due diligence are key moving forward. RMG generates substantial waste in the country, notably pure cotton waste amounting to 250 000 tones out of the 577 000 tonnes produced in 2019. Recycling this waste could yield substantial financial benefits, while reducing imports of textile fibre. Initiatives such as the Circular Fashion Partnership hold promise in upcycling post-production fashion waste, which would be a step in collectively steering the sector towards a more sustainable future.

Climate change and natural disasters remain threats in Bangladesh

Bangladesh is among the world's most exposed countries to climate and weather-related hazards. Over 50% of its land lies below six meters above sea level and approximately 80% of its population is exposed to extreme weather risks. These challenges are exacerbated by rapid urbanisation, high population density, and gaps in infrastructure development. In addition to severely affecting human development, the rise in frequency and impact of disasters caused by the acceleration of climate change is also hampering Bangladesh's economic development potential and industrial competitiveness. Floods, driven by storms and heavy rainfalls frequently disrupt energy supplies, even with flood protection structures in place at thermal power plants. This severely impacts domestic agricultural production and disrupts transport and logistics, which leads to substantial economic losses in key sectors including agriculture, logistics and manufacturing. The vulnerability to natural disasters increases business uncertainty and trade unpredictability, increasing the costs of investing and doing business in Bangladesh. Easing vulnerability to climate change and natural disasters in Bangladesh is a human and an economic imperative that requires urgent attention to sustain future progress.

Transforming the economy is a pressing need

The current economic development model characterised by the overdependence on one export-oriented, import-dependent, low-tech, labour-intensive industrial segment (i.e., RMG) and the presence of a handful of local domestic-oriented, import-dependent conglomerates operating in a limited, albeit essential, consumer goods sectors has exhausted its capacity to deliver Bangladesh the inclusive and sustainable growth the world economy and the country needs.

The current economic model also makes Bangladesh increasingly and extremely vulnerable to external shocks and exacerbates Bangladesh's persistent trade deficit. The trade deficit is ballooning despite export growth, as imports have risen markedly due to growing energy and input needs to sustain established domestic and export-oriented industries, inflationary pressures and reduced remittances. The balance-of-payments deficit reached USD 7.2 billion in the first half of FY23, up from USD 5.3 billion in FY22, creating considerable pressure on foreign exchange reserves.

Labour productivity growth in Bangladesh remains excessively low, standing at 3% between 1990 and 2019. By 2019, Bangladesh's labour productivity was 9% of the United States, trailing behind India and Viet Nam, which albeit still far from the frontier, stand at 12% and 14%, respectively. The country risks being trapped in a low-wage and low-productivity spiral. Transforming industries to make them secure, safe and decent places to work for all individuals—and ensuring women are not discriminated against—is a key step forward in Bangladesh's next development phase.

Bangladesh remains the third-biggest recipient of official development assistance (ODA), after Syria and Egypt in absolute terms. While early development co-operation efforts focused on poverty alleviation, rural development and disaster preparedness, international partners are increasingly active in supporting

Bangladesh's economic transformation. Overall, around 32% of total ODA to Bangladesh between 2018 and 2021, which rounds up to USD 8.9 billion, focused on economic transformation programmes, making Bangladesh one of the countries where ODA focuses the most on economic transformation. Within the ODA for economic transformation, infrastructure and energy account for the most, accounting for 75% of the total. India, China and Russia are also active in Bangladesh, especially in the transport and energy sectors, most specifically in power plants.

To continue succeeding, Bangladesh needs to update its business mindset and the policy approach

Bangladesh's achievements should not lead to complacency as deep fragilities persist and risk hampering future progress. Bangladesh is grappling with multiple challenges, from mitigating the impacts of climate change to preparing for LDC graduation. Additionally, the country must address the growing demands for increasing transparency and accountability in public and private actions arising from domestic and international stakeholders.

To secure a prosperous future, Bangladesh needs to prioritise new drivers of growth: shifting from a price-led competitiveness model to one grounded in quality and innovation.

The upcoming LDC graduation can serve as an important push to modernise domestic policy making and to update the international partnerships the country relies on and participates in. Bangladesh is poised to shift to its next development phase. Three issues emerge as pivotal: future-readying the state, shifting mindset in doing business and modernising the policy mix. Digitalisation and international partnerships are two powerful drivers of change that Bangladesh should harness to move forward and implement the reforms needed to continue succeeding.

Future-readying the state

Bangladesh needs to future-proof the state to endow it with necessary and modern institutions, transparency and accountability mechanisms, and domestic resource mobilisation capacities to operate as a modern, value-driven and rules-based system.

Despite its accomplishments, Bangladesh remains a young nation. The process of building a modern nation state is still in the making. Bangladesh is an institution-rich country. Currently the public sector consists of 42 ministries and a multitude of public institutions, agencies and committees often with overlapping responsibilities and reporting lines. The experience of countries with modern and efficient institutional arrangements shows that what matters most for creating an effective state is not the number of institutions *per se* but the quality and clarity of purpose of the institutions and the accountability mechanisms in place to measure impact and track progress. While Bangladesh has created numerous institutions and has made some progress in modernising the machinery of the state, the institutional structure remains unwieldy and top heavy, and in practice flagship initiatives continue to be driven from the highest level in government, making co-ordination at lower layers of the structure difficult.

Public expenditure is expanding but resources remain limited. Its total public budget in 2023 is USD 61 billion, which is approximately three times the total annual revenue of a multinational company such as H&M. Bangladesh needs more resources to invest in achieving a sustainable and prosperous future. In 2020, total tax revenues reached 10.2% of GDP. Although this is higher with respect to the 8.5% of 2007 and in line with Indonesia and Pakistan it remains lower compared to other countries in the region, such as Viet Nam with 22.7%, Philippines with 17.8% or Thailand at 16.5%. It also needs to increase its operational capacities. Overall, the country's capacity to implement planned budgeted actions is less than 20%. The prevailing way of doing business remains too complex and personalised.

Advancing towards a rules-based, transparent, and accountable political and government system will be crucial. Simplifying and streamlining the governance system and continuing cutting red-tape will also be priorities. Empowering institutions and endowing them with the capabilities of functioning amidst the political alternation inherent in modern democracies is a gradual and learning-by-doing process, and Bangladesh needs to continue advancing in this respect. Multiple institutions with often overlapping responsibilities and a pivotal role played by the government leadership is a common feature in countries engaged in creating modern nation states. In the case of Bangladesh, this complexity carries an historical legacy that necessitates time for resolution to ensure national cohesion.

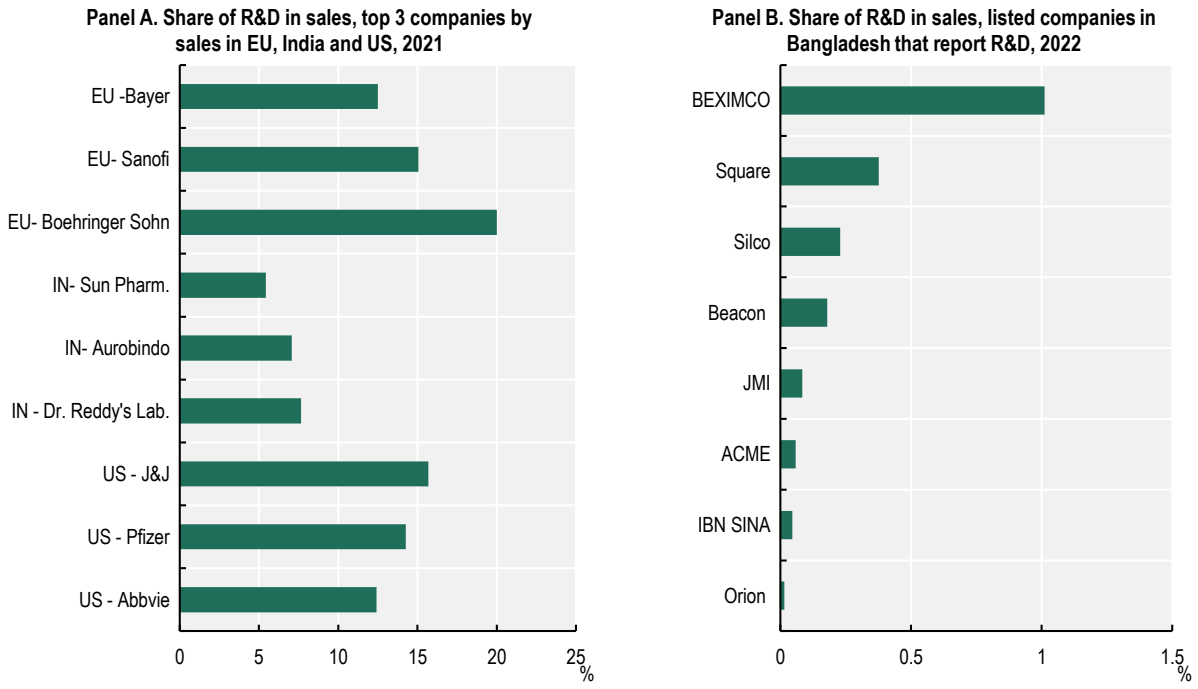
An empowered state, operating through effective institutions is also a transparent and open state. A pivotal objective for Bangladesh in sustaining its trajectory of success is to harness digital technologies, fostering enhanced efficiency and transparency in interactions between citizens, businesses, and the government. This entails facilitating government accountability across policies, investments, and expenditures by ensuring accessible information and responsiveness to the needs of citizens and businesses. The recent announcement to amend the Digital Security Act, issued in 2018, represents a step forward. It will be crucial that the amendments point to greater transparency and accountability.

Shifting mindsets in doing business

Bangladesh knows how to do business, domestically and internationally. Enhanced scrutiny of the social and environmental impact of businesses as well as the changing trade preferences associated with Bangladesh's graduation from LDC status are pushing the country to alter its business model.

Bangladesh has untapped innovation potential. In Bangladesh, only 1.2% of firms invest in R&D—less than half the rate observed in Indian firms. A mere 2.6% of Bangladeshi firms employ technologies licensed from foreign counterparts, in contrast to Viet Nam's 10.8% and Türkiye's 14.4%. Even in pharma, which tends to be a particularly R&D-intensive industry, Bangladesh invests little in research and development. The top two investing firms devoted 1% and 0.4% of their business turnover to R&D, compared to 15% of the top world pharma R&D firms. Bangladesh also suffers from overall gaps in technical and managerial skills for innovation. Pharma in Bangladesh should explore new business areas, including partnerships to serve pharmaceutical needs in LDCs and other poor countries in need. The industry should also engage more in prospective studies to identify future opportunities and to meaningful partnerships with local research centres.

Figure 1.7. Firms in Bangladesh invest little in R&D, even in pharma



Note: Panel A is calculated based on net sales which is defined as sales excluding sales taxes and shares of sales of joint ventures and associates. Panel B is calculated based on gross revenue/sales.
Source: Authors' elaboration based on EU (2022), The 2022 EU Industrial R&D Investment Scoreboard https://iri.jrc.ec.europa.eu/scoreboard/2022-eu-industrial-rd-investment-scoreboard, and Marketwatch (2023), stock financial statistics (database), https://www.marketwatch.com/investing.

Domestic firms in Bangladesh should step up in their innovation efforts and could play a more active role in fostering the development of a local innovation ecosystem. They could also benefit from the growing start-up scene in the country, and increasing linkages with academia and research centres. The private sector in Bangladesh should take responsibility in fostering an innovation-driven growth process, notably by improving traceability, increasing quality and compliance with international quality standards, as well as by investing more in R&D and innovation.

To do so, the government needs to update its policy approach and update the incentives it offers to the private sector. In fact, the conditions that propelled private sector development in Bangladesh are linked to a highly protected market environment and to a policy toolbox focused which—despite reforms—has remained fundamentally unchanged since the late 1970s. Changing business mindsets in the domestic and international private sector is not an easy task. It requires the modernisation of the policy toolbox to actually induce pro-innovation behaviours in firms. While there is no unique way to effectively craft a pro-innovation policy, global good practices point to the need to set up targeted innovation funds and to endow institutions with the capacity to mobilise resources through different mechanisms, from grants to fiscal incentives and insurance. This needs to happen at all levels of firms' development: from seed to expansion. Modernising the financing sector to inject in the system medium- and long-term financing for innovation is also a common good international practice. Targeted policies will also need to be included to ensure SMEs benefit from the incentives to innovate.

Bangladesh has homegrown firms, and although limited in number they have resulted in the formation of a domestic business elite. But businesses continue to be run in two prevailing modes: 1) selling basic and essential products catering to the domestic market; and 2) exporting cost-effective but labour-intensive

products thanks to cheap labour. These two prevailing business strategies are nurtured by a targeted policy approach that facilitates domestic production through regulations and controls. This intervention limits the entry of foreign producers to serve the domestic market and facilitates access to imports for domestic manufacturing activities.

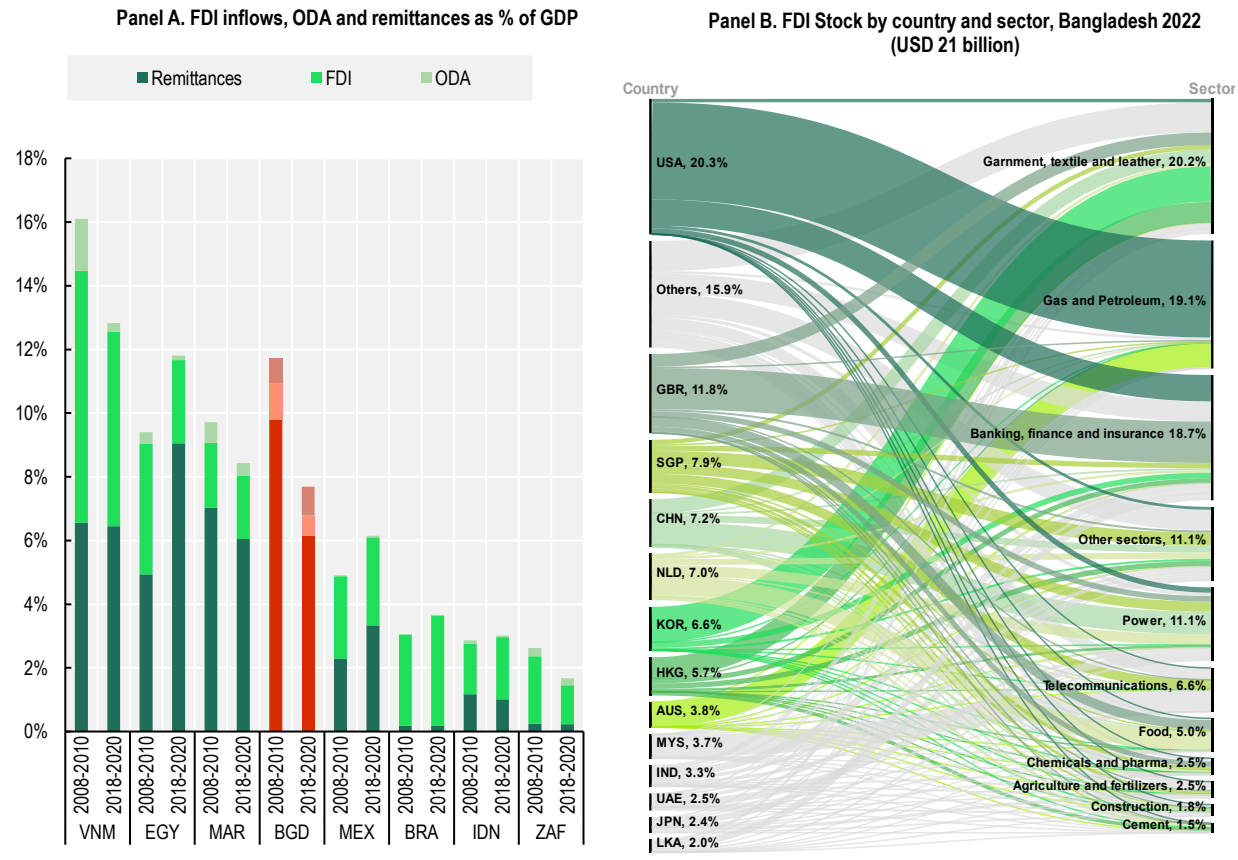
The prevailing price-led market-access mindset is the result not only of current incentive schemes, which actually lack targeted conditionalities to support innovation and learning, but also the prevailing approach of international partners, who still see in Bangladesh a business-deal and not an innovation partner.

FDI could also play a bigger role in fostering diversification, learning and innovation. Although attracting FDI is among the top government's priorities, FDI to Bangladesh remains limited and concentrated in traditional sectors. FDI accounts only for 0.7% of GDP in the country, versus 6% in Viet Nam and 2% in Morocco (data refers to 2018-20). During 2018-22, Bangladesh's remittances were seven times higher than FDI. The top two investors in Bangladesh are the United States and the United Kingdom, accounting for 20% and 11% of total FDI to the country.

In addition to being limited, FDI in Bangladesh reinforces the existing specialisation pattern. Contrary to the global trend where FDI significantly propels development in cutting-edge sectors, including environmental technologies which constituted about one-quarter of investments during 2018-2022, FDI in Bangladesh focuses on manufacturing (40% of total during 2017-22), with garments and textiles representing one-third of it, followed by food products (Figure 1.8). In garments and textiles most FDI continues to be driven by the price competitiveness of domestic production due to persistent low labour and environmental costs. Other factors include established contract manufacturing and outsourcing arrangements with leading global brands, mostly from the United States, Canada and Europe. To make the most of FDI and ensure it contributes to shift to an innovation-driven growth, the policy for FDI attraction, as well as the incentives in place need to be updated.

The EU, Bangladesh's main trade partner, has taken productive steps to enable a new, more innovation-oriented way of doing business in Bangladesh. In 2016, the EU established in collaboration with Bangladesh's Ministry of Commerce the EU-Bangladesh Government Business Climate Dialogue. The initiative operates as a platform to foster dialogue and promote reforms. In addition to identifying digitalisation as a key area for enhanced partnership between Bangladesh and the EU, the dialogue led to the creation of the EU Chamber of Commerce in Bangladesh. The entity, which federates EU businesses operating in Bangladesh, is a major positive step to support a shift and an upgrade in the way of doing business in Bangladesh. It holds promise when it comes to enabling domestic reforms and updating international partnerships. To maximise participation in the Business Climate Dialogue, the government of Bangladesh should set up clear institutional mechanisms to enact reforms discussed by the Dialogue.

Figure 1.8. FDI could do more for Bangladesh diversification and innovation efforts



Source: Author's elaboration based on World Bank, https://data.worldbank.org, UNCTAD stat, https://unctad.org/statistics and Bangladesh Bank https://www.bb.org.bd/.

Modernising the policy approach

Bangladesh needs to update its economic model to continue to succeed. To do so, it needs to diversify its export base, develop a strategic network of international partnerships, and foster a more innovation- and quality-based industrial development. It also needs to overcome the duality of its industrial model with an export oriented RMG sector and highly protected industries operating for the domestic market.

To get there, Bangladesh needs to reconsider its policy approach. The current policy framework is not conducive to creating a favourable environment for innovators. The legacy of a policy framework, resembling that of India and Pakistan in the 1950s, which heavily emphasises regulations and controls and reliance on domestic demand, without targeted policies to foster gradual upgrading and innovation, persists. Bangladesh's policy toolbox to support industrial development has not changed much since the early years of the country's founding. The accumulation of domestic industrial capabilities in Bangladesh, in RMG as well as domestic-oriented industries such as pharmaceuticals and electronics, relied on a combination of targeted domestic policies and a conducive international framework which allowed Bangladesh to substantially diverge from WTO rules on trade and intellectual property. LDC graduation will affect Bangladesh's capacity to use the current policy toolbox to continue nurturing industrial capacities and question the multilateral compliance of some of the specific policies adopted.

Since the 1980s, Bangladesh has focused on attracting FDI using simple but quite generous incentive packages, whose effect was limited by excessive complex institutional arrangement and the complexity of

doing business locally. Not surprisingly, the impact of this approach to attract FDI has been limited. In addition, export support has remained fine-tuned to the needs of RGM, resulting in practice in an anti-export bias for other industries. And support to industrial competitiveness lacks incentives for learning and innovation and relies mostly on tariff management and direct non reimbursable transfers (Figure 1.9).

Policies will need to be upgraded and will need to shift from focusing on market access and tariff management to more modern policy tools. The current policy framework does not incentivise investing in innovation in domestic and foreign firms. It also limits foreign investors' appetite for investing in the country, despite its significant market potential and strategic geographic location. Bangladesh must further reduce red tape, enhance digital and physical infrastructure, and simplify the complexities of conducting business within its borders.

The current policy approach favours incumbent firms and protects the *status quo* while the country should look ahead and implement a modern policy mix that encourages learning, risk-taking, and innovation while at the same time providing new business opportunities for new firms and sectors. Despite the changes in rhetoric and policy branding, innovation is still not on the radar of Bangladesh's policy approach. In fact, even in the use of TRIPS flexibilities more could have been done to effectively use them to enable shifting from pure manufacturing to incentivise research and innovation in the pharmaceutical industry.

LDC graduation will affect Bangladesh's flexibility to continue nurturing industrial capacities and poses questions about the international compliance of some of the specific policy tools in use. In particular, LDC graduation raises concerns regarding the overreliance on tariff management and direct subsidies. The expiration of the TRIPS waiver will also substantially impact the number of patents the country will need to consider and their validity date, therefore impacting local manufacturing capacities. This is particularly relevant for the pharmaceutical industry. However, regardless of the outcomes of the ongoing negotiations to extend the TRIPS waiver granted to LDCs beyond the Bangladesh's graduation year (to match the deadline set for all LDCs in 2033) Bangladesh needs to update its policy framework to make it more modern, innovation-oriented, and therefore globally compliant. In particular, the country needs to:

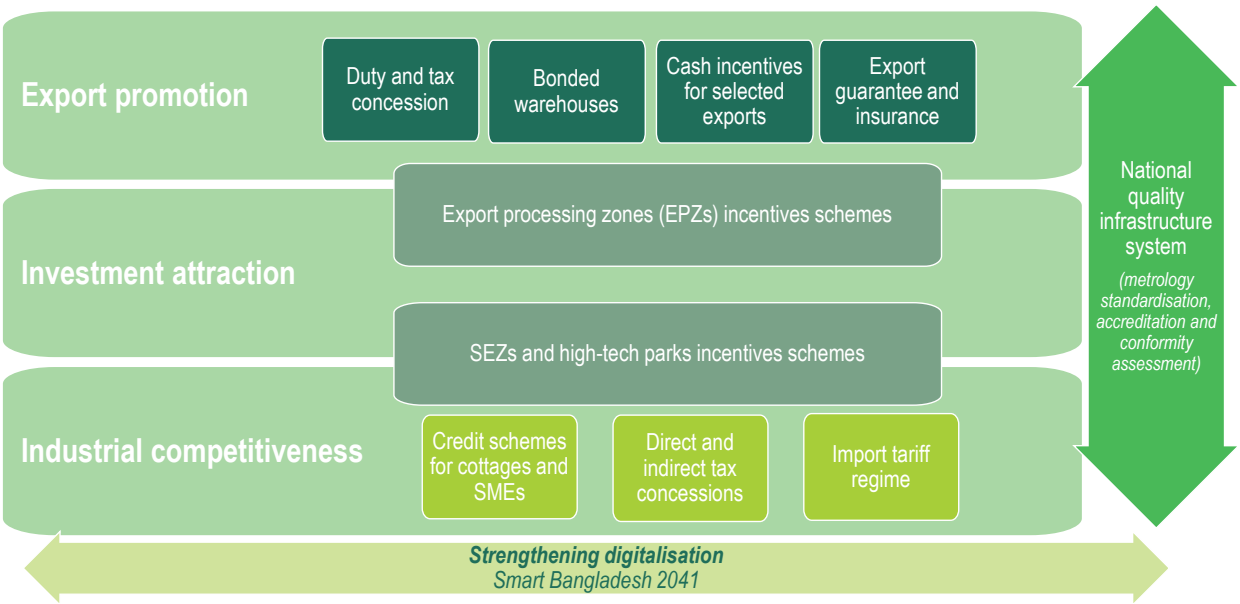
- Develop a more co-ordinated approach between industrial, trade and FDI policies to ensure they all act together to achieve the main objective of sustaining innovation and continuing to upgrade the Bangladeshi industrial system. Attracting FDI is the goal, but doing it in a way that fosters learning in the economy is equally important. A way to do this for Bangladesh would be to update the incentives packages and shift to a more targeted FDI approach, proactively looking to attract more knowledge-intensive FDI, and to introduce conditionalities to ensure that the local economy gets the most out of FDI.
- Simplify and clarify the institutionality for attracting FDI — currently comprising four different agencies with overlapping roles — is also necessary to increase the ease-of-doing-business. Despite progress, including the online platform launched in 2021 to serve as a one-stop-shop for investors, Bangladesh remains a difficult country for foreign investors to operate in, due to the persistence of personalisation in dealing with government-business relations and the high level of complex bureaucracy system. Bangladesh should modernise the institutional arrangement and endow the agencies in charge of attracting FDI with the tools and resources to operate in a more business-oriented way. For instance, the country needs to reconsider its institutionality and de-link its management from the state bureaucracy.
- Modernise the incentive packages to ensure local industrial development, innovation, and learning, including by developing targeted tools to foster innovation, strengthen the skills, knowledge and science base, as well as adding conditionalities to FDI incentive packages. This can be done in different ways and identifying an appropriate way for Bangladesh to craft its new policy mix is a crucial step in the ongoing process of state building. In particular, Bangladesh would benefit from setting up an innovation fund linked to major national innovation challenges, from greening and upgrading the RMG to fostering industrial upgrading in domestic industries. Progressively

Bangladesh should shift from a policy approach mostly focused on tariff management, to a more sophisticated one, relying on different schemes including setting up matching funds for innovation, where state support is subject to private sector investment. While Bangladesh's distinctive feature of micro-finance institutions has played a key role in poverty reduction, endowing the state with medium- and long-term financing capacities for national transformative projects should be contemplated in the journey towards becoming a high-income economy.

- Develop a strategic network of trade and international partnerships, including leveraging the potential of regional integration. Bangladesh is one of the least regionally integrated countries in Asia. While 75% of its merchandise imports come from Asia, only 16% of its exports are sold in the region. Bangladesh stands to gain from developing a targeted strategy to engage with Asia, including through ASEAN. The country also lacks a network of international agreements. Negotiations are ongoing with its main trade partner, the European Union (EU), regarding LDC graduation, and a potential transition towards a potential GSP+ scheme. This would grant preferential access to up to 66% of tariff lines within the EU market upon proven progress in several areas including transparency, accountability and workers' rights.
- Mobilise resources to meet challenges, including a budget of USD 900 000 for R&D projects in 2021-22 for the High-Tech Park Authority and the Ministry of Science and Technology is too little to engender change in the country. However, the priority is not only to increase resources, but to endow the state with the necessary accountability processes to ensure transparency and efficiency in resource mobilisation. Digital technologies can be leveraged to make all the information related to government spending and investment available to the public.

Figure 1.9. Bangladesh needs to update the current policy approach to transform the economy

Overview of priorities and tools for production transformation, Bangladesh, 2023



Note: The figure is not meant to be exhaustive. It provides a snapshot of the main public instruments that country has in place.
Source: Authors' elaboration based on official information from Bangladesh Finance Division, Ministry of Finance, Country Budget Speech 2022-23. Return to the Path of Development Leaving the COVID-19 Behind and Budget speech 2022-23, https://mof.portal.gov.bd and Bank of Bangladesh, Foreign Exchange Policy Department, https://www.bb.org.bd.

Some noteworthy positive steps include: the advances in national quality infrastructure system which is key to ensure traceability, safety and standards compliance, and the reforms approved in 2022 to update

the 1911 patent act, as well as the Start-up Bangladesh initiative. The API Park is a welcome initiative, which needs time to be fully developed. The government and the private sector should also continue engaging in a constructive dialogue reaffirming a shared commitment to prioritising innovation.

Leveraging digitalisation and international partnerships

Digital technologies could transform and make industrial development in Bangladesh inclusive and sustainable. Digitalisation opens innovation, productivity, and sustainability opportunities in all economic areas, both domestic and trade oriented (e.g., agrifood, pharmaceuticals and electronics). It is also essential to transform RMG and to explore opportunities in the circular economy. Digitalisation is pivotal for international accountability, traceability and standards compliance in government and businesses. It can contribute to increasingly associate “made in Bangladesh” with the quality and standards the country is pursuing for its next development phase. Digitalisation also contributes to export diversification, enabling the country to trade digital services and content. Advancing in enabling digitalisation, it is urgent to close digital infrastructure gaps and update the regulatory framework. The 2018 Digital Security Act needs to be amended. Actively engaging in global dialogues on topics such as a regulatory framework for emerging sectors (including AI) is paramount for Bangladesh.

A change in mindset from the international partners is also essential. International partners need to engage with Bangladesh beyond well-worn topics such as responsible business conduct and transparent supply chains. They need to establish comprehensive partnerships to ensure transparent, inclusive, and sustainable business development. This extends to investing in the greening of Bangladesh's energy mix and industrial fabric, while exploring partnerships in the circular economy and bioeconomy.

Bangladesh already has a track record including numerous accomplishments, milestones and a proven capacity to implement reforms and address pitfalls. The country can build on what has been achieved and should accelerate reforms to continue on its path to further success. As the eighth-most populous nation worldwide, Bangladesh has the capacity and responsibility to emerge as a significant player in the multilateral system of tomorrow. A private sector ready to innovate and international partners committed to engage on equal footing with local stakeholders are key going forward. Bangladesh’s prosperous future depends as much on its own domestic efforts as it does on the readiness of international partners to share responsibilities in an effort to help the country improve on its fragilities and to jointly craft a mutually beneficial way of managing openness and doing business.

2 Bangladesh: A journey of economic transformation

This chapter offers an overview of Bangladesh's developmental journey since its independence in 1971. It delves into the pivotal role of manufacturing, which has not only facilitated the country's sustained growth but has also been a driving force in the transformation of its economy and society. Recognising the need for sustained progress, it advocates for an update of the economic development paradigm currently characterised by a dualistic approach that, over time, has favoured the establishment of the world's second-largest readymade garment industry. In a context of increasing domestic and external fragilities, the chapter provides suggestions that should guide Bangladesh towards a more dynamic and resilient trajectory of development. This entails embracing innovation, fostering regional integration, and optimising the role of foreign direct investment.

Introduction

Since gaining independence in 1971, Bangladesh has achieved impressive progress. From a country known for its extreme poverty and fragility with a predominantly agrarian landscape, the country embarked on a transformative journey that ultimately culminated in the establishment of a manufacturing-driven economy. After independence, Bangladesh was the world's ninth-poorest country, with a nominal income per capita of USD 95, an infant mortality rate of 210 deaths per 1 000 births, and an average life expectancy of 46.6 years (United Nations Department of Economic and Social Affairs, 2022[1]). At the time of the country's foundation, Bangladesh was facing several challenges. The country was devastated by the consequences of the war for independence, as well as the Bhola cyclone that struck in 1970 and a subsequent flood-induced food crisis in 1974. These multiple crises took a shattering toll on both lives and infrastructure, making Bangladesh known globally for its extreme poverty (Lewis, 2011[2]; Mookherjee, 2011[3]). Estimates indicate that during the initial years of independence, the country lost over 5 million lives, equivalent to 8% of the population at that time. In addition to the profound social and humanitarian implications, the economy witnessed an 84% decline in agriculture and a 66% contraction in industrial production by the end of 1974 (Bangladesh Bureau of Statistics, 2018[4]). This period also brought about a soaring inflation rate, approaching triple digits. In 1975, the United Nations classified Bangladesh as a Least Developed Country (LDC), making it eligible for international support measures targeted at the world's poorest countries (Van Schendel, 2020[5]).

In the aftermath of independence, international donors mobilised major resources and supported improvements in health, nutrition, and living standards, striving to alleviate extreme deprivation and foster inclusivity. Official development assistance (ODA) to Bangladesh, amounting to 8% of GNI by 1977, reflected international solidarity in aiding the nation's revival. From 1971 to 1981, Bangladesh received USD 8 billion in aid, placing it behind only India, Syria, and Egypt and surpassing neighbouring countries like Pakistan, Indonesia, and Viet Nam (OECD, 2023[6]) Also, local non-government organisations (NGOs), played a pivotal role and complemented the collective effort, notably by curtailing extreme deprivation and exclusion. During this period Bangladesh became a test case of how aid can propel development (Faaland and Parkinson, 1977[7]).

Since then, Bangladesh has advanced across all fronts, thanks to a combination of government policies and international support. The country has undergone a profound transformation of its economy, transitioning from a predominantly agrarian subsistence society into a global manufacturing hub. A total of 20.5 million people lifted themselves above the extreme poverty line between 1991 and 2017, leading to a reduction in the poverty rate from 43.5% to 14.3%. Bangladesh achieved lower-middle-income status in 2015, and in 2018, the United Nations Committee for Development Policy (CDP) recommended the country for LDC graduation based on progress achieved in three criteria: gross national income per capita, human assets, and economic vulnerability. The standard preparatory period towards LDC graduation- three years- expected in 2024 was postponed to 2026 to account for the challenges posed by the COVID-19 pandemic. Presently, Bangladesh stands as the eighth-most populous country in the world and boasts the world's 35th largest economy by GDP size, ranking between Viet Nam and Thailand. Despite these advancements, Bangladesh’s development model faces pressing challenges and the country remains the third-largest global recipient of Official Development Assistance (ODA), trailing behind Syria and Egypt. In 2021, it received a total of USD 5 billion from members of the OECD Development Assistance Committee (DAC), equivalent to 1.2% of Gross National Income (GNI) (OECD, 2023[6]).

This chapter analyses Bangladesh's economic transformation, emphasising the progress achieved, notably in sustaining growth, developing local manufacturing capabilities engaged in global trade, and the more recent strides made in digitalisation. The chapter subsequently discusses the limitations of the current development model in Bangladesh, underscoring the risks associated with overreliance on the Ready-Made Garments (RMG) sector. Furthermore, the chapter addresses challenges related to food and energy dependency, environmental sustainability, and inclusivity. The chapter concludes by identifying

three priorities to support diversification and facilitate the transition to a next development phase that is not solely reliant on low-cost labour but, rather, centred around quality and sustainability. These priorities encompass fostering an innovation culture within government and businesses, strengthening regional integration, attracting higher quality Foreign Direct Investment (FDI), and maximising the potential of international partnerships to transform the economy. Chapter 3 of this PTPR delves into the policies that underpinned Bangladesh's economic transformation and identifies areas for reform to ensure continued success. Chapter 4 zooms in on two industries: electronics and pharmaceuticals.

Bangladesh has deeply transformed its economy and society

Since achieving independence, Bangladesh has undergone an impressive transformation from a predominantly rural and agricultural economy to a more urbanised and industrialised one. The contribution of agriculture to GDP decreased from 62% in 1975 to 35% in 1981, while the contribution of industry, including construction, increased from 9% to 14%. This transformation was accompanied by a significant expansion of the capital city, Dhaka, whose population grew from 2 million to 3.3 million during the same time period (World Population Review, 2017[8]; World Bank, 2023[9])

From the 1980s onward, the country has implemented a targeted industrialisation strategy focused on nurturing domestic industries (see Chapter 3). This section provides an overview of Bangladesh's economic transformation, concentrating on three areas where progress has been made over the last forty years. These include sustained growth, the accumulation of industrial capabilities (Bangladesh is now the second-largest global hub for RMG manufacturing), and the more recent developments in embracing digitalisation to revolutionise the economy.

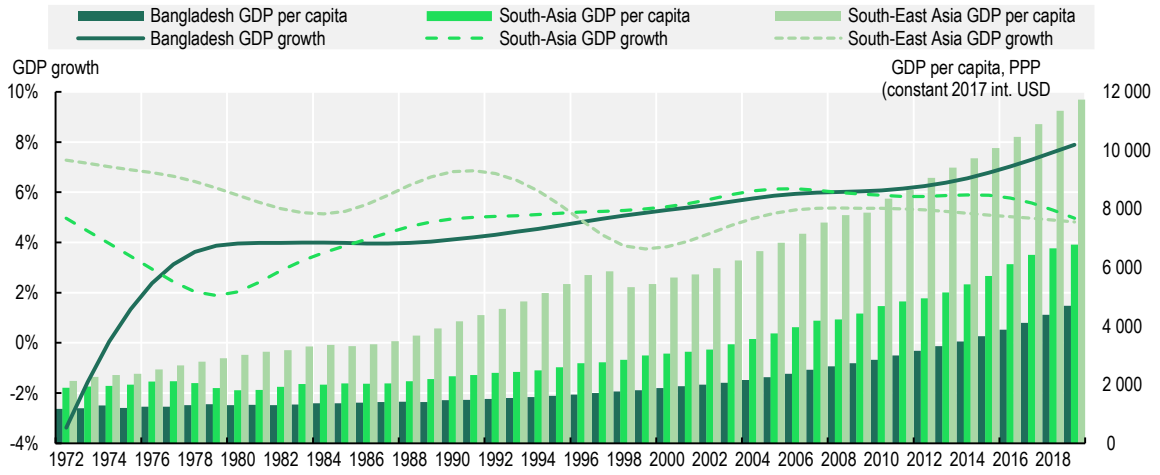
Bangladesh is a South-Asia growing economy

Bangladesh’s GDP growth performance has been remarkable. After stagnant growth rates in the post-independence era, the country recorded annual average GDP growth of 4% in 1976, which remained stable until the 1990s. This growth sustained the country’s progress, albeit at lower rates than other economies in South and South-East Asia. Since the start of the 21st century, Bangladesh's annual GDP growth rate has been, on average, 6%; and since 2010, the country has recorded higher growth rates than the South-Asia average.

Sustained GDP growth since the late 1970s has been accompanied by significant human development gains. Life expectancy has increased to 73 years by 2020, up from 66 in the year 2000, and the infant mortality rate has declined to 24 per 1 000 live births, a substantial decrease from the previous 60 deaths during the same period. As of 2021, GDP per capita was USD 1 684 (in constant 2015 USD). Although Bangladesh has managed to narrow the gap in GDP per capita with other countries in South Asia, similar progress has not been achieved with Southeast Asian economies. In the 1970s, Bangladesh's GDP per capita stood at 55% of the Southeast Asian average and by 2021, it had regressed to 40% (Figure 2.1).

Figure 2.1. Bangladesh average annual GDP growth has outpaced the South-Asia average since 2010

Bangladesh GDP growth and GDP per capita, 1972-2021



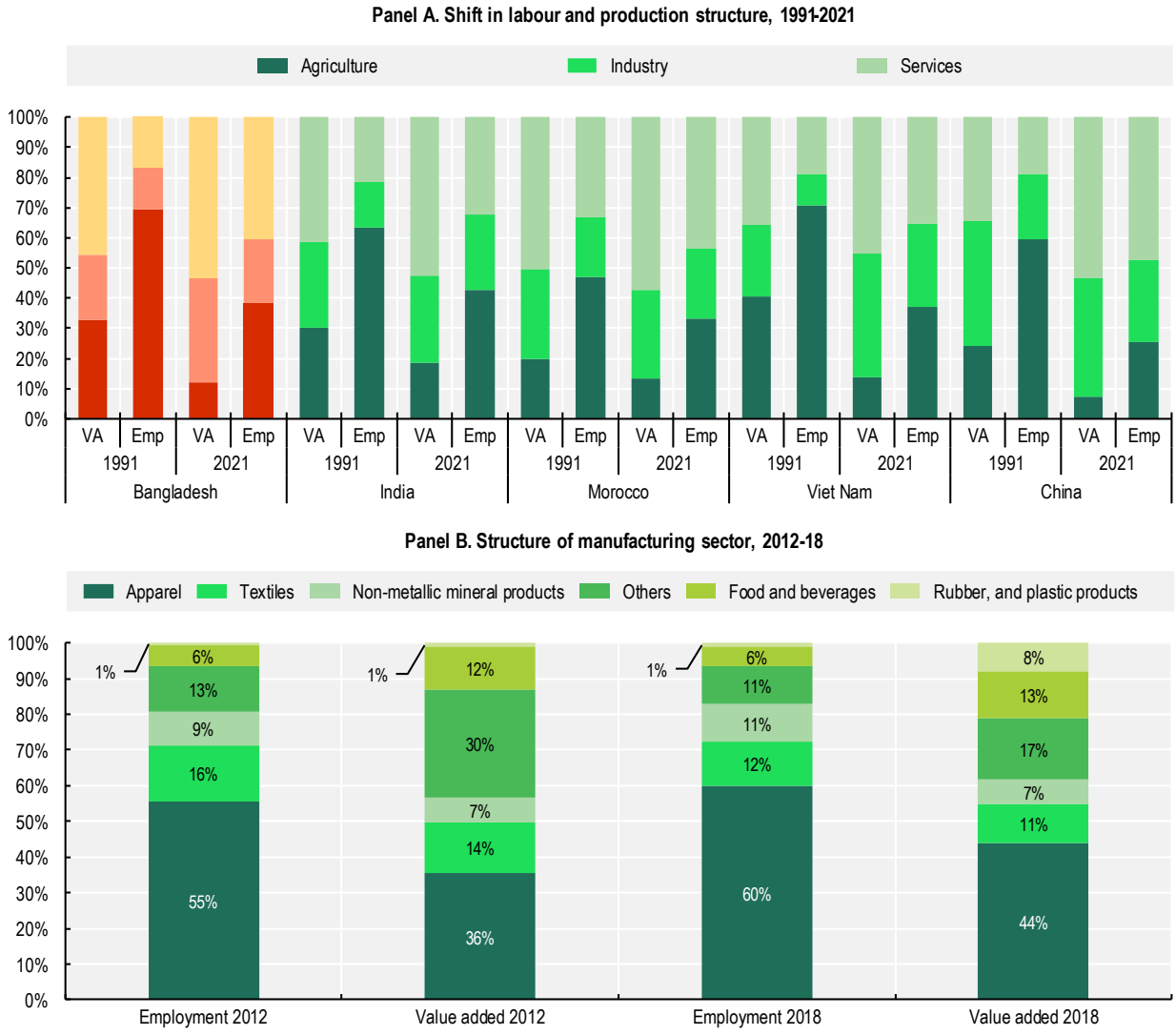
Note: South Asia excludes Bangladesh. Regional aggregates follows UN classification. For GDP growth, HP filter was applied (lambda 54.12), according to OECD guidelines, http://dx.doi.org/10.1787/pdtvy-2016-en
Source: Authors' elaboration based on data from Penn World Table (PWT) version 10.0. Real GDP at constant 2017 national prices (in mil. 2017 USD)

Now a global garment manufacturing hub

Bangladesh's economic landscape has experienced a profound economic transformation. Like many other Asian countries, since the 1990s the industrial sector's (including construction) contribution to GDP has surged from 18% to over 31%, and the services sector has expanded from 40% to more than 50%, echoing trends observed across Asia (Figure 2.2, Panel A). In these countries, the process of industrialisation has been characterised by a substantive structural shift within their economies. Initially grounded in import substitution policies aimed at fostering local industrial capabilities, these economies have transitioned towards more sophisticated industrial sectors. In tandem, they have fostered innovation and attracted foreign direct investment (FDI), which ultimately culminated in diversifying their production and exports. This diversification journey was accompanied by an elevation of economic structures, with a greater emphasis on higher value-added activities and sectors, including basic metals, electrical and electronics equipment, and chemicals (Lee, 2022[10]).

Bangladesh's economic transformation has exhibited a distinctive characteristic—an industrial system with dual traits. On the one hand, the country has an export-oriented sector primarily driven by Ready-Made Garments (RMG), with many firms acting as sub-contractors for multinational corporations. On the other hand, a more shielded, domestically-oriented sector aims to supply the domestic market. This dualism is upheld and perpetuated by a policy framework that, despite reforms, remains largely anchored to similar principles as it was at the time of independence. Over the past few decades, Bangladesh has grown into a global powerhouse in garment manufacturing. Presently, RMG and textiles account for over 70% of formal manufacturing jobs and contribute to 55% of the total value added in domestic manufacturing (MVA) (Figure 2.2, Panel B). Other sectors include food and beverage, which contributes 13% of MVA, followed by non-metallic mineral products (9%) and rubber and plastic (6%).

Figure 2.2. Manufacturing employment and value added dominated by garments and textiles



Note: Panel A. Employment data refers to 2019.
Source: Authors' elaboration based on world bank national account, https://data.worldbank.org and UNIDO Indstat (2022), https://stat.unido.org/database.

The history of garment and textile production in Bangladesh spans centuries, with notable developments during the Mughal Empire (16th-19th century) when fine muslins and silks were produced. This growth continued during the British Raj (1858-1947), marked by the establishment of jute mills and expanded cotton production. However, some protectionist measures during this period impacted industrialisation, leading to deindustrialisation in West Bengal due to bans and high tariffs on exports (Fauzia Erfan, 2004[11]).

The modern garment and textile industry in Bangladesh gained momentum after the nation's independence in 1971. In the early 1980s, the sector experienced a revival, aided by the government's creation of free-trade zones that encouraged foreign investors to build factories. The combination of affordable labour and low production costs further catalysed the industry's growth. A pivotal development occurred in 1977 when the Korean conglomerate Daewoo collaborated with local partner *Desh* to produce garments in Bangladesh as a cost-effective offshoring strategy, sparking knowledge transfer and inspiring the formation

of new companies. By 1984, exports had solidified, and by the early 1990s, the garment and textile sector had replaced jute goods (Balchin and Calabrese, 2019[12]; Van Schendel, 2020[5]).

Bangladesh is now firmly specialised in RMG, producing mass-market finished products such as knit t-shirts, non-knit men's suits and shirts, and knit sweaters. The upsurge of RMG and related activities has bolstered the industrialisation process. The manufacturing value added as a share of GDP moved from 11% in 2000 to 22% in 2022, in line with other emerging manufacturing hubs such as Türkiye, Viet Nam, and Thailand. This places Bangladesh ahead of other emerging countries like India (16%) and Indonesia (20%) (UNIDO, 2023[13]).

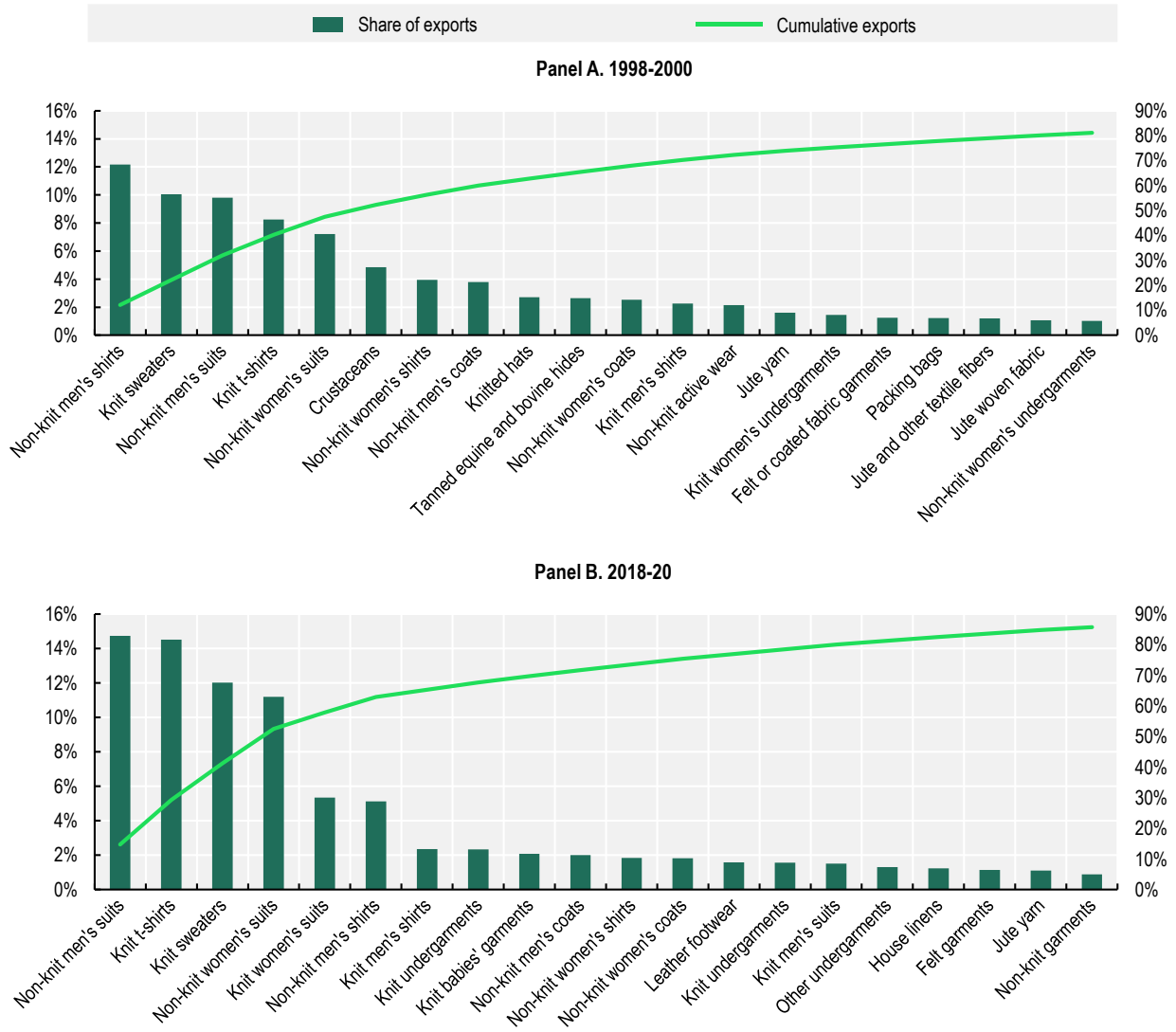
RMG is also the largest employer in Bangladesh, involving around 4.4 million individuals, primarily women. Women comprise a significant 80% of the RMG labour force, making this sector the predominant employer. A stark reality emerges as women bear a higher likelihood of informal employment, a trend exacerbated within the RMG sector where approximately 70% of jobs remain in the informal realm, leading to worker insecurity (ILO, 2020[14]; Bhattacharya, Khan and Khan, 2021[15]).

Domestic and international policies played and continue to play a key role in determining the competitiveness of the RMG in Bangladesh. Since becoming a member of the World Trade Organization (WTO) in 1995, the country progressively liberalised its trade policies and diminished non-tariff barriers, providing a further boost to the sector. The EU's Everything But Arms (EBA) initiative in 2001, offering duty-free, quota-free market access to Least Developed Countries (LDCs), greatly benefitted Bangladesh's competitive garment industry, which capitalised on zero tariff rates and lifted volume restrictions. Although it was feared that the termination of the Multi-fibre Arrangement (MFA) in 2005 would intensify global competition, Bangladesh's existing sector strength and rising demand from Europe and Asia helped mitigate the impact (Lewis, 2011[2]; Whalley, 2006[16]).

RMG is the pulling sector of Bangladesh exports. From 2000 to 2021, Bangladesh's exports surged eightfold in nominal value, escalating from USD 5.3 billion to USD 43 billion. In 2021, around 84% of the country's exports were RMG-related, solidifying Bangladesh's position as a top-three global RMG exporter, together with the People's Republic of China (hereafter “China”) and Viet Nam. In 2018-20, the first top ten exported products – all related to garment and textiles – accounted for 56% of total exports, up from 45% in 1998 (Figure 2.3). Since the 1990s, Bangladesh has tried to diversify its production and export structure. The country promoted the production of leather and jute which have centred around the state-owned Bangladesh Jute Mills Corporation. The Government also identified other activities that could shift from focusing on the domestic market to exporting, including electrical and electronic equipment (E&E) pharmaceutical and food, but these efforts have yielded very limited results thus far (Kathuria and Malouche, 2015[17]). While leather and frozen food— particularly crustaceans—are currently part of the export mix (albeit marginally at 2% and 1% of total exports in 2018-20), E&E and Pharmaceutical production are mainly aimed at domestic consumption (see Chapter 4). In over twenty years, the export basket of Bangladesh expanded from 846 products (H Harmonized System (HS) Codes6) in 1998-00 to 1 009 in 2018-20. However, in addition to the limited change, these products, which remain linked to primary and resources-based activities, account for only 0.4% of total exports (CEPII, 2023[18]).

Figure 2.3. RMG account for 84% of Bangladeshi exports

Top 20 exported products in total merchandise exports, Bangladesh 1998-2000 and 2018-20



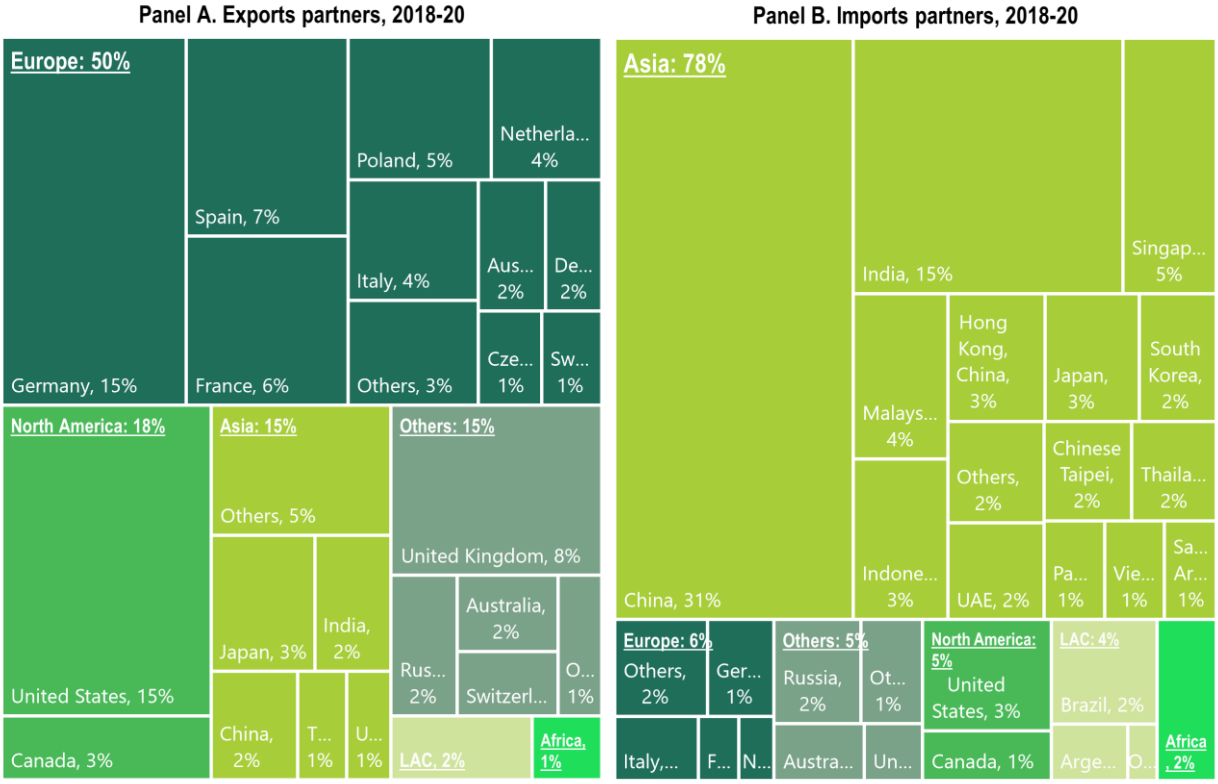
Note: CEPII developed a procedure that reconciles the declarations of the exporter and the importer, that may be different in the original data from COMTRADE.
Source: Authors' elaboration based on BACI HS 6 digits database, from CEPII (2022), http://www.cepii.fr.

The significance of the RMG sector profoundly influences Bangladesh's import patterns and trade relationships, with the country primarily sourcing imports from Asia to subsequently export to Europe and North America (Figure 2.4). Since the late 1990s, there has been a notable increase in export concentration within Bangladesh, leading to the emergence of new trade partners as the country solidified its reputation as a key player in the global RMG industry. Between 1998 and 2000, two countries accounted for nearly 50% of Bangladesh's exports: the United States held the lion's share with 36%, while Germany contributed 10%. During this time, Europe, including Germany, constituted 48% of total merchandise exports, whereas Asia's share stood at 11%. In stark contrast, Africa, South America, and Oceania each represented less than 1% of the total.

The United States and Germany remain the foremost destinations for Bangladesh's exports, each contributing 15% to the overall total. The European Union as a collective entity emerged as the primary trade partner, substantially increasing its share to 50% of Bangladesh's total exports, up from the previous period's 40%. The remarkable expansion of Bangladesh's market share was favored by the 2011 reform of the European Union rules of origin, which allowed LDC apparel exports to qualify for EBA treatment under a single transformation criterion (UNCTAD, 2022[19]). Furthermore, Asia's overall share reached 15%, on par with the combined percentages of the US and Germany. Other regions continued to hold marginal positions, although Oceania exhibited a slight uptick to 2% (data refers to the period 2018-2020). The escalating demand for RMG products from Europe has served as a major impetus behind export growth, with three key items—non-knit men's suits, knit t-shirts, and knit sweaters—leading the way. Notably, West European countries, which are home to some of the most prominent apparel brands by market value, have spearheaded this expansion. Among them, Germany, Spain, France, and the United Kingdom have played pivotal roles in propelling the surge in demand (Brand Finance, 2022[20]).[1]

Figure 2.4. Importing from Asia to export to Europe and North America

Share of merchandise exports and imports by region and country, Bangladesh 2018-20



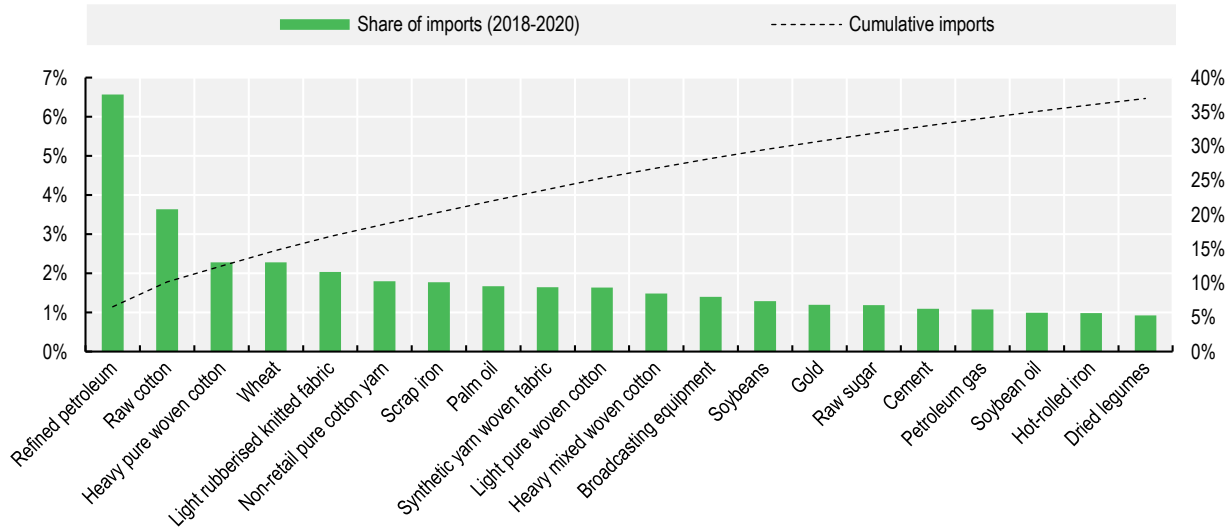
Source: Authors' elaboration based on BACI HS 6 digits database, from CEPII (2022), http://www.cepii.fr.

Bangladesh's import sources are concentrated in Asia, with almost 80% of imports coming from China, India, and Singapore. Notably, China is the source of non-raw textiles and machinery, India provides raw cotton and textiles, and Singapore is the source of sewing machines and synthetic colouring matter. The composition of Bangladesh's imports is more diversified. While imports have not changed significantly during the last 20 years, from 1998-00 to 2018-20, they increased by a factor of eight, but neither the relative shares of technological intensity nor product composition underwent any relevant transformation (Figure 2.5). A large proportion of Bangladesh imports include staple food and other relatively income inelastic commodities such as fuel and petroleum. The import basket also exhibits a high dependence of

inputs for the RMG exporting industry, with the single major import being raw cotton (3.71% of total merchandise in 2020). Bangladesh is the third largest importer of raw cotton after China and Viet Nam (12.6% of the world's total cotton imports), the fourth largest importer of light rubberised knitted fabric and the first importer of heavy pure woven cotton. It is also a significant importer of textile processing machines, sewing machines, synthetic colouring matter, and dyeing finishing agents.

Figure 2.5. Imports are key to sustaining Bangladesh RMG exports, and are determinant for food and energy security

Top 20 imported products in total merchandise imports, Bangladesh 2018-20



Note: CEPII developed a procedure that reconciles the declarations of the exporter and the importer, that may be different in the original data from COMTRADE.
Source: Authors' elaboration based BACI HS 6 digits database, from CEPII (2022), http://www.cepii.fr.

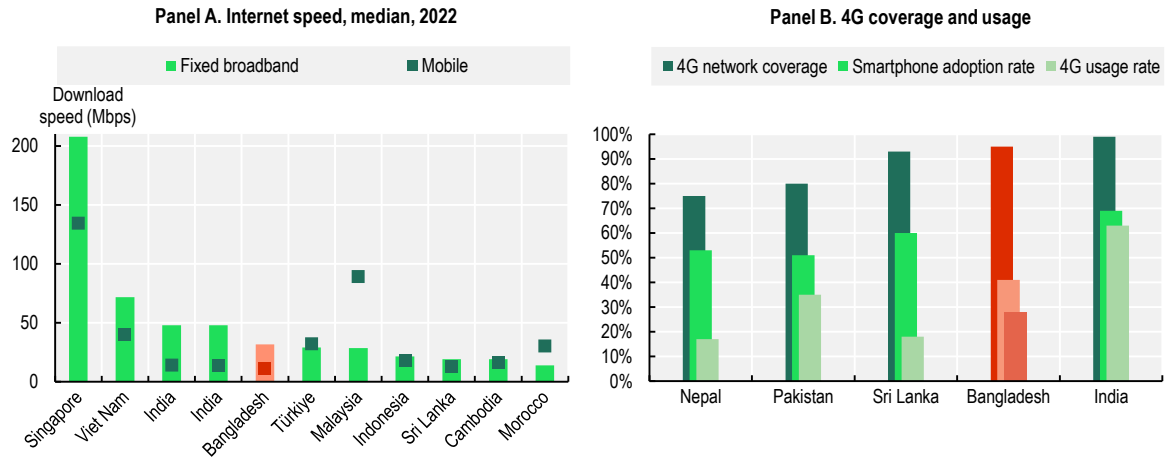
Bangladesh has further deepened its specialisation in RMG, establishing it as the economic backbone and a prominent voice in both domestic and international government-business discussions. Bangladesh needs to diversify its exports and RMG can play an important role in it. The RMG sector has demonstrated the ability to enhance worker safety and standards compliance; promote innovation, original design, improved working conditions; and adopt advanced technology for modernising production, enhancing productivity, and bolstering environmental sustainability. These areas must be prioritised as the RMG sector charts its course ahead, with domestic policies and international partnerships converging to support progress in these crucial domains.

Bangladesh has advanced in digitalisation

The government of Bangladesh has recognised the importance of digitalisation for development. It has launched two subsequent initiatives to support bridging infrastructure gaps and to promote access to digital technologies: Digital Bangladesh Vision 2021 and Smart Bangladesh Vision 2041 (see Chapter 3 of this PTPR). Presently, 4G coverage extends to 94% of the territory, and individual internet usage has surged from 3% to 25% between 2010 and 2021. Concurrently, fixed broadband subscriptions per 100 inhabitants have doubled from 3 to 6.1 over the same period (Figure 2.6). Bangladesh's businesses are also increasingly adopting digital technologies for their operations. Local firms engaged in global supply chains display a higher proportion of website adoption (66.5%) compared to firms that are not engaged with foreign partners, for which only 2.5% have an online presence (World Bank, 2023[21]). However, despite

the fact that significant strides have been made, several substantial gaps persist when compared to other countries. For instance, Viet Nam has an internet usage rate of 70% of its population, a notable contrast to Bangladesh's 25%. The slow mobile download speeds in Bangladesh, averaging 11 Mbps in 2022—only 1/3 of the global average and 8 times slower than the fastest country Singapore—underscore the urgency of addressing digital infrastructure challenges to further accelerate the country's progress.

Figure 2.6. Digitalisation has advanced, but international gaps remain significant

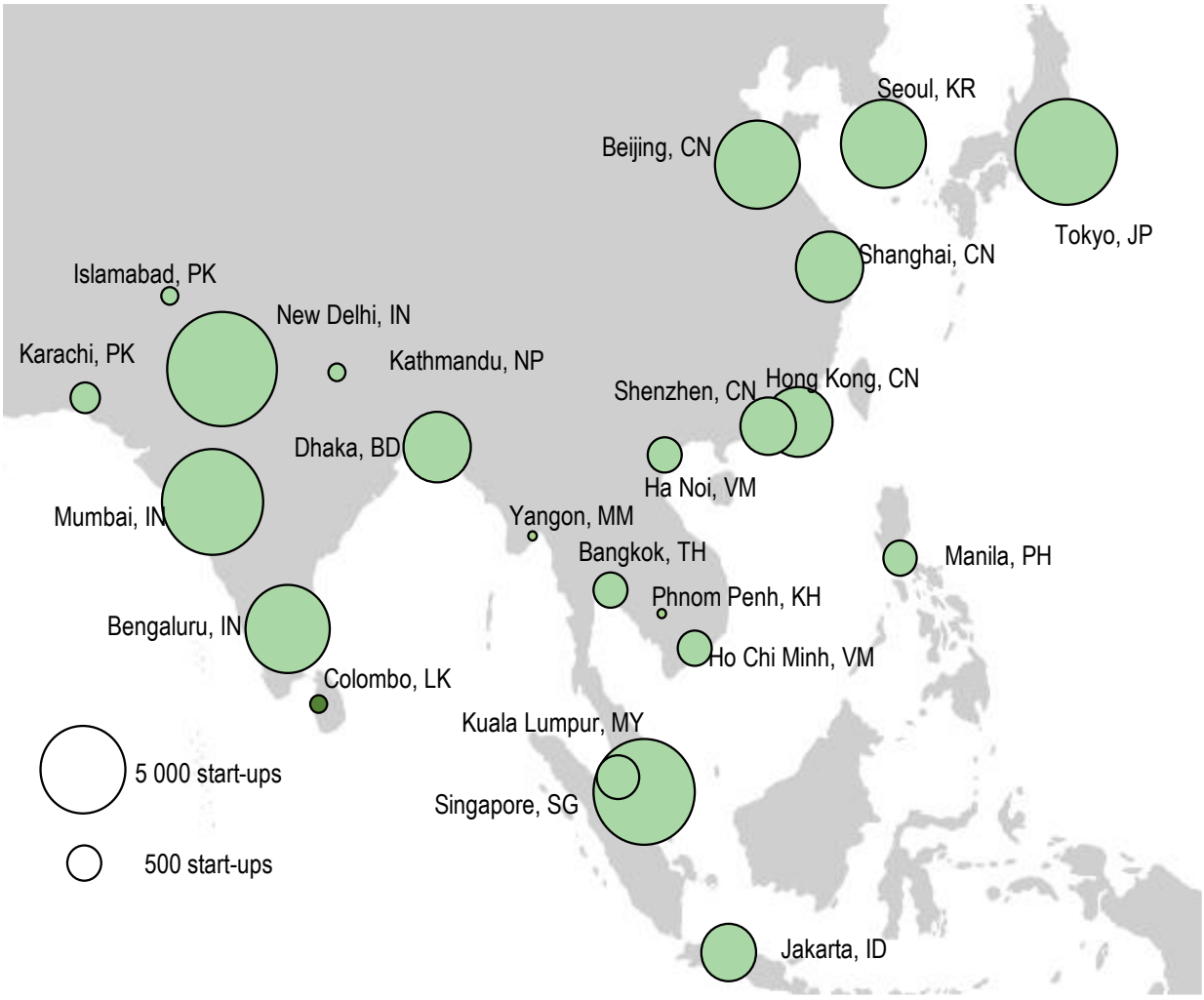


Note: Panel A. April 2022 median values (download speed in Mbps).
Source: Authors' elaboration based on Speedtest Global Index (Ookla), https://www.speedtest.net/it and GSMA (2021), "Achieving mobile-enabled digital inclusion in Bangladesh", https://www.gsma.com/mobilefordevelopment/resources/achieving-mobile-enabled-digital-inclusion-in-bangladesh/.

Digitalisation is contributing to enhance entrepreneurship and start-up creation. In 2022, Bangladesh was home to 2% of Asia's start-ups,[2] up from almost zero around a decade ago (OECD, forthcoming[22]). This 2%, even though small for a country the size of Bangladesh (India with a population 8 times larger is home to 23 times the number of start-ups, accounting for 40% of the region's total), puts the country on par with Viet Nam and Malaysia. In Bangladesh, like most countries where the start-up ecosystem is incipient, start-ups tend to be concentrated in Dhaka. Indeed, 88% of all start-ups in Bangladesh are located in the capital. The city has become the 10th largest in Asia in terms of start-up hubs, with a population of start-uppers that is much higher than other LDCs (Figure 2.7). Dhaka is also relatively start-up dense compared to other emerging city in the region, with about 12 start-ups per 100 000 people, similar to, for example, Ho Chi Minh in Viet Nam (9). It has room to grow compared to for example Singapore, which is the densest hub in the region (109 start-ups per 100 000 people), and Bengaluru in India, which comes in second (39).

Figure 2.7. Dhaka has emerged as an important hub in Asia

Top 10 and selected start-up hubs in Asia, 2022



Source: Authors' elaboration based on Crunchbase (2023), database, https://www.crunchbase.com/

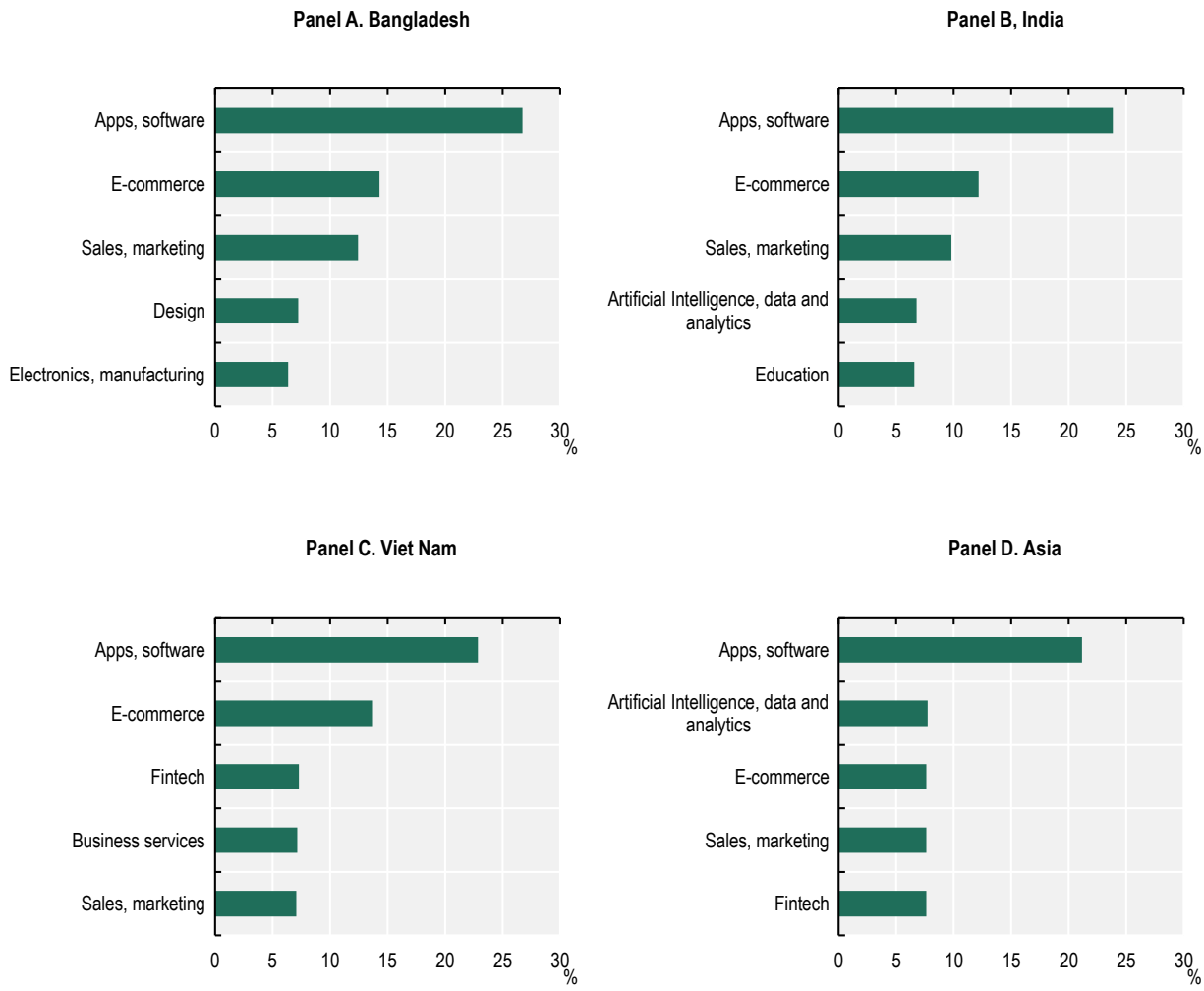
Bangladesh's start-ups are tapping into the country's large market. The top sector for Bangladesh's start-ups includes apps, software and related activities (27%), similar to other hubs in the region, reflecting also a global rising trend in app-based businesses. Significant proportions of start-ups also gravitate towards e-commerce (14%), closely followed by sales and marketing (12%), in line with a boom in e-commerce in large developing countries, which are implementing solutions adapted to local needs. Bangladesh also has a small share of start-ups (6%) in electronics and manufacturing. In contrast, other hubs in the region have a higher share of start-ups in relatively more high-tech activities, such as artificial intelligence, data and analytics and fintech (Figure 2.8).

Despite progress, Bangladesh is still a small player when it comes to venture capital (VC). The country's VC investments have increased from below USD 1 million annually before 2014 to an annual average of around USD 150 million in 2019-21. However, the overall size of investments is still small, making up only about 5% the size of the Viet Nam's average over the same period, for instance. Scaled to GDP, Bangladesh attracted the 12th highest volume of venture capital in Asia at 0.04% of GDP, on par with Myanmar and slightly lower than Pakistan. This lags significantly behind the 2019-21 Asian and OECD

averages at 0.71% and 1.28% respectively. Singapore by contrast is the region's most mature ecosystem, with VC accounting for nearly 1.6% of its GDP.

Figure 2.8. Design and electronics are among the top start-up sectors in Bangladesh

Top 5 sectors in terms of share of start-ups in Bangladesh, selected countries and Asia (%), 2022



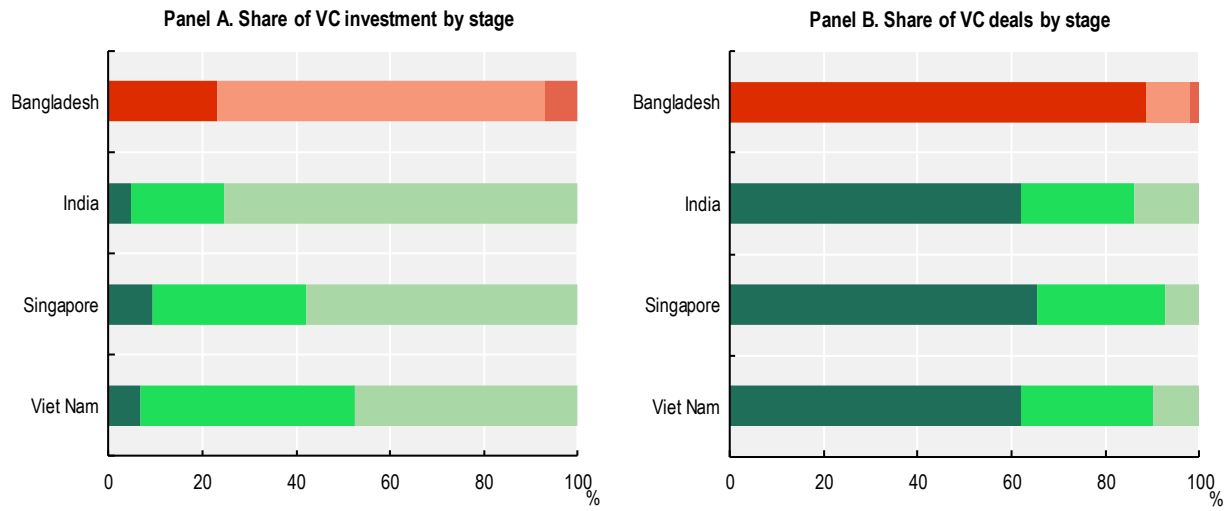
Note: Start-ups are considered those active in 2022 and founded in the period 2013-2022.
Source: Authors' elaboration based on Crunchbase (2023), database, https://www.crunchbase.com/.

VC concentrates in fintech and e-commerce and is less diversified than in more established start-up ecosystems in Asia. In fact, while only 3% of start-ups in Bangladesh focus on fintech, the sector attracted 44% of the country's venture funding thanks to BKash, Bangladesh's only unicorn. Similarly, the lion's share of funding that went to e-commerce (a sector that overall represents 40% of all VC in Bangladesh), owes to ShopUp, another successful start-up in the country. When looking at the Asian average, for example, that includes more mature hubs in the region, no sector amounted to more than 14% of the total. Moreover, seed investments account for the majority of investment deals in the country, accounting for 87% of the total, higher than the 62% on average in India, Viet Nam and Singapore (Figure 2.9). On one hand, this means that start-ups that have a promising idea can find investment, but on the other hand, this also indicates a relative lack of scale-up capital that can flow into large deals. As a result, the share of late

stage deals is small in the country, accounting for 7% of the total, which is much lower than India, for instance where it stands at 76%.

Looking ahead, alongside government initiatives like Start-up Bangladesh, the new Smart Bangladesh policy framework requires modernising the capital market and banking system. Private credit provision lags behind peers, with low domestic credit for the private sector leading to a "missing middle" scenario. This means just a handful of large companies receive most of the financing, leaving startups and SMEs struggling for capital. Around 35% of firms and half of SMEs cite difficulties in accessing finance as their main obstacle (Gu, Nayyar and Sharma, 2021[23]). A concerning financial issue is the rising non-performing loan (NPL) rate, which increased from 1.9% in 2011 to about 8% in 2020, or possibly higher. By contrast, Viet Nam and Indonesia reported 1.9% and 2.6% NPL ratios in 2020. India's rates (2.7% in 2011, 7.9% in 2020) and Pakistan's now align with Bangladesh's. High NPLs not only suggest future instability but it also hinders financial sector development, which is vital for diversification and structural transformation (IMF, 2022[24]).

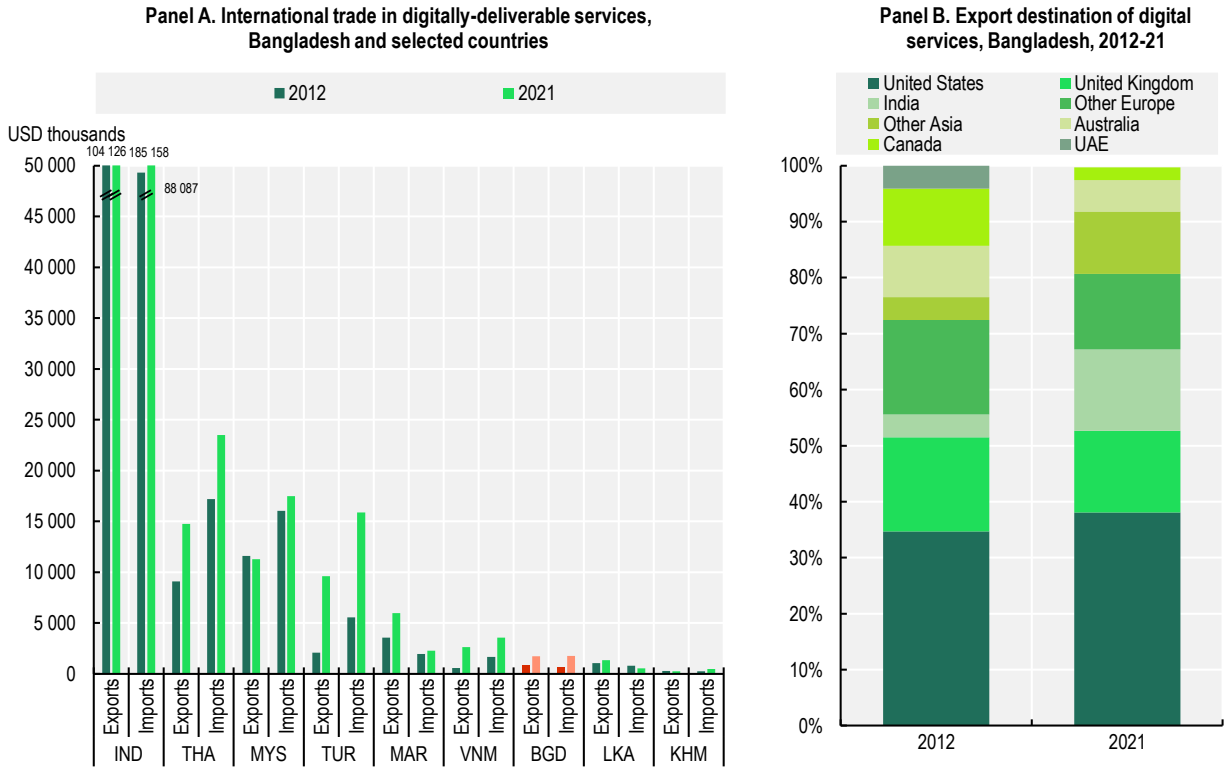
Figure 2.9. Bangladesh's venture capital investments focus on seed and early-stage deals



Source: Authors' elaboration based on Crunchbase (2023), database, https://www.crunchbase.com/.

Digitalisation is also contributing to diversifying Bangladesh's exports. The country's total exports of digital deliverable services grew from USD 780 million in 2012 to USD 1.73 billion in 2021, even though this is still far from its regional and global counterparts. Bangladesh has increased digital service exports to Asian markets, rising from 8% to 27% between 2012 and 2021 (Figure 2.10). As Bangladesh's gig-worker sector burgeons—ranking as the second-largest globally after India—a landscape of opportunities and challenges unfolds. While this sector promises economic potential, it also necessitates measures to address informality and ensure equitable working conditions.

Figure 2.10. Bangladesh has started to export digital services



Note: Digitally-deliverable services are an aggregation of insurance and pension services, financial services, charges for the use of intellectual property, telecommunications, computer and information services, other business services and audio-visual and related services. The digitally-deliverable services series is based on the concept of potentially ICT-enabled services as developed by UNCTAD in a technical note in 2015 as well as in a report of the 47th United Nations Statistical Commission in 2016.
Source: Authors' elaboration based on UNCTADstat, https://unctadstat.unctad.org and Bangladesh Association of Software and Information (BASIS) annual report 2022, https://basis.org.bd/annual-report.

Despite progress, Bangladesh has much ground to cover in effectively utilising digital technologies and boosting complementary digital skills across the entrepreneurial landscape, thereby intensifying inter-sectoral productive linkages (UNCTAD, 2020[25]). Bangladesh's digital governance progress is commendable, issuing over 100 million digital IDs and digitising 66% of government services. However, challenges remain due to complex procedures and usability concerns. Streamlining processes and user-friendly interfaces are essential for unleashing digital technologies' transformative potential. Progress in regulating the sector is crucial. The announcements of an imminent reform of the 2018 Digital Security Act and the Data Protection of 2023 Act are a positive step, although the key will be to see the details of the implemented reforms. It seems they have relaxed data localization requirements, and they have provided greater recognition of the importance of international co-operation and safeguarding measures for facilitating data flows. All of which are positive step forwards (Randolph, 2023[26]). Moving ahead digitalisation challenges also encompass upskilling the government and private sector workforce, enhancing digital infrastructure resilience, and securing deployment.

Advances in digitalisation can also support stronger and more resilient industrial development. Digitalisation can amplify manufacturing productivity by up to 10% in developing economies, and integrating digital technology increases export intensity and Total Factor Productivity (TFP) (Asian Development Bank, 2023[27]). Likewise, embracing digital technologies can foster innovation sustainable industrial development by signalling quality and standards (Box 2.1). Digitalisation can also serve as a tool

to make other sectors more sophisticated and modern while enhancing efficiency in broader areas such as weather forecasting (to improve disaster response, for example), streamlining institutional arrangements and customs procedures, and bolstering tax revenue collection.

Box 2.1. ACIMIT's Digital Ready certification: Pioneering standardisation in textile machinery

Digitalisation stands as a pivotal force in catalysing the evolution of the textile industry while preserving creativity and craftsmanship. The Association of Italian Textile Machinery Manufacturers (ACIMIT), representing 300 companies engaged in textile machinery production and related accessories, launched the “Digital Ready” certification in 2022, tailored to the textile machinery sector. This innovative certification seeks to streamline production processes by establishing a universal language and data reading system, thereby facilitating seamless interaction between machinery and production systems. ACIMIT's collaboration with Polytechnic of Milan ensures a simplified and standardised approach to managing machine data and production processes.

Facilitated by the international certification body RINA, this certification acts as a bridge connecting textile machinery manufacturers and their customers. To achieve the 'Digital Ready' certification, member companies adhere to a structured framework involving machine identification, data collection, document analysis, and on-site audits conducted by RINA. Once earned, the certification remains valid for five years, encompassing all machinery of the same production type and eliminating repetitive procedures. In the pursuit of digital excellence, this initiative is poised to enhance customer relationships, operational efficiency, and promote standardisation.

In 2022, Italian textile machinery production reached EUR 2.7 billion, with a significant 86% being exported to 130 countries. Leading export regions include Asia (44%), non-EU Europe (18%), European Union (17%), North America (9%), South America (8%), and Africa (4%).

ACIMIT, in partnership with the Italian Trade Agency (ITA), is also extending initiatives to Bangladesh, the fifth-largest market for Italian textile machinery. These initiatives aim to bolster skills development and advanced technology adoption in the garment textile sector. Key components include establishing Technological Training Centers in collaboration with the Bangladesh University of Textiles (BUTEX), offering specialised courses in areas such as Sustainable Technologies, Techniques for Reducing Denim Finishing Impact, Water and Energy Saving in Dyeing and Finishing, and Innovative Weaving Technology and Techniques.

Source: Alessandro Zucchi, President Association of Italian Textile Machinery Manufacturers (ACIMIT), Peer Learning Group (PLG) Meeting of the PTPR of Bangladesh, 8 September 2022.

Deep fragilities risk to hampering future progress

Despite the remarkable progress achieved on multiple fronts, such as poverty reduction, sustained growth, and digital business development, certain longstanding vulnerabilities persist that must be addressed to ensure continued progress in the future.

Bangladesh's success should not lead to complacency. The world is experiencing turbulent times, with escalating geopolitical tensions and profound transformations brought about by digital technologies. These changes are rapidly reshaping businesses and jobs, altering power dynamics, and affecting the generation, distribution, and the way in which profits are captured. Emerging technologies like the Internet of Things (IoT) and artificial intelligence (AI), coupled with evolving trade and investment trends, are gradually

diminishing the advantage of low labour costs (Primi and Toselli, 2020[28]). Bangladesh faces the risk of becoming stuck in a cycle of relatively low-wage and low-productivity growth, which could limit its potential for expanding production and trade opportunities. Moreover, the acceleration of climate change is adding pressure to redefine work modes, production processes, consumption patterns, trade practices, and even overall societal and territorial structures to ensure economic practices align with the well-being of people and the planet.

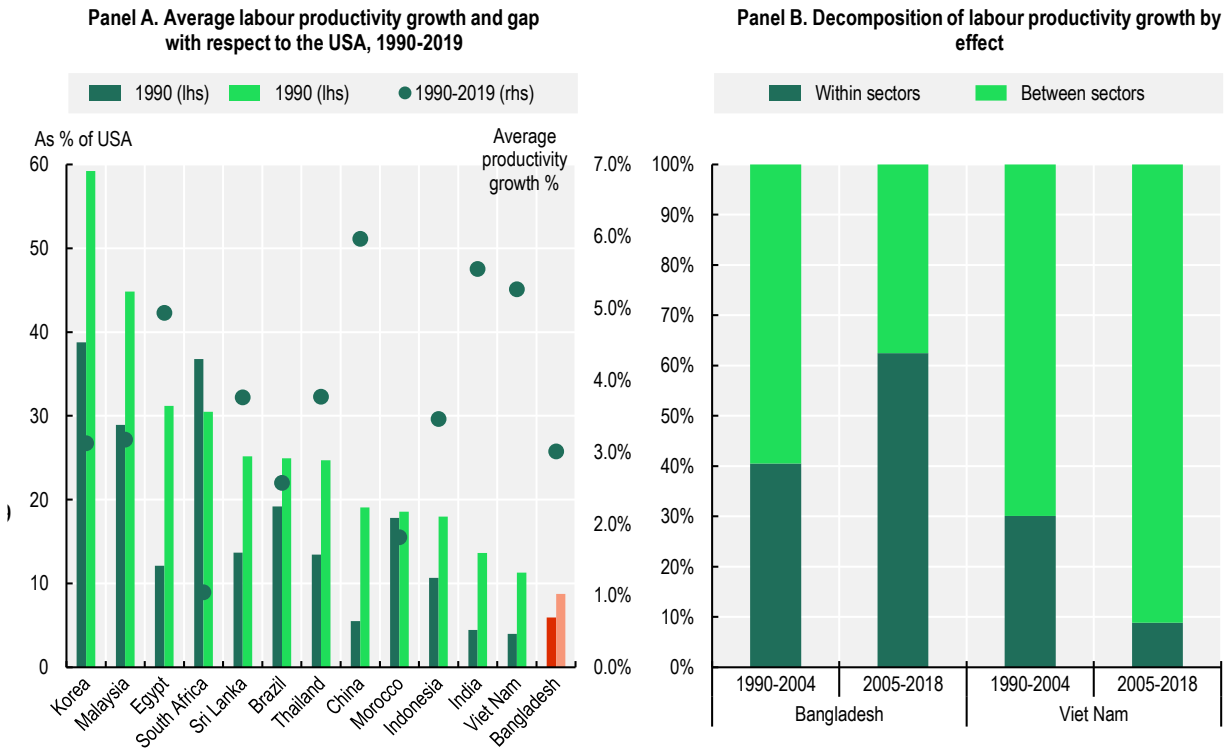
Addressing these global challenges alone underscores the need for a reassessment of Bangladesh's economic development model. This necessity becomes even more compelling when considering the country's unique circumstances. Bangladesh's youthful nation is grappling with increasingly intricate and diverse issues, from mitigating the impacts of climate change to preparing for LDC graduation. Additionally, the country must address the growing calls from both domestic and international stakeholders for more transparency and accountability in the public and private spheres.

The current economic model has reached its limits

To continue succeeding, Bangladesh needs to update its economic model. A business sector operating in a dual economy with enterprises focusing on providing the domestic market and operating in a highly protected market and RMG export-oriented firms engaged in low-hand segments of the fashion industry cannot sustain Bangladesh's development progress towards development. Public policies will need to be reorganised to avoid perpetuating this duality and to support a shift towards new drivers of growth and development.

The present arrangement of production, encompassing both export-oriented and domestically-focused enterprises, does not effectively foster the generation of quality employment opportunities with fair compensation or contribute significantly to enhancing productivity. Labour productivity in Bangladesh remains excessively low. Labour productivity growth averaged 3% between 1990 and 2019, which is not enough to close the gap with more advanced countries. In Asia, most countries achieved substantially faster productivity growth rates. By 2019, Bangladesh's labour productivity was 9% of that of the United States, trailing behind India and Viet Nam, which albeit still far from the frontier, at least stand at 12% and 14%, respectively (Figure 2.11, Panel A). The country is trapped in a spiral of relative low wages and low productivity driven by sectors that seem to have limited employment capacity in the future and that do not translate into effective formal job creation. The relative less importance of labour shift to more dynamic sectors – activities in which productivity grows faster than the average- contributes to explain the persistency of the productivity gap with respect to the frontier (Figure 2.11, Panel A). In contrast countries like Viet Nam have seen productivity increase determined by a change in specialisation towards more dynamic activities (Diao, McMillan and Rodrik, 2017[29]). Hence, transforming industries to make them drivers of job creation, secure, safe and decent places to work for all individuals—and ensuring women are not discriminated against—is a key step forward in Bangladesh's next development phase.

Figure 2.11. Labour productivity gap with the frontier persists



Note: Panel B. The within effect measures the productivity growth in each sector of the economy due to capital, human and technological accumulation. The between effect (or reallocation) measures the productivity growth due to labour reallocation from less to more productive sectors.
Source: Authors' elaboration based on data from Penn World Table (PWT) version 10.0, https://www.rug.nl/ggdc/productivity/pwt/?lang=en.

The export-led growth model, which is heavily reliant on RMG, has run its course in terms of its capacity to sustain development. Partly also due to its reliance on LDC-specific International Support Measures which will be phase out upon graduation from the LDC category (UNCTAD, 2022[19]). This approach has driven growth and generated employment, yet in the future its adequacy for driving continued success is an open question. Challenges include sustainability, inclusiveness, excessive dependency on external factors, changes in the global fashion industry and calls for a deep transformation of the RMG sector.

The COVID-19 pandemic revealed the fragility of the RMG sector and also the need for increasing responsibilities of foreign lead firms along the whole value chain. In Bangladesh, several production facilities stood by as large orders were cancelled leading to substantial revenue contractions. Indeed, the average decline in the sector was nearly 17.4% in 2020, compared to the preceding year according to the Bangladesh Garment Manufacturers and Exporters Association (BGMEA). Additionally, the pandemic affected capital investment plans, with factories delaying or reducing planned investments, including those directed to automation (Hossain and Alam, 2022[30]).

Sustainability is also paramount for the future of RMG. Environmental concerns including groundwater pollution, airborne waste, soil degradation, and noise pollution require substantial attention and urgent actions. The garment industry's global carbon footprint is significant, accounting for between 4% to 6% of carbon emissions and almost 20% of wastewater generation (OECD, 2018[31]). Collaborative efforts and shared and transparent responsibility across the value chain, standardised practices and due diligence will be key moving forward. Emerging trends in the circular economy should also be taken into account in Bangladesh. RMG generates substantial waste, notably pure cotton waste amounting to 250 000 tones

out of the 577 000 tones produced in 2019. Recycling this waste could yield substantial financial benefits, while contributing to reduced imports of textile fibre. Initiatives such as the Circular Fashion Partnership hold promise in upcycling post-production fashion waste, which would steer the sector towards a more sustainable future. (Global Fashion Agenda, 2022[32]). Bangladesh has made clear steps towards increasing sustainability, including fostering the adoption of sustainable business practices, including the LEED certification. Bangladesh currently has the highest number of LEED-certified green factories globally, standing at 192.

The current production model and the relatively weak input-output linkages within the domestic-oriented sectors also exacerbates Bangladesh's persistent trade deficit. Despite the increase in exports over the past two years, the rise in imports of intermediary goods to support established export industries and address growing energy demands has been even more significant. This trade imbalance amplifies the balance-of-payments (BoP) deficit. In FY22, Bangladesh faced a substantial BoP deficit driven by the current account, which deepened in FY23, exerting significant pressure on foreign exchange reserves. The balance-of-payments deficit reached USD 7.2 billion in the first half of FY23, up from USD 5.3 billion in FY22, creating considerable pressure on foreign exchange reserves (World Bank, 2023[33]).

The combination of increased imports, reduced remittances, and external pressures converged to fuel these deficits. Inflation escalated from an average of 6.1% in FY22 to 8.7% during the first eight months of FY23, propelled by global commodity price increases and the progressive depreciation of the Taka. In 2019, the exchange rate was approximately 84.5 BDT to 1 USD and as of 2023, the exchange rate stands at approximately 100 BDT to 1 USD. Global uncertainties, including geopolitical tensions and economic disruptions like the Russian invasion of Ukraine, have exacerbated the situation, casting a pall over foreign exchange reserves and the broader economic landscape (World Bank, 2023[33]).

Bangladesh energy dependency is also a major source of concern. A complex energy crisis, exacerbated by various factors, is hampering the country's progress. Bangladesh has increased the electrification rate ranging from 85% to 95% in 2021 from a mere 20% in 2000 and has increased its total power generation capacity to 25 700 megawatts (MW) in 2021 according to different domestic and international statistics (IEA, 2023[34]). However, during the first five months of 2023 several energy shortages increased due to costly and inadequate natural gas imports. This comes amid a global hike in energy prices, including LNG. In Bangladesh, 70% of electricity production come from LNG, of which 20% is imported. The dependence on imported energy compounds this challenge, underscoring why it is important to diversify imports and energy supplies including renewables. On top of this, gas reserves are expected to be exhausted by 2030 (Bangladesh Power Development Board, 2023[35]).

Bangladesh’s economy is highly and increasingly vulnerable to natural disasters

Sustainability is key for industrial development in Bangladesh and globally. In addition, Bangladesh is highly exposed to natural disasters and needs to rethink its industrial strategy both to minimise the country’s contribution to climate change and to mitigate its impacts in the future.

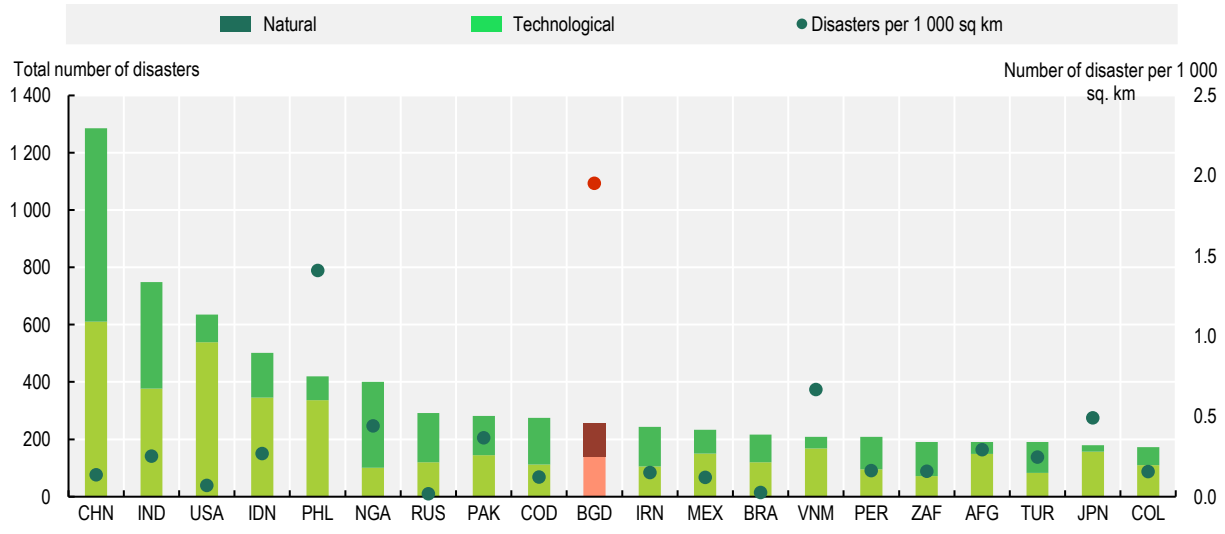
Natural disasters pose a growing threat to global economies and development, with escalating damages and impacts. The Centre for Research on the Epidemiology of Disasters (CRED) reported staggering estimated damages of USD 3.5 trillion from 2000 to 2021. This sum is equivalent to France's 2021 GDP, underlining the severity of these events. Climate change is causing more storms, floods, droughts, fires, and heatwaves, and the effect of such disaster are particularly felt in LDCs and small island developing states (SIDS). These disasters also trigger secondary technological and industrial accidents, compounding their toll on populations and sectors.

Bangladesh is among the countries most exposed to climate and weather-related hazards. The country faces acute weaknesses. Over 50% of its land is less than six meters above sea level, and approximately 80% of its population is exposed to extreme weather risks. The country grapples with a history of multiple

threats, from droughts and cyclones to floods and landslides and the increase in frequency and impact of natural disasters induced by climate change is increasing Bangladesh's precarious situation. In 2000-21, Bangladesh ranked 10th in the world in terms of number of natural and technological disasters, a score which is magnified when the incidence in terms of population is considered (Figure 2.12). These challenges are exacerbated by rapid urbanisation, high population density, and gaps in infrastructure development (UNCTAD, 2020[25]).

Figure 2.12. Bangladesh is among the most exposed countries to natural disasters in the world

Top 20 exposed countries and number of disasters 1 000 sq. km, 2000-21



Source: Authors' elaboration based on EM-DAT - The international disaster database, https://www.emdat.be/.

In addition to major human development impacts, natural disasters also hamper Bangladesh's industrial competitiveness. The vulnerability to natural disasters compounds with industrial and technological hazards, leading to substantial economic losses in sectors like agriculture, logistics, and manufacturing. This results in business uncertainty and trade unpredictability. Floods, driven by storms and heavy rainfall frequently disrupt energy supplies, even with flood protection structures in place at thermal power plants, and impact domestic agricultural production while proving a challenge to transport and logistics. Recently, more than five gas-fired power stations in Sylhet were pre-emptively shut down due to flooding in June 2022. To minimise the impact of natural disasters on industrial development, Bangladesh needs to increase prevention, reaction and restoring and re-building capacities (OECD, forthcoming[36]). Bangladesh and its international partners are aware of the need to increase the country's resilience to natural disasters (Table 2.1). Bangladesh has initiated programmes with the International Monetary Fund (IMF) under the Resilience and Sustainability Facility, Extended Fund Facility, and Extended Credit Facility. These programmes address both immediate challenges, such as current account imbalances and reserve losses, and long-term structural concerns like actions to tackle climate vulnerability.

Bangladesh's exposure to environmental fragilities, exacerbated by natural and technological disasters, necessitates a comprehensive strategy adaptation and resilience-building. By integrating environmental considerations into development frameworks, enhancing climate adaptation measures, and fostering economic stability, the country can forge a path towards sustainable growth. Bangladesh has already issued a National Adaptation Plan and has estimated that a budget of USD 230 million will be needed to implement it. Increasing access to finance for resilience to natural disasters and partnerships with

international stakeholders including the EU, the World Bank and the IMF will be key to implementing the necessary actions and support.

Table 2.1. Building resilience to natural and industrial hazards

	Natural and environmental	Industrial and technological	Social
Priority action to prevent, react and re-build	• Awareness and education campaign on adaptation and mitigation strategies. • Increased adoption and compliance with safety standards. • Promotion of environmentally-resilient agriculture.	• Increased efficiency of use and allocation of financial resources. • Targeted support for micro -SMEs • Repurposing technology and human capital. • Reforms in incentives and other support for sustainable technology and industrial development. • Use of cutting edge technologies in the construction of infrastructure. • Adding strategic preventive maintenance in infrastructure planning cycle.	• Increase investments in health, education system. • Better targeting and scaling up of social protection system. • Upgrading private sector capacity for social/impact investments. • Effective implementation of urban and community plans.

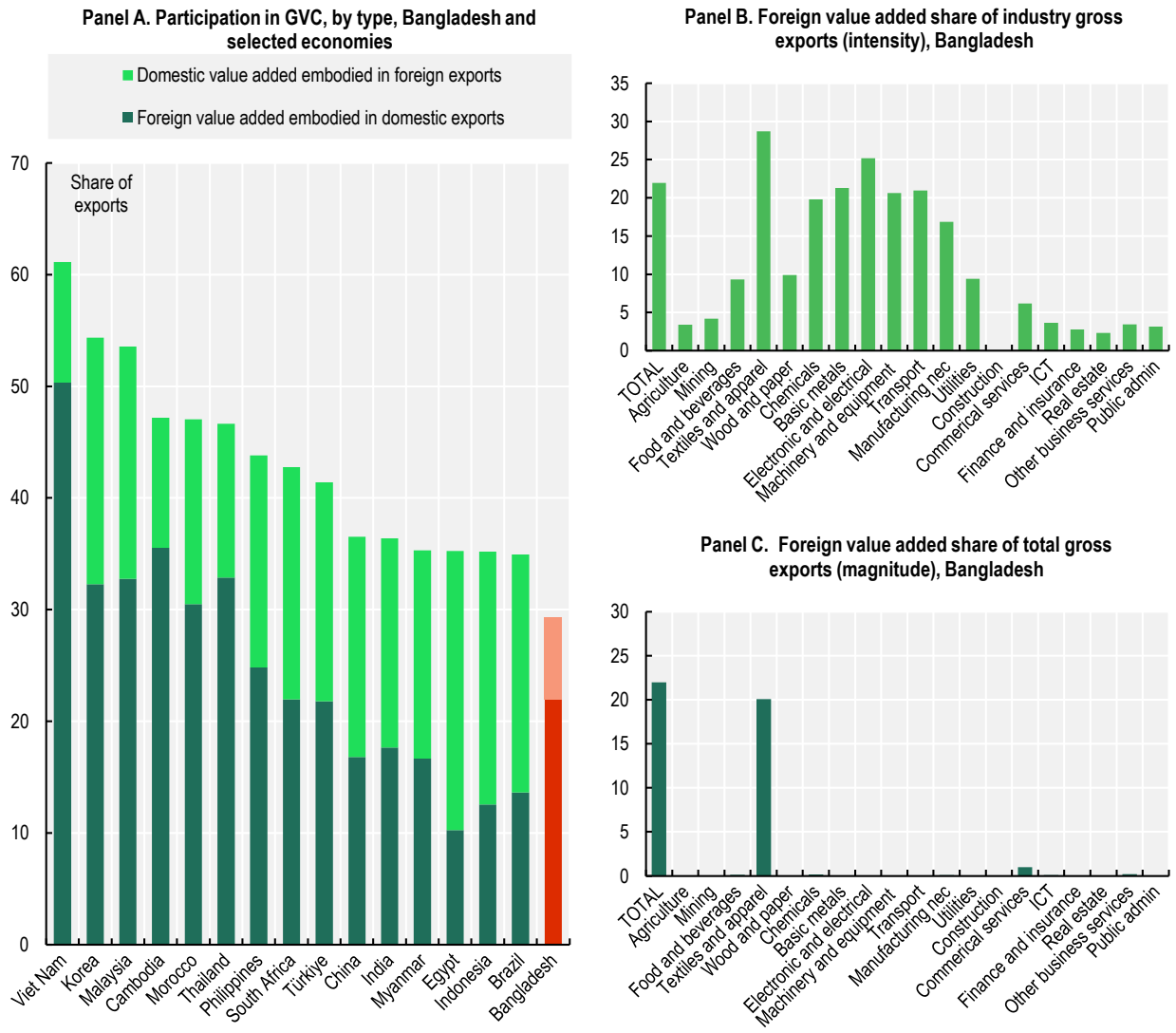
Source: Consensus building event - *Working group: cushioning fragilities to develop a sustainable transformation*. PTPR of Bangladesh, 18 October 2022, Dhaka.

Bangladesh needs to update its economic model to further its successes

To secure a prosperous future for Bangladesh, a fundamental shift in its development model is essential. Bangladesh must overhaul its economic model and identify new drivers for sustainable and inclusive growth. The subsequent paragraphs delve into three critical issues that, if effectively addressed, could catalyse the transition to the next developmental phase. There needs to be a shift in the business mindset from merely seeking market access to prioritising innovation. This entails updating trade policies and aligning them with a comprehensive industrial development strategy. Second, strategic management of international trade and investment relationships is crucial. Developing a clear approach to maximise benefits from regional integration and attract more and better FDI is essential. This approach should strategically bridge the persistent duality in Bangladesh's business landscape – enterprises serving the domestic market with substantial protection and those focused on exporting to provide multinational corporations with cost-effective, yet high-quality RMG.

The way forward is the diversification and sophistication of the industrial base. It is not surprising that a granular analysis of the type and intensity of Bangladesh's participation in global value chains (GVCs) is limited. While practically all sectors in the economy rely on imported intermediaries that are further processed and transformed—particularly the manufacturing sector—the magnitude of the participation in GVCs is overwhelmingly explained by a 93% contribution from the garment and textile industry. The specialisation in exporting finished RMG products limits the possibilities for the local industrial sector to provide and increase value-added in other economic activities and countries (Figure 2.13). To some extent, Bangladesh resembles the type of engagement espoused by large developing economies such as, India, Indonesia, and China, which focus on developing domestic industrial capabilities and relying on domestic markets. However, these countries show a more diversified industrial and trade base that allows them to develop domestic and foreign linkages along the entire value chain (Annex 2.A).

Figure 2.13. Bangladesh participation in global value chains, 2020



Source: Authors' elaboration based on OECD Trade in Value Added (TiVA) database, http://oe.cd/tiva.

Shifting the mindset and embracing innovation

Bangladesh has an untapped innovation potential. Despite the progress made in becoming a trusted powerhouse in garment manufacturing in South Asia and the ongoing diversification efforts (e.g., a growing domestic electronic industry and a pharmaceutical industry capable of meeting domestic demand for essential drugs), Bangladesh is not yet an innovation driven economy. The country has home-grown firms and a domestic entrepreneurial class that is very influential; however, businesses continue to be run in two prevailing modes: 1) selling basic and essential products on the protected domestic market or 2) exporting cost-effective but labour-intensive products that leverage on the relative low labour cost. These two prevailing business strategies are nurtured by a targeted policy approach that facilitates domestic production through regulations and controls. These interventions facilitate access to imports that sustain RMG exports and which limits entry of foreign producers to serve the domestic market. They also discourage the creation of a domestic innovation-driven business climate that could serve both domestic and foreign markets (see Chapters 3 and 4).

In Bangladesh, only 1.2% of firms invest in R&D—less than half the rate observed in Indian firms (Table 2.2) and only 2.6% of Bangladeshi firms employ technologies licensed from foreign counterparts, in stark contrast to Viet Nam's 10.8% and Türkiye's 14.4%. This is the result not only of the current incentive schemes, which actually lack targeted conditionalities to support innovation and learning, but also the prevailing approach of international partners, who still see in Bangladesh a business-deal and not an innovation partner. Bangladesh also suffers from overall gaps in technical and managerial skills for innovation. The scarcity of engineering or applied science graduates, coupled with limited R&D workforce engagement, underscores the need for a skilled workforce. While some firms benefit from managers with expertise developed in multinationals, most firms lack an adequately skilled workforce (Asian Development Bank, 2023[27]).

As Bangladesh moves forward, it's crucial for the private sector to assume responsibility for innovation and technological advancement. Businesses are focusing on acquiring technology through strategic partnerships and mergers and acquisitions (M&A) in critical sectors. This approach transcends traditional foreign direct investment (FDI) and showcases proactive engagement by domestic firms. Walton High-Tech Industries PLC, a prominent conglomerate spanning consumer electronics, home appliances, mobile phones, real estate, and automobiles, exemplifies this trend by acquiring foreign technologies abroad. Walton's expansion includes acquiring three European brands: ACC, Zanussi Elettromeccanica (ZEM) and Verdichter (VOE). By doing so, Walton has made significant gains in terms of machinery, trademarks, and patents. The objective of such a strategy involves integration and collaboration with other European brands, as well as establishing research and innovation centres (ORBIS, 2023[37]).

Table 2.2. The private sector in Bangladesh invests little in innovation

Percentage of manufacturing firms that used foreign technology, introduced new products or processes, or that spent on R&D

Economy	% of firms using technology licensed from foreign companies	% of firms that introduced a new product/service	% of firms that introduced a process innovation	% of firms that invested on R&D
Bangladesh (2022)	2.6	n/a	1	1.2
India (2022)	5.4	2.9	3	3.7
Morocco (2019)	26	4.3	3.7	7.7
Türkiye (2019)	14.4	11.7	1.9	22.3
Viet Nam (2015)	10.8	35.5	45.8	30.4

Source: Authors' elaboration based on World Bank Enterprise Surveys, https://www.enterprisesurveys.org/en/enterprisesurveys.

Bangladesh has accomplished lots in its first development phase, it now needs to embrace innovation as its next collective bet. Both the government and the private sector need to shift mindsets and approaches to enable innovation. Innovation will be needed at all levels and in all businesses. Not only will it be necessary to make current activities sustainable and inclusive, it will also be essential to support export diversification and to generate new sources of growth. Increasing technology adoption in firms and modernising production would contribute to diversifying the export profile and support local development. Estimates from the Asian Development Bank show for the specific case of Bangladesh a positive correlation between advanced technologies and export success. The increase in overall technology levels is linked to a 3-percentage-point surge in the likelihood of exporting. Moreover, the adoption of industrial technologies increases the probability of being an exporter by 10%. Additionally, technology adoption yields higher social returns, with a 1.0-standard-deviation rise in the technology adoptions leading to an 8% increase in wages (Asian Development Bank, 2023[27]).

Bangladesh possesses the potential to transform into an innovation-driven nation. With its expanding market size and population, established universities and research institutions, and global imperatives to align consumption, production, and trade practices with environmental sustainability, the need to shift from price-driven competition to innovation and quality is evident. This transition necessitates a shift in business perspectives and policy frameworks. Notably, global research and development (R&D) expenditures doubled to USD 2 trillion (USD 2005 PPPs) from 2000 to 2020, with significant contributions from Asian countries (OECD, 2023[38]). As the 8th most populous nation worldwide, it has the capacity and responsibility to emerge as a significant player in global knowledge and innovation dynamics. Achieving this status demands an expansion of the country's science and knowledge base.

To realise this transformation, public authorities must bolster the education system. Bangladesh's current lag in scientific output and human capital poses a challenge, highlighting the urgency for investment in STEM education and research capabilities. In 2021, the country published only 73 scientific articles per million inhabitants, contrasting with the higher figures seen in Indonesia, for instance. Additionally, the share of STEM graduates in 2021 stood at 11%, trailing behind figures for Viet Nam and India, indicating room for improvement (Elsevier, 2023[39]).

Leveraging regional integration

Bangladesh’s size and geostrategic location makes it an attractive partner in South Asia. The country serves as a pivotal point between East Asia, Southeast Asia, and South Asia, with close proximity to China and India, the world's largest and third-largest economies by PPP GDP, respectively. The country's access to the sea is another vital asset, particularly with the ongoing upgrades of the Chittagong and Mongla ports. The ongoing infrastructure developments are expected to strengthen Bangladesh's connectivity with Europe and other regions, providing opportunities to expand established trade links, create new ones and attract foreign investors, while also nurturing local suppliers.

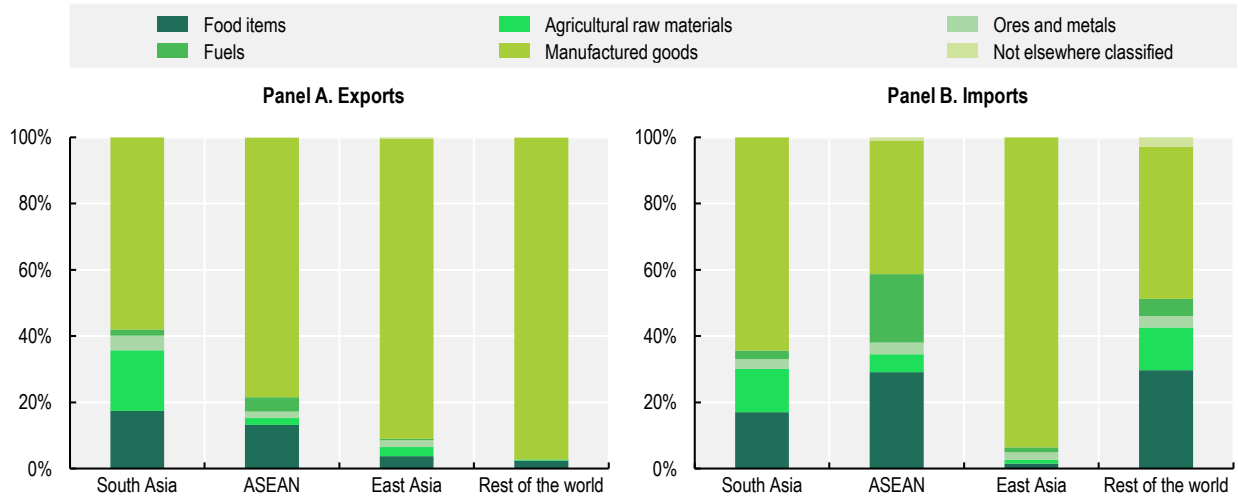
Bangladesh has a distinctive regional trade integration model, mostly focused on importing intermediaries from Asia that are used as inputs for final products that are exported to North America and Europe. Bangladesh is among the least regionally integrated countries in Asia, which is a region known for its high level of regional integration. The country participates in the Asia Pacific Trade Agreement (APTA); the Global System of Trade Preferences among Developing Countries (GSTP); the Protocol on Trade Negotiations (PTN); the South Asian Free Trade Agreement (SAFTA); the South Asian Preferential Trade Arrangement (SAPTA); as well as the Bay of Bengal Initiative on Multi-Sectoral Technical and Economic Cooperation (BIMSTEC). It also enjoys preferential access to various regional markets due to its LDC status. It lacks, however, a strategically crafted network of international and bilateral agreements, which stands in contrast to the well-developed networks from which other countries in the region benefit.

Despite these arrangements, Bangladesh's regional integration presents a lopsided picture: 75% of its merchandise imports come from Asia, while only 16% of its exports are sold within the region. A closer look at Bangladesh's trade patterns reveals a skewed distribution. Between 2019-21, the country exported USD 1.3 billion to South Asia, USD 0.7 billion to ASEAN, and USD 2.5 billion to East Asia, with most of its exports (88%) going to the European and US markets. In contrast, Asian sub-regions played a significant role in supplying imports. Bangladesh relies heavily on regional markets for a wide range of imported inputs, particularly manufactured products and intermediate goods from Asian countries, predominantly China, India, and Singapore, which account for 52% of total merchandise imports between 2019 and 2021. China primarily sources Bangladesh with non-raw textiles and machinery, while India mainly supplies raw cotton and other textiles. Additionally, Singapore is a key source of machinery, such as sewing machines, and chemical products like synthetic colouring matter. Conversely, 58% of Bangladesh's non-RMG exports are destined for Asia (mainly India, China, and Japan), while 29.4% go to Europe. However, sectoral differences exist. For non-RMG manufactured goods, Asia's share as an export destination increases to 66%, while Europe's decreases to 21%. Exports of non-RMG natural resources and resource-based

manufactured goods primarily go to Asia (56%), but European countries increased their share as importers of Bangladesh's less complex non-RMG exports, accounting for 31% of the total (Figure 2.14).

Figure 2.14. Bangladesh trade with Asia is relatively more diversified than its global trade

Composition of Bangladesh's trade flows by destination (2019-2021)



Note: All food items (SITC 0 + 1 + 22 + 4); Agricultural raw materials (SITC 2 less 22, 27 and 28); Ores and metals (SITC 27 + 28 + 68); Fuels (SITC 3); Manufactured goods (SITC 5 to 8 less 667 and 68).
Source: Authors' elaboration based on UNCTADstat, https://unctadstat.unctad.org.

This trend is more pronounced for more sophisticated products, such as chemicals and machinery (which include pharmaceuticals and electronics). Asia accounts for 81% of these exports as destination market for Bangladesh, with emerging markets like Sri Lanka, Myanmar, Philippines, and Nepal gaining importance. Africa's share also increases capturing 6.5% of the total, mostly due to Kenya, although from a small total average annual value of USD 390 million (2019-2021).

Bangladesh is also a net importer of services across all regions; nonetheless, the regional market also plays a prominent role as a service export destination for the country, accounting for a sizeable 39% of Bangladesh's services exports. In the same vein, half of Bangladesh's service imports come from Asia, making it Bangladesh's main trade partner in services.

Table 2.3. Tapping into regional markets to foster economic transformation

STRENGTHS	WEAKNESSES
Large and dynamic market	Non-Tariff Barriers, redtape
Young labour force	Logistics & infrastructure
Entrepreneurship	Lack of skilled labour force
Movement of professionals	Limited R&D
	Access to capital
OPPORTUNITIES	**THREATS**
Some strong sectors with proven track record	Small companies might find more difficulties to operate
Growing market in the region	Geopolitics & instability
Integration with big players in GVCs	Energy and inflation crises
Improved quality of products and services	Loss of preferential status & incentives => LDC graduation

PRIORITY ACTIONS
Connectivity ASEAN-SAFTA in terms of land and use of ports
Addressing non-Tariff Barriers => mutual recognition agreements
Harmonised HS codes
Visa-free movement of professionals in the region
Increased investment in R&D
Supporting adherence to Environmental Social Governance standards

Source: Consensus building event - *Working group: cushioning fragilities to develop a sustainable transformation*. PTPR of Bangladesh, 18 October 2022, Dhaka.

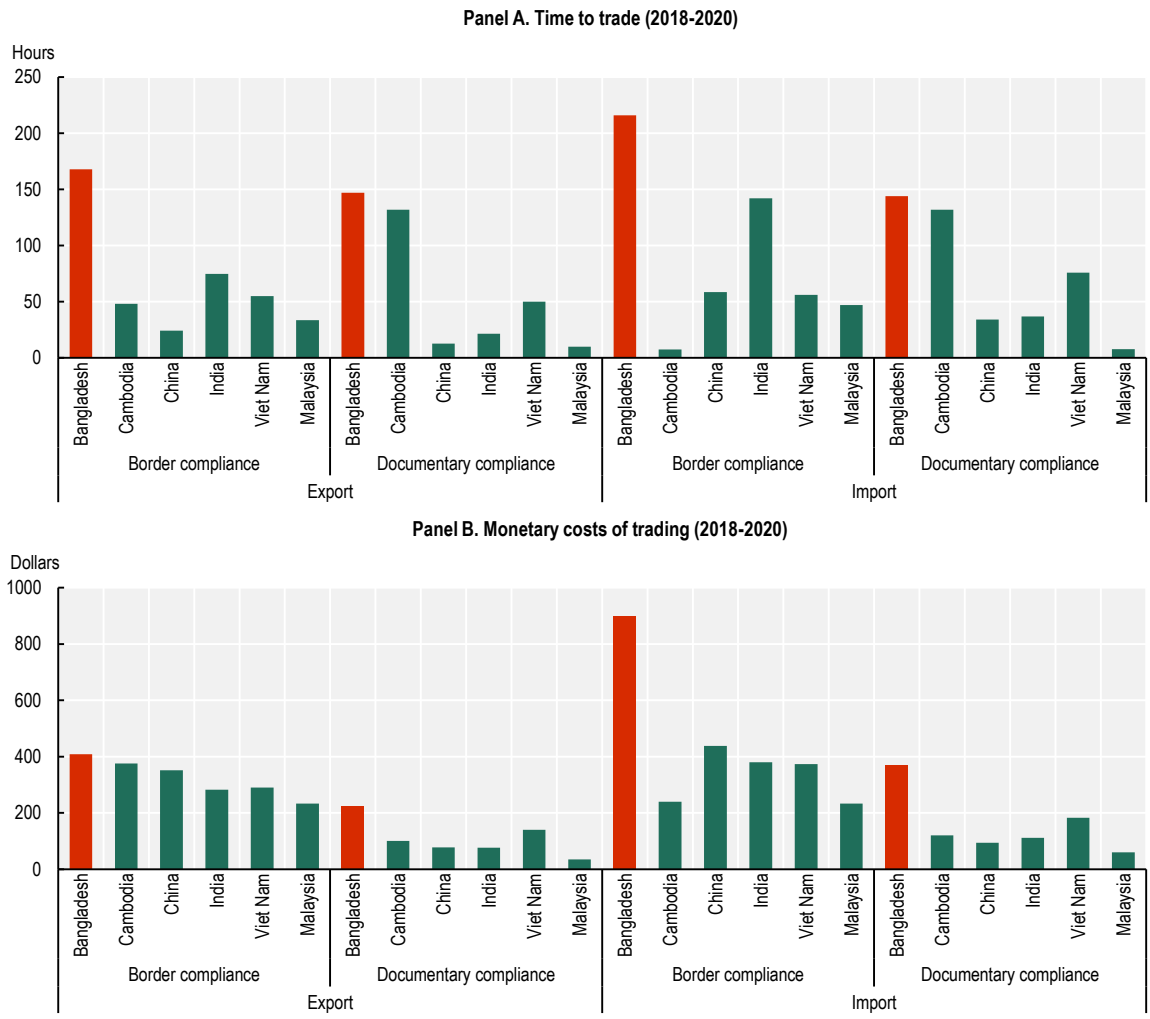
While regional integration presents several opportunities and challenges to diversify and sophisticate the economy, several Asian partners have been more effective at supplying the Bangladeshi economy, than Bangladeshi exporters at penetrating regional markets. This imbalance stems from the interplay of several structural and trade policy constraints that should be addressed to make the most of regional integration (Table 2.3). In particular:

- **Supply-side constraints limiting product diversification in Bangladesh**. Supply-side constraints, ranging from inadequate infrastructure to costly access to advanced technologies and lack of specialised skills (especially in STEM and digital sectors), undermine competitiveness beyond the low-tech labour-intensive industries, thereby limiting trade complementarities within the region. With more than 85% of merchandise exports accounted for by textiles and clothing, mostly RMG, Bangladesh tends to lack the productive capacities to competitively meet varied regional demand. Moreover, despite some engagement in high-tech and more knowledge-intensive sectors (electronics, ICT, pharmaceutical, business services, etc.), to date this process is only incipient and happening mainly with a domestic focus. Meanwhile, the weak development of productive capacities creates a vicious circle slowing down the pace of digital transformation and the establishment of a broader competitiveness basis (UNIDO, 2020[40]; UNCTAD, 2020[25]).
- **Inefficient transport, logistics and distribution networks.** Costly and inefficient logistics and distribution has long weighed on Bangladesh's competitiveness, creating congestion and delays even in established industries (UNCTAD, 2022[19]). It has also hampered export-oriented trade links and business-to-business contacts regionally and worldwide, particularly outside the established RMG value chains. Transport and logistics bottlenecks affect all modes of transport, but they tend to have a disproportionate bearing on trade taking place by road over land borders, which slows intra-regional trade. For example, about 90% of bilateral trade between Bangladesh and India takes place through land customs stations (including the Benapole-Petrapole that accounts for about 70% of bilateral trade). India is also a transit country to other regional markets such as Bhutan and Nepal. While the government has put in place ambitious infrastructural projects to improve both physical and digital connectivity – think for instance of the Padma Multipurpose Bridge or the National ICT Road Map – tackling these bottlenecks will take time and calls for a concerted approach to develop economic corridors that spatially decentralise productive transformation opportunities (UNCTAD, 2020[25]; Hong, 2018[41]).
- **Relatively high tariffs prevail, where no LDC-specific preferential market access is available**. Bangladeshi producers tend to face relatively high levels of protection when exporting towards the regional market products for which preferential treatment is not available, or in those cases where preference utilisation is hampered by high compliance costs and other barriers. The potentially high rate of protection faced by Bangladeshi exporters outside (LDC-specific) preferential schemes is compounded, as confirmed by focus-group interviews, by the lack of a harmonised understanding of HS product classification, which creates scope for uncertainty on the applicable tariff and adds further transaction costs (Box 2.2).
- **Pervasive non-tariff barriers**. Widespread non-tariff barriers, complex trade facilitation, and transit procedures hinder Bangladesh's trade capacities, especially regionally (Rahman, Naimul

and Saif, 2015[42]). An analysis of trade costs highlights Bangladesh's lag compared to neighbours, particularly in border compliance. High transaction costs hamper competitiveness, limiting trade with key regional partners (Figure 2.15) however some improvements have been recorded more recently (World Bank, 2021[43]). Digital tech like ASYCUDA and the national single window rollout could lead to efficiency gains, but progress lags behind regional peers. Traders face challenges: a lack of mutual recognition agreements (MRAs) for effective market access, deficient testing facilities at land customs, and transit bottlenecks with India, Bhutan, and Nepal under the BBIN-MVA (UNCTAD, 2023[44]).

Figure 2.15. Non-tariff barriers also hamper regional integration opportunities for Bangladesh

Time and monetary costs of trade in Bangladesh and selected Asian economies (2018-2020)



Source: Authors' elaboration based on World Bank Doing Business 2020 database, https://databank.worldbank.org/source/doing-business.

Box 2.2. Regional integration and LDC graduation: Navigating Bangladesh's transition

As Bangladesh nears LDC graduation, effective regional integration becomes crucial for two reasons. Firstly, as LDC-specific preferential access changes, maintaining competitiveness requires anticipating impacts on trade. Secondly, bolstering regional trade can counterbalance the loss of LDC preference in third-party markets.

Scenario analysis provides insights:

- LDC-specific preference withdrawal: This explores the impact of transitioning from LDC-specific access to Most Favoured Nation (MFN) Treatment in partners like India or Japan.
- Gaining preferential market access: This examines the effects of Duty-Free Quota-Free (DFQF) access through bilateral or regional agreements, like ASEAN.

Table 2.4 outlines trade impacts for each partner. Key takeaways include:

- Losing LDC preferences affects export earnings, even regionally.
- Retaining or gaining preferential access boosts exports, diversification, and partner expansion.

Table 2.4. Impact on LDC graduation in selected regional markets under alternative trade arrangements

Area	Region	Export potential of 5 major items (USD million)	Total export potential, extrapolated by considering the proportion of 5 items in total exports
South Asia (if MFN)	India	-182.4	-641.2
	Pakistan	-2.8	-3.5
	Total	**-185.2**	**-644.7**
East Asia (if MFN)	China	-233.6	-615.6
	Japan	-226.8	-529.4
	South Korea	-184.9	-396.8
	Total	**-645.2**	**-1 541.8**
ASEAN (if Duty-free)	Indonesia	176.4	374.5
	Singapore*	95.3	232.0
	Viet Nam	37.8	82.1
	Thailand	20.0	41.8
	Malaysia*	95.7	231.3
	Total	**425.2**	**961.7**

Note: *Actual export (2019) has been considered as potential export since MFN tariffs facing Bangladesh are zero in both countries.

Bangladesh's untapped export potential across ASEAN, South Asia, and East Asia presents growth opportunities. A strategy integrating LDC graduation and regional integration is crucial. A proactive regional integration agenda, including bilateral agreements and blocs like ASEAN and RCEP, mirrors Viet Nam's success. This requires gradual implementation, considering Bangladesh's unique situation and potential adjustment costs. Evolving from preferential to reciprocal trade necessitates a revamped policy framework, affecting sectors and politics. Nurturing the growth coalition for sustainable development prevents "middle-income traps" and aligns with a shift from labour-cost to knowledge-driven competitiveness, ensuring a prosperous future.

Source: (UNCTAD, 2023[44]), Regional integration as a strategic avenue for Bangladesh: LDC graduation with momentum, https://unctad.org/publication/regional-integration-strategic-avenue-bangladesh-ldc-graduation-momentum.

FDI and international partnerships could be further steered to transform the economy

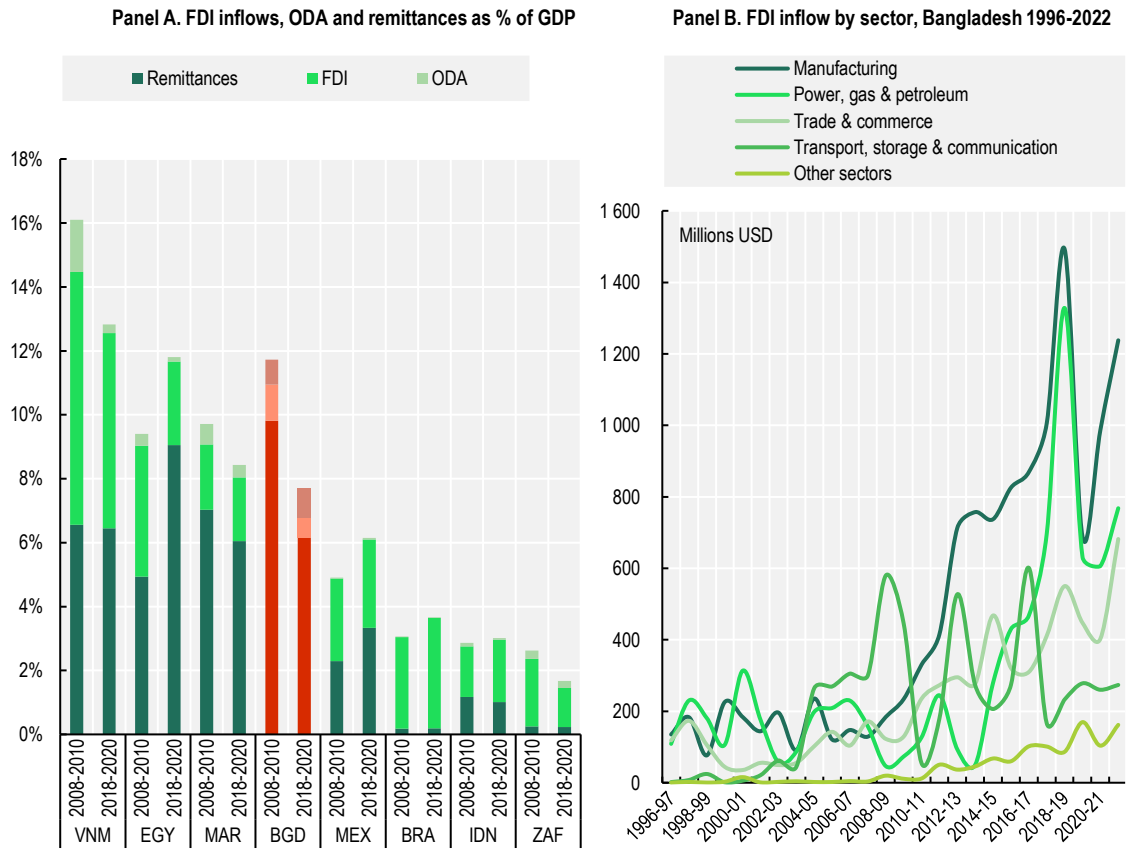
Bangladesh has emphasised that attracting Foreign Direct Investment (FDI) is a key aspect of its industrialisation strategy since the 1980s, primarily through the establishment of Special Economic Zones (SEZs). However, the inflow of FDI into Bangladesh remains modest in comparison to other emerging economies, as well as alternative financial sources such as remittances and Official Development Assistance (ODA). Notably, during 2018-2022, remittances exceeded FDI by a substantial margin, reaching up to seven times the value of total FDI (Figure 2.16, Panel A).

Despite an increase in nominal FDI—rising from an average of USD 400 million in the late 1990s to USD 2 900 million during 2018-22—FDI inflows as a percentage of GDP slipped from 1.1% in 2008-10 to 0.7% in 2018-20. Bangladesh's FDI-to-GDP ratio is mediocre in comparison to other emerging industrial economies. For instance, Viet Nam registers a much higher ratio of 6.10%, and countries like Indonesia and Morocco surpass Bangladesh with figures of 2%. The limited incidence of FDI is balanced by a relatively higher amount of domestic investment, which indicates the significant role played by the local private and public sectors. The Gross Fixed Capital Formation (GFCF) as a percentage of GDP in 2022, is comparable to that of Viet Nam, standing at 32%. This is above of other countries in the region, including India and Indonesia at 29%, as well as Thailand and Malaysia at 23% and 20% respectively.

However, there is a drawback to consider. The low proportion of FDI on GFCF in Bangladesh could lead to potential investment limitations in the medium and long run. In 2022, the FDI as a percentage of GFCF was only 2.8% in Bangladesh. This figure is notably smaller than the 6.2% in India and Indonesia, and significantly lower than Viet Nam's 21%. If larger volumes of foreign investment flow into the country, it could help counterbalance the current fiscal constraints that are delaying or postponing domestic investment. This approach would also assist in increasing the country's foreign currency reserves.

In addition to playing a marginal role in the economy, FDI in Bangladesh tends to concentrate in traditional sectors, limiting FDI’s potential to foster economic diversification and fast track Bangladesh to catch up in more sophisticated industries. Between 2017 and 2022, FDI in Bangladesh focused on manufacturing, which accounted for almost 40% of total FDI inflows to the country. Garments and textiles represented one-third of FDI inflows, followed by food products. In garments and textiles, most FDI continues to be driven by the price competitiveness of domestic production due to persistent low labour and environmental costs. Other factors include the established contract manufacturing and outsourcing arrangements with leading global brands, mostly from the US, Canada and Europe. Within manufacturing, the sectoral composition of FDI hasn’t changed much, with the exception of pharmaceuticals which rose from USD 50 to 500 million of total stock. Two emerging areas for FDI are power and energy, which currently account for 27% of total FDI inflows to Bangladesh and ICT and commercial services, which account today for 25% of total FDI. These new investments are linked to national plans to increase energy and electricity capacity of the country to match population expansion and increase in industrial activities (Figure 2.16, Panel B).

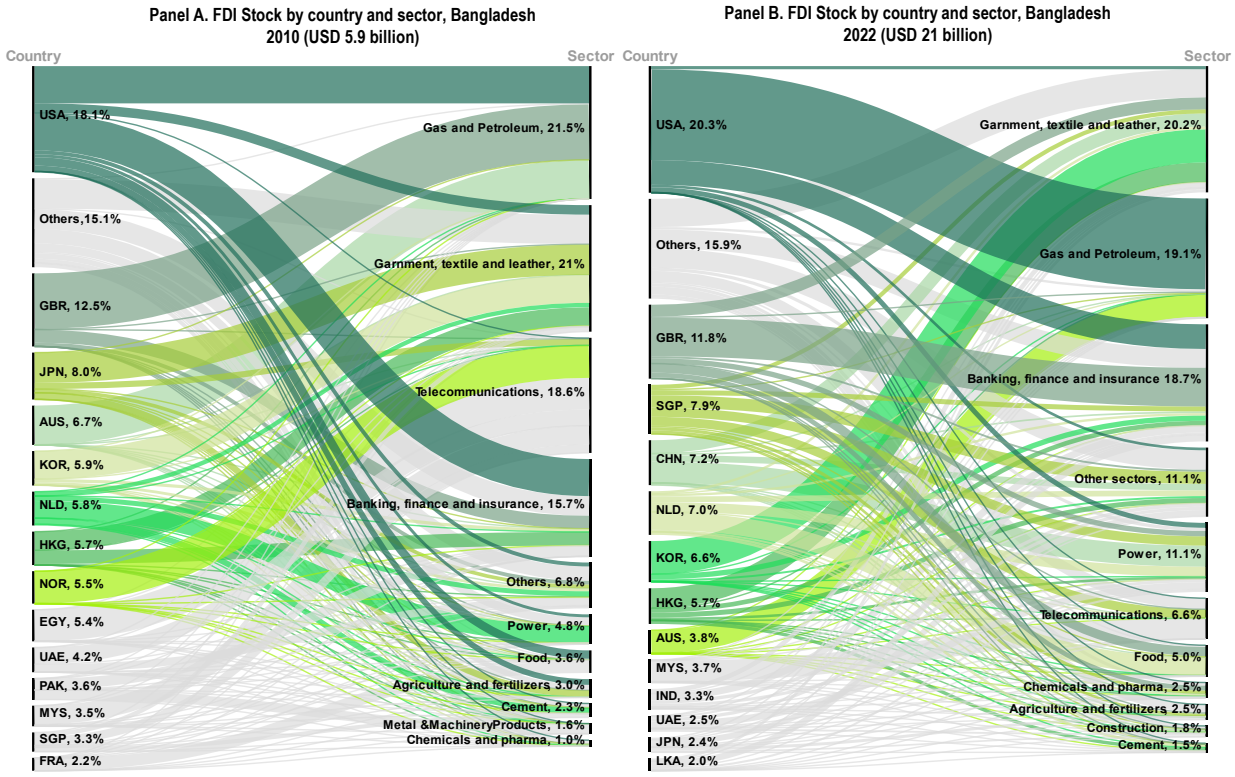
Figure 2.16. Remittances and ODA matter more than FDI for Bangladesh



Source: Authors' elaboration based on World Bank, https://data.worldbank.org, UCTAD stat, https://unctad.org/statistics and Bangladesh Bank, https://www.bb.org.bd/.

While the total stock of FDI to Bangladesh trebled between 2010 and 2022, the Unites States remained the main investor, accounting for around 20% of the total. The United States invests mainly in energy and banking activities. The second key partner is the United Kingdom, which accounts for 13% of total FDI and which also invests mostly in energy and banking. Asian economies have been increasingly investing in Bangladesh in the last decade. Traditional partners such as Japan reduced its incidence on the total and Korea remained the leading investor in garments and textiles. Overall, South, South-East and East Asia together accounted for 44% of total FDI stock in 2022, up from 30% in 2010. China, Singapore and India emerged as new investors. China and India are mostly investing in power generation whereas Singapore has a more diversified portfolio that encompasses power generation, chemicals and telecommunication. The EU countries overall account for 9.4%, and within them the main investors are the Netherlands followed by Denmark and Germany, all with a relatively diversified portfolio that include investments in consumers goods in addition to energy (Figure 2.17).

Figure 2.17. The US remains the leading investor in Bangladesh, while new players are coming along



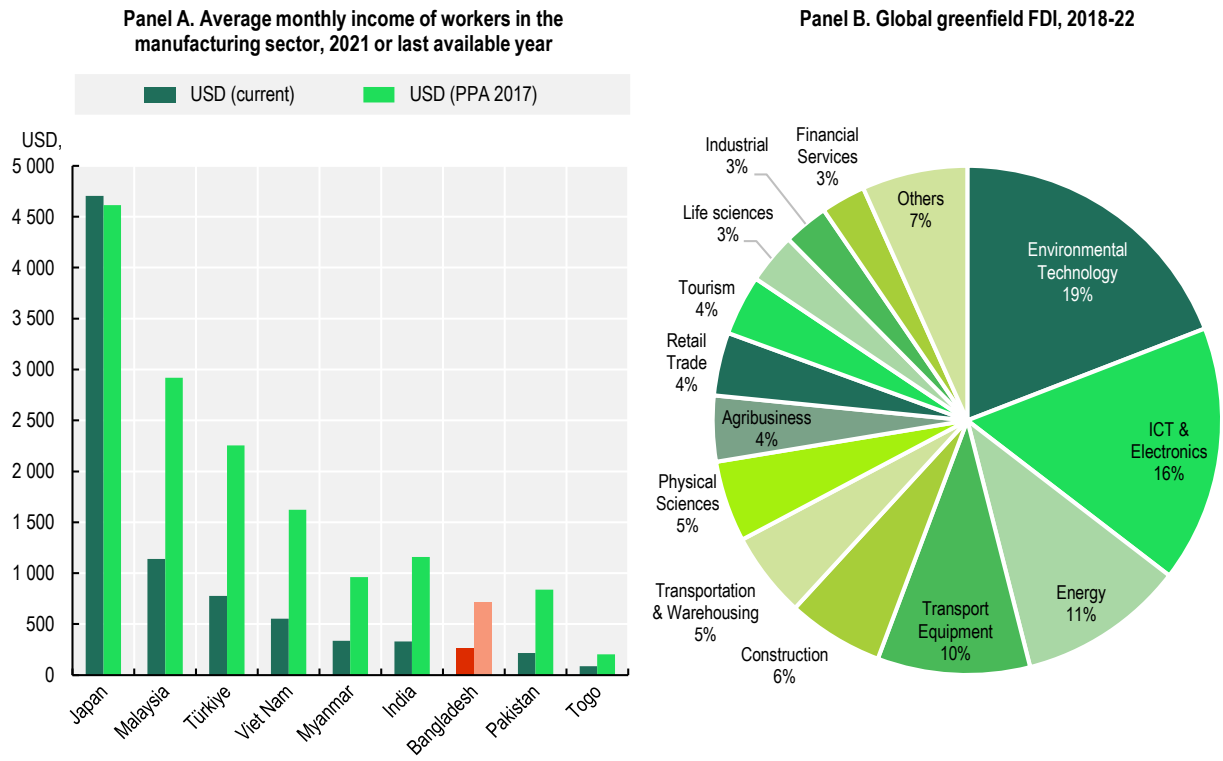
Source: Author's elaboration based on Bangladesh Bank, https://www.bb.org.bd/.

Foreign Direct Investment (FDI) holds significant potential as a catalyst for development. It contributes by bolstering foreign currency reserves and promoting exchange rate stability. Furthermore, FDI can facilitate imports of capital goods and services and favours technology transfer and innovation. If effectively managed, it serves as a valuable avenue for industrialisation and cultivating business acumen. FDI plays a role in encouraging economic diversification, fostering the emergence of fresh sectors within the host economy. Realising these benefits requires a focused approach that nurtures local industries and ensures that FDI's positive impacts reverberate throughout the domestic economy.

However, the current landscape of FDI in Bangladesh primarily hinges on price competitiveness and aligns with conventional industries, neglecting the transformative potential that FDI can bring to the country. Contrary to the global trend where FDI drives development in cutting-edge sectors, Bangladesh's FDI largely reinforces its existing specialisation pattern. Globally, FDI acts as a major catalyst in pioneering industries. Environmental technologies commanded approximately 25% of investments during 2018-2022, followed by ICT and electronics, representing 16% of global FDI (Figure 2.18).

FDI can be an important development driver. FDI contributes to increase foreign currency reserves and financial stability by favouring a stable exchange rate. It enables financing the imports of capital goods and services, and, if properly steered, can be an important source of industrialisation and can help countries learn ‘how to do business’. It can also foster economic diversification by enabling the development of new activities in the economy receiving the FDI. To do so, it requires targeted strategies to nurture local industrial development and ensure the positive spillovers to FDI accrue to the local economy.

Figure 2.18. Global FDI are going green and tech



Note: Panel A. Bangladesh (2017), India (2019), Myanmar (2020), Malaysia (2020).
Source: Authors' elaboration based on the Financial Times' FDI market database, https://www.fdimarkets.com/ and ILO statistics, https://ilostat.ilo.org/.

Conclusions

Bangladesh's impressive accomplishments to date, while commendable, have resulted in a partial economic transformation. The persistence of significant vulnerabilities poses a potential threat to future advancements. The nation stands at a pivotal juncture in its development journey, where substantial achievements and hurdles intersect. Amid the challenges posed by the COVID-19 pandemic, Bangladesh has demonstrated progress in critical domains, including in recognising, at early stages, the pivotal role of digitalisation for both societal and economic progress.

Bangladesh has demonstrated a strong capacity to do business and to trade in international markets. Going forward, Bangladesh can gain more from trade. To do so, it needs to overcome the dualism of its industrial base in which an export-focused RMG cluster that is heavily reliant on Asian imports supplies garments primarily to multinational corporations in the EU and North America. This cluster coexists alongside highly protected firms serving the domestic market. This model hampers innovation by encouraging established firms to maintain the *status quo.* It encourages the country to focus on market access and prices, rather than embracing quality and performance differentiation as core drivers of competitiveness.

To sustain progress and achieve higher-income status, Bangladesh needs to deeply transform the way it does business, trades, and the way in which the public realm manages its relationship with society and international partners. To build on its successes, the country needs a comprehensive update of its economic strategy and its approach to business development. The government and the private sector in

Bangladesh need to shift mindset from negotiating market access to prioritising innovation, inclusivity, transparency and sustainability. International partners should rise to the challenge and invest to support Bangladesh to advance to its next development phase.

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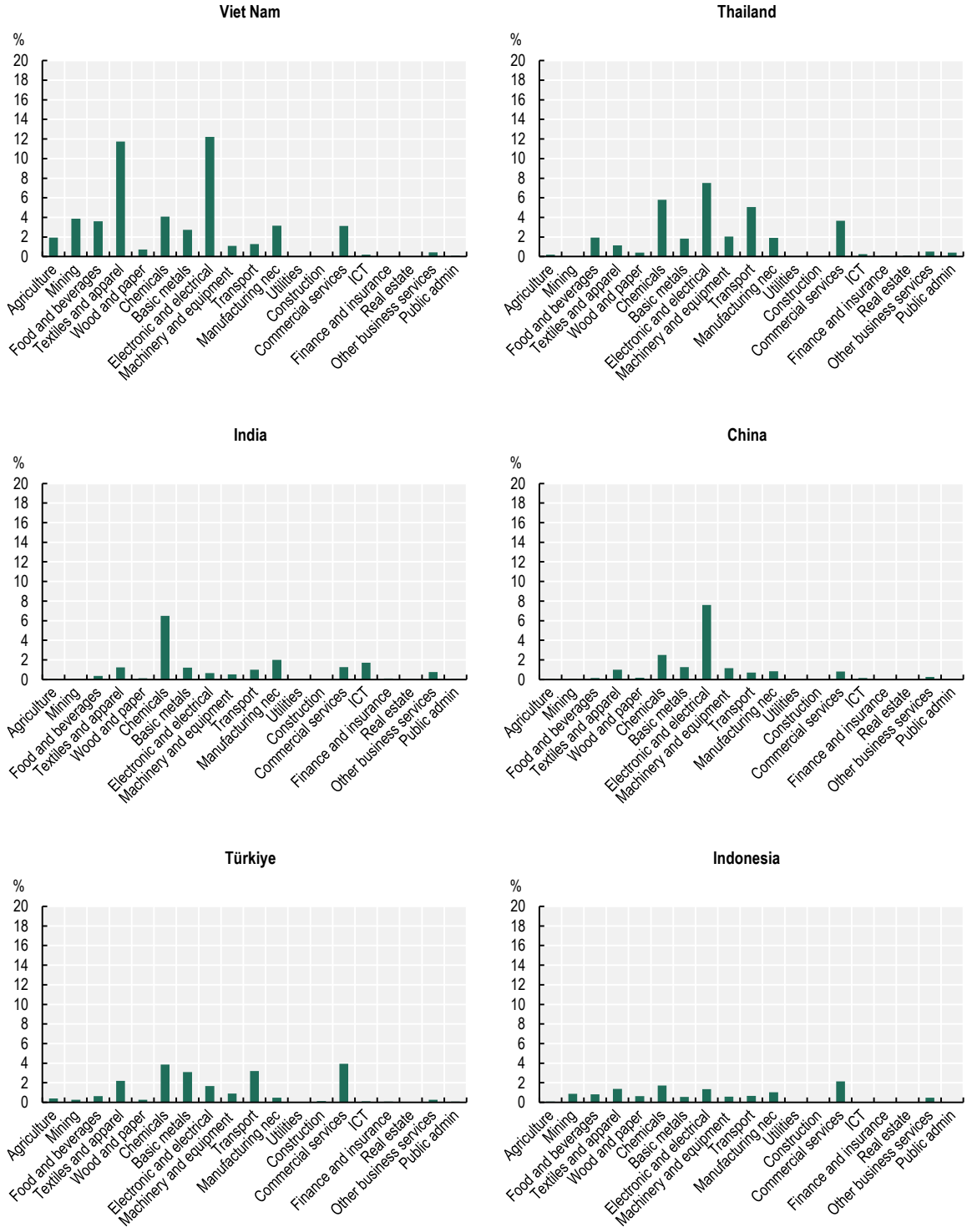
Annex 2.A. Magnitude of GVCs participation

Annex Figure 2.A.1. Foreign value-added share of total gross exports *(Magnitude)*, 2020



Source: Authors' elaboration based on OECD Trade in Value Added (TiVA) database, http://oe.cd/tiva.

Notes

[1] France has strengthened its position in the last few years through luxury brands such as Luis Vuitton, Chanel and Hermès. However, Asian brands have been entering the top 50, with UNIQLO (Japan) on top, and more recently Chinese brands specialised in coats and sportswear, such as Bosideng, Li-Ning, and Anta.

[2] Definition of Asia taken here excludes Western Asia.

3 Looking forward: Bangladesh's next development phase

Bangladesh is ready to shift to a new development phase. This chapter discusses the government's long-term vision, the policies for economic transformation, and clarifies the priorities in moving forward. To meet its aspirations of achieving high-income status by 2041, Bangladesh needs to future-proof the state and endow it with up to date operational and implementation capacities. It also needs to update its international partnerships to ensure a sustainable and smooth graduation from the LDC status. Moreover, it should update the policy toolbox to foster a diversified, innovative, and green industry. The government has an important reform agenda ahead; the private sector and international partners will be instrumental in enabling Bangladesh to continue to succeed.

Introduction

Bangladesh has impressed the world with its achievements in a rather short span of time. Since its foundation as an independent country in 1971, Bangladesh has achieved remarkable progress. It stands among the fastest-growing economies globally and has demonstrated significant resilience to the global COVID-19 pandemic.

This country, rather small in land size, similar to the Iowa state in the United States and Nepal, and slightly smaller than Cambodia, was once known for extreme poverty and famines. It has transformed into a manufacturing powerhouse in South Asia. Despite facing industrial accidents, including the Rana Plaza accident in 2013, the country has demonstrated the ability to adapt and enhance worker safety as it increasingly commits itself to global sustainability standards.

Bangladesh has gained international recognition as a model for modern poverty reduction and is currently the largest country to graduate from the Least Developed Country (LDC) category. Building on these accomplishments, the country is looking forward to economic diversification and sustainable development in the post-graduation era. With a population of more than 160 million, Bangladesh ranks as the eighth most populous country globally, representing around 2% of the world's population. The country faces high and growing exposure to natural disasters. Over time, Bangladesh has learned to comply with global standards.

Chapter 3 of the PTPR of Bangladesh presents the country's long-term development vision within the context of its current developmental trajectory. It evaluates the country's governance and policy approach to economic transformation and identifies potential game-changers for future reforms. This chapter concludes by advocating for an acceleration of efforts to fulfil the country's ambition to become a high-income economy by 2041. It calls for implementing reforms to strengthen and upgrade its institutional framework and updating policy approaches to address both domestic and the external challenges and aspirations. Additionally, this chapter urges the private sector and international partners to adapt their mindsets and tools. A revitalised government approach, coupled with innovation-oriented and entrepreneurial business practices, along with collaborative partnerships with all stakeholders, will be pivotal in enabling Bangladesh to sustain and further its accomplishments.

Bangladesh aspires to become a high-income country by 2041

Since its founding as an independent country in 1971, Bangladesh has achieved a remarkable transformation. From a country known for food scarcity, extreme poverty and natural disasters, Bangladesh is today a growing economy and a manufacturing hot-spot in South Asia, home to a globally relevant ready-made garments (RMG) export industry.

In its 50-year anniversary of independence in 2021, Bangladesh has been recommended by the United Nations Committee for Development Policy (CDP) for graduation from the LDC category by fulfilling the three criteria used to grant countries access to LDC-specific international support measures (ISMs). While this underscores a major achievement it also entails some challenges such as the loss of preferential market access, which was specifically crafted to support these poor and vulnerable economies (Box 3.1).

Box 3.1. What does graduation from LDC mean for Bangladesh?

The LDC category is based on three sets of criteria compiled by the UN Committee for Development Policy (CDP): human assets; economic and environmental vulnerability; and income per capita. Each of these criteria is measured by a series of statistical sub-indicators which are monitored annually by the CDP. To be eligible for graduation, a country must meet at least two of the three graduation criteria at two successive Triennial Reviews of the CDP (UN Committee for Development Policy, 2021).

Bangladesh met all three criteria for the first time at the 2018 Triennial Review. For the second time in 2021 it again met the criteria and was recommended for graduation in 2024. The graduation date was subsequently extended until 2026 due to the pandemic. As a result of graduation, Bangladesh will lose access to certain international support measures (ISMs). Three main areas of impact are expected (UN Committee for Development Policy, 2020):

Preferential trading arrangements

The most significant of these impacts is the LDC-specific duty-free quota-free (DFQF) schemes and LDC-specific preferential rules of origin applied in major export destinations. Significant impacts are expected in the EU, Canada, Japan and other markets, affecting especially RMG, which has benefitted particularly from the Everything But Arms (EBA) initiative which provides duty-free, quota-free access to the region. After a three-year transition period extending until 2029, EU exports will be subject either to the regular Generalised System of Preferences (GSP) scheme, GSP+ if granted access, or alternative trading arrangements. No significant impacts are expected in the United States under current rules. In the case of United Kingdom, however, as of 2023 a new GSP scheme has been granted, called the Developing Countries Trading Scheme (DCTS) (Table 3.1).

World Trade Organization Agreements

LDC-specific special and differential treatment under World Trade Organization (WTO) agreements will also be withdrawn. Bangladesh will no longer benefit from the extension given to LDCs under the Agreement on Trade Related aspects of Intellectual Property Rights (TRIPS) and will have to align intellectual property rights and sectoral regulations for the pharmaceutical industry to the agreement. After graduation, Bangladesh will also no longer benefit from the general transition period for LDCs under TRIPs. The country may need to review its subsidies to comply with the Agreements on Agriculture and on Subsidies and Countervailing Measures. It will also lose certain facilities for dispute settlement. In other WTO agreements, several LDC-specific provisions will expire before Bangladesh's expected date of graduation. Bangladesh will no longer benefit from LDC provisions in regional agreements, unless it negotiates otherwise. Bangladesh will forego benefits accorded to LDCs in future trade negotiations as well as access to or priority in training and capacity-building opportunities at the WTO and other institutions.

Development co-operation

Graduation is expected to have limited impact on development co-operation. It is not expected to affect assistance by the World Bank, the Asian Development Bank, most United Nations entities, GAVI - the Vaccine Alliance, the Global Fund, most ODA from OECD-DAC Members (including Canada, the United Kingdom, the United States and the European Union) or South-South co-operation. Some partners, including Japan, may extend slightly less favourable terms on ODA loans and a gradual shift from grants to loans by partners including Germany. Bangladesh will lose access to mechanisms that are reserved for LDCs, such as the LDC Fund (climate change) in some cases after smooth transition periods.

A final impact of graduation is that Bangladesh will pay higher contributions to the United Nations system (preliminary estimates suggest that this could amount to USD 5 to 5.5 million per year) and no

longer benefit from some forms of support for travel to meetings (for reference, the amount disbursed for the travel of Bangladesh delegates to the General Assembly in 2018 was USD 23 500).

Despite the serious impact of the loss of ISMs – principally DFQF and EBA – in its various strategic plans Bangladesh aims to accommodate the impact by upgrading industry, improving linkages, enhancing productivity and diversifying production, as well as accessing new markets. Graduation is viewed not as a hurdle to be overcome but as a stage on which to base the next phase of development.

Table 3.1. Trade implications of LDC graduation

	LDC status		Post LDC graduation	
Destination	LDC tariffs	LDC ROOs	Graduation tariffs	Graduation ROOs
EU	EBA, duty free for all products except arms	70% value-added can be imported Single transformation for apparel	Standard GSP or GSP+?	50% value-added can be imported Double transformation for apparel
United States	GSP+, no preferences currently apply due to suspension in 2013	35% domestic content requirement + other LDCs	n/a	35% domestic content requirement only
United Kingdom	Developing Countries Trading Scheme (DCTS)	75% non-originating content at the chapter level	Developing Countries Trading Scheme (DCTS)	75% non-originating content at the chapter level
Canada	LDC GSP, duty free for all products except dairy, poultry, and egg products	60% value-added can be imported	Standard GSP	40% value-added can be imported
Japan	Special preferential treatment for LDCs	In General on-originating materials of 40% but with donor country content rule de minimis for textile	Standard GSP	No specific rules of origin
China	LDC GSP, duty free for 98% of tariff lines	Specific criteria for substantial transformation	APTA or MFN	n/a

Source: (UN Committee for Development Policy, 2020[1]; UNCTAD, 2021[2]) and own analysis.

Among the distinctive features of Bangladesh, one notable fact is that the industry, particularly manufacturing, has held a central role in the country's development plans from the outset. Being a densely populated and economically challenged nation, susceptible to natural disasters, and situated in an increasingly significant geostrategic region, the Bangladeshi government has consistently regarded industry, in conjunction with a strategic outlook on outward migration and improvements in agricultural productivity, as pivotal driver for sustaining growth, creating jobs, ensuring food security, and generating foreign exchange.

Industrialisation, anchored in the manufacturing sector has been at the core of the country's development plans since the 1970s and continues to play a key role in the current *Perspective Plan 2021-2041: Making Vision 2041 a Reality*. This plan builds upon the Perspective Plan 2010-2021, which laid out Bangladesh's aspiration to attain middle-income status and transform the economy through digitalisation. The new plan

further elevates the country's ambitions, aiming to achieve high-income status by 2041 through industrialisation.

The Vision 2041 identifies several priorities, including food security, access to education and health, gender equality, and good governance. It emphasises the significance of industrialisation and digitalisation, while stating the government's ambition to enhance domestic export potential, diversify the economy, and attract more private and foreign investment. It also identifies in industry 4.0 and in the modernisation of the energy and transport infrastructure the key enablers to achieving inclusive industrialisation. The Vision aims for industry to generate 40% of GDP by 2031 and then gradually reducing it to 33% by 2041. Industry, and in particular manufacturing, are seen as key sectors to drain surplus labour force from agricultural activities, as well as informal jobs (Government of the People's Republic of Bangladesh, 2020[3]).

Being one of the countries most profoundly affected by natural disasters on a global scale, Bangladesh is acutely conscious of the imperative to reassess its industrial foundation while proactively addressing the demands of climate change mitigation and adaptation. This commitment is eloquently articulated in another policy document, the *Delta Plan 2100*, a comprehensive blueprint introduced in 2018. The plan revolves around five overarching goals: i) ensuring resilience to climate change; ii) enhancing water security and efficiency; iii) developing a sustainable and integrated river systems and management; iv) preserving natural ecosystems; and v) developing effective institutions and equitable governance for in-country and transboundary water resource management.

Bangladesh's modern state is in the making

Bangladesh has a tradition of long-term planning, which have been embedded in its multi-annual development plans since the country's independence. These plans frame the government's ambitions and, since 1971, have guided the country's decision-making processes. To operationalise the Vision 2041, Bangladesh relies on five-year plans, implemented through annual plans and budgets associated with a host of specific policy actions.

Bangladesh is an institution-rich country. At present, 10 out of the current 42 ministries existing in Bangladesh have direct responsibilities when it comes to industry, trade and investment (Figure 3.1). These ministries are: planning, finance, commerce, industry, agriculture, fisheries and livestock, post, telecommunication and ICT, shipping, textiles and jute, science, technology and innovation and power and energy. In addition to these ministries, several operational agencies and bodies play a crucial role in the economic transformation strategy of the country and oversee the implementation of multiple, often overlapping, policies including the Bangladesh Industrial Policy 2022, the Bangladesh Investment Promotion Scheme (BIPS), and the Bangladesh Economic Recovery and Reform Program (BERRP).

The Prime Minister (PM) and the PM Office play a crucial co-ordinating role in the complex and relatively young institutional architecture of Bangladesh. The PM chairs the Country Economic Council (NEC), which operates as the ministerial council of the country. The NEC's deliberations are approved by the Executive Committee (ECNEC), which is chaired by the PM and composed of nine-line ministers, including the Finance, Planning, Agriculture and Commerce ministries. The PM also chairs the Planning Commission, which undertakes research and studies to support decision-making by the NEC and the ECNEC. The Planning Commission has six divisions, including Programming, General Economic, Socioeconomic, Agriculture, Water and Rural, Industries and Energy, and Physical Infrastructure. The Ministry of Planning acts as the secretariat for the NEC and the ECNEC, and is mandated to ensure coherence between different policies. The Prime Minister office through the Principal Secretary also chairs the High-level Committee for LDC Graduation, which has 22 members and seven thematic subcommittees, and heads the Cabinet Division, which acts as the Secretariat to the Cabinet of Ministers, the collective decision-making body of the government. This Cabinet Division provides administrative support and facilitates inter-ministerial co-ordination between ministries.

Bangladesh, a relatively young nation, is currently in the process of shaping itself into a modern state. Developing effective and transparent institutions capable of functioning well amidst the political alternation that characterises modern democracies is an enduring process of learning through experience. The intricacy and overlap of institutional structures in Bangladesh, coupled with the pivotal role played by leadership and the multitude of ministries and agencies, reflect a common feature in constructing effective modern nation-states. In the case of Bangladesh, this complexity carries a distinct historical legacy that will take time to resolve if national unity is to be ensured.

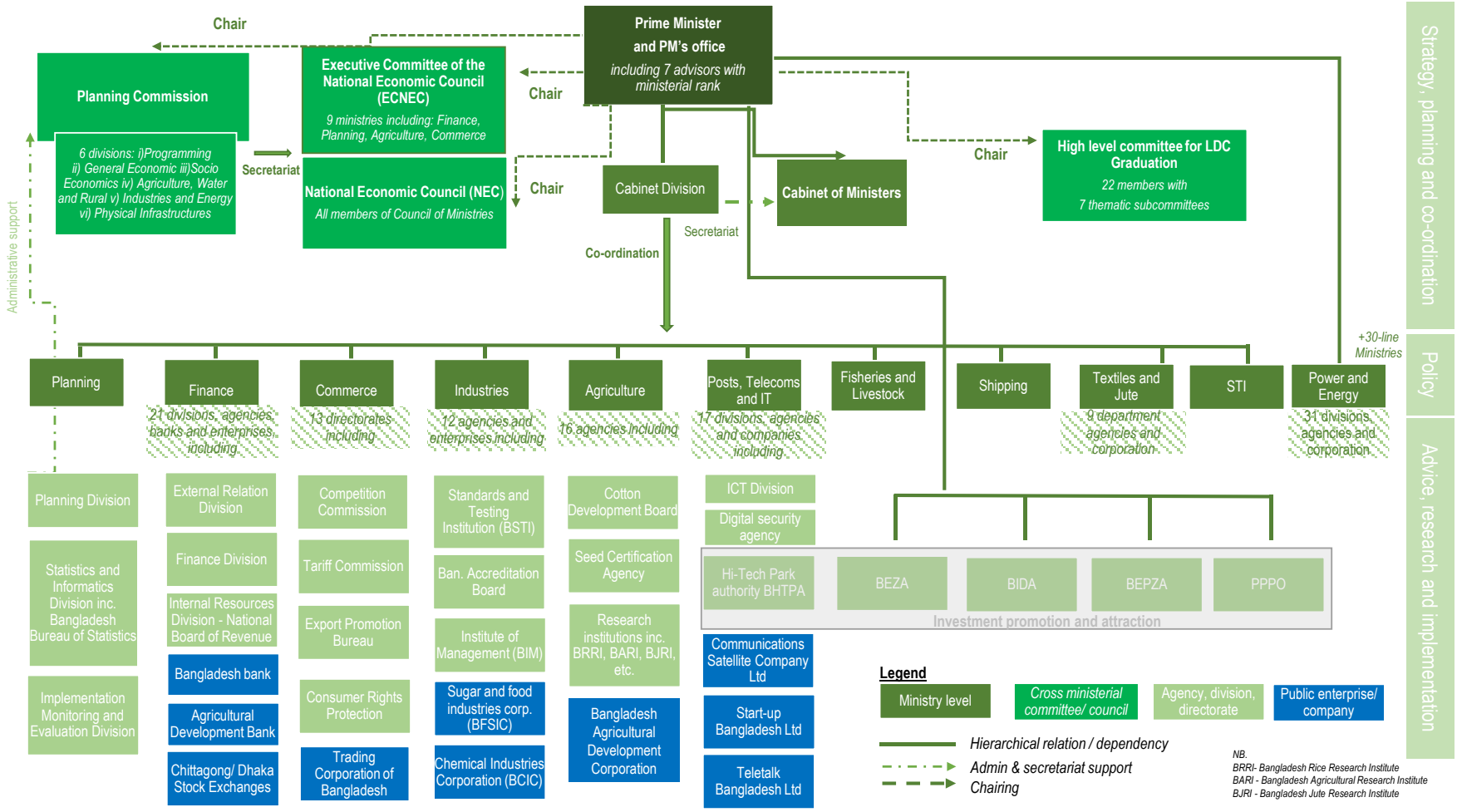
A significant portion of the technical and operational institutional framework for industrial development in Bangladesh traces back to the government of Pakistan. The foundation for industrial development institutions was fashioned around the cultural, strategic, and operational norms prevalent in India and Pakistan during that era (Rahim, 1978[4])

Bangladesh had to establish a framework for industrial development, adapt existing institutions, and create new ones that aligned with its national interests. Over time, these institutions underwent significant transformations and persist in their activities to this day. For instance, the Bangladesh Cottage and Small Industries Corporation, originally established during the Pakistani era, was restructured by presidential decree in 1973. Similarly, the Bangladesh Council of Scientific and Industrial Research (BCSIR), originating from the East Pakistani industrial laboratory, was founded in 1973. This entity currently encompasses 13 research institutes and employs slightly over 1 000 personnel. Notably, around 30% of this workforce consists of scientists engaged in diverse fields spanning basic and applied sciences, encompassing disciplines such as chemistry, genomics, medicine, herbal products, biomedical engineering, light engineering, mining, minerals, glass, ceramics, thin-film technology, magnetic materials, and leather products, among others (House, 1990[5]; Van Schendel, 2020[6]).

Over time, Bangladesh has advanced in improving government-business dialogue, with the domestic and the international private sector. Over the last ten years, Bangladesh has also advanced in responsible business conduct (RBS). After the Rana Plaza disaster in 2013, the country implemented a number of policy initiatives to ensure the safety of workers particularly in the garment and textile industry. Several local stakeholders are also members of the Manufacturers Network, hosted by the OECD, including: the Bangladesh Garment Manufacturers and Exporters Association (BGMEA), Bangladesh Knitwear Manufacturers and Exporters Association (BKMEA), Federation of Bangladesh Chambers of Commerce and Industry (FBCCI) and Newage Group. Bangladesh signed the Dutch Agreement on Sustainable Garment and Textile, and the Accord on Fire and Building Safety. These agreements between global brands, retailers and trade unions led to the introduction of stricter safety standards, the establishment of independent safety inspection bodies and the development of remediation plans with the support of international partners (OECD, 2018[7]). Other initiatives include the integration of lean manufacturing processes and methodology, which focuses on minimising waste within manufacturing systems while simultaneously maximising productivity. It operates in co-operation with Denmark.

The achievements attained by Bangladesh thus far, alongside the determination to sustain success through a focus on becoming an industrial and trade-oriented nation, exert and will drive further progress in establishing a contemporary, rule-based nation-state. The moment is opportune to transition from an emphasis on nation-building to state development. And this should involve developing modern institutions by streamlining existing ones and injecting efficiency, accountability, and clarity of purpose.

Figure 3.1. Institutional governance for production transformation in Bangladesh, 2023



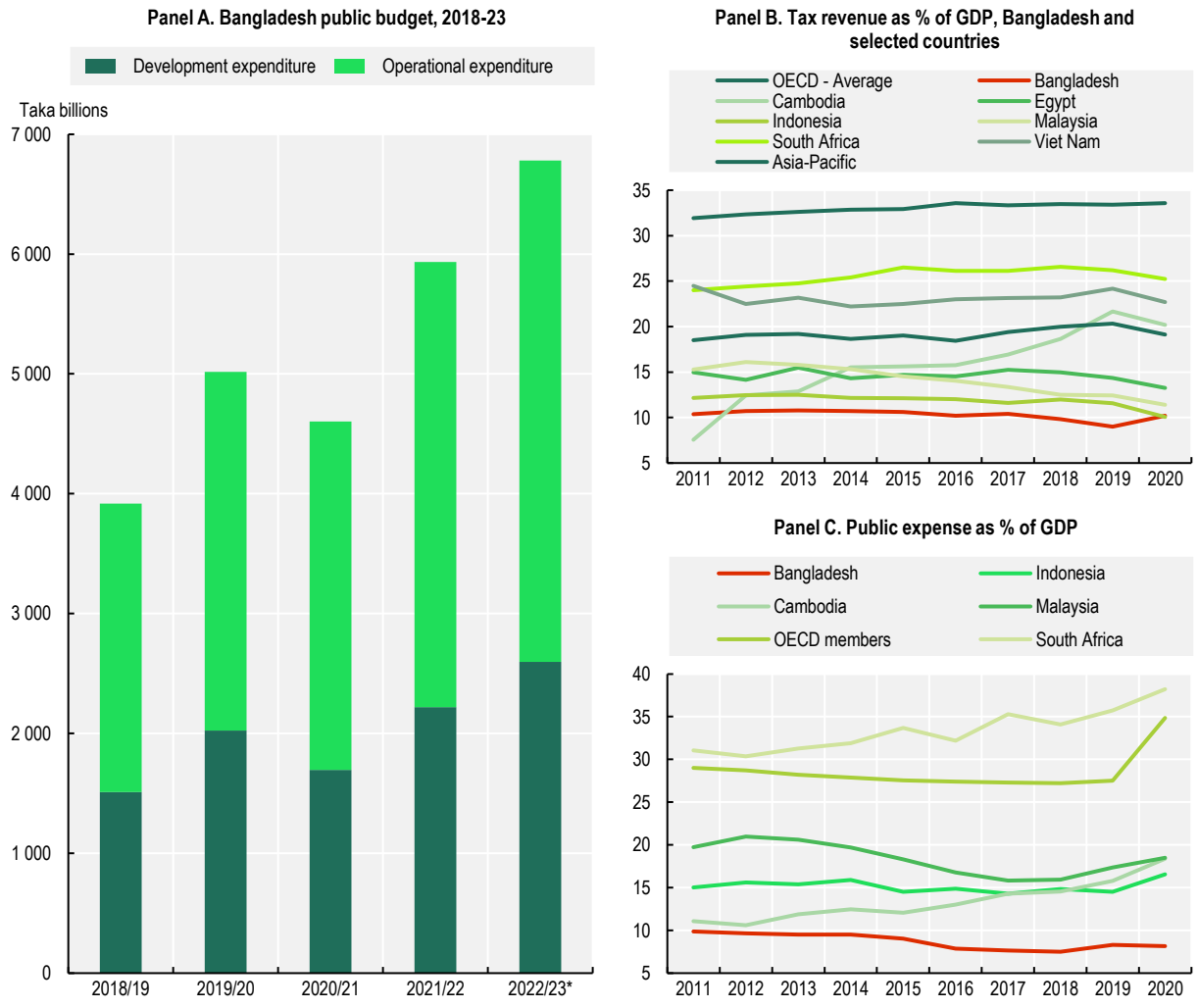
Source: Authors' elaboration based on official information.

Public expenditure is expanding but resources remain limited

Total public budget has been expanding to limit the effect of external shocks. For the fiscal year 2022-23,[1] total country budget is expected to increase by 14% in nominal terms with respect to 2021-22, reaching Taka 6.8 trillion (USD 61 billion) (Figure 3.2, Panel A). While 2020-21 and 2021-22 budgets were structured to mitigate the impacts of Covid-19 with stimulus packages targeting priority sectors including health, agriculture, social inclusion and employment protection, 2022-23 has been designed to boost economic growth while at the same time reducing the impact of other external shocks such as the invasion of Russia of Ukraine (Ministry of Finance, 2022[8]). The latter resulted, like in many other countries, in an inflationary pressure on important commodities such as energy and staple foods products that Bangladesh largely imports. Although global food prices are decreasing after the peak of March 2022, they are still above historical average (e.g., 34% higher than October 2020), with uneven impacts across countries and regions particularly in developing and more fragile contexts. For example, the retail price of one kilogramme of wheat in Dhaka was USD 55 cents at end-2022, 80% more than before the war (FAO, 2023[9]). Exchange rate fluctuations are also creating an uneven impact across countries and regions, undermining the effect of declining international prices for consumers in import-dependent countries (UNCTAD, 2023[10]).

Limited domestic resource mobilisation remains a challenge and is likely to hamper future progress (Figure 3.2, Panels B and C). The 2022-23 budget is composed of tax revenues collected by National Board of Revenue (NBR), domestic loans, foreign loans and grants, and other non-tax revenues. Tax revenues account for 54% of resources, followed by domestic loans with 22% and foreign loans and grants accounting for 15% of the total. Although several actions have been implemented to expand the tax base, including the VAT reform of 2012 and 2019, tax revenues over GDP remains low. In 2020, total tax revenues reached 10.2% of GDP. Although this is higher with respect to the 8.5% of 2007 and in line with Indonesia and Pakistan it remains lower compared to other countries in the region, such as Viet Nam with 22.7%, Philippines with 17.8% or Thailand at 16.5% (OECD, 2022[11]). Expanding tax revenues while preserving equity and redistribution will be fundamental to increasing public investments and effectively realising the ambitious long-term vision of Bangladesh (Ahmed and Heady, 2020[12]). Addressing informality remains crucial, as well. The informal sector, estimated to be around 30% of GDP, and tax avoidance, further shrink the margin of action of the state in designing and implementing long-term effective policies. Of the 213 000 companies registered as a Joint Stock Company in Bangladesh, only 21% filed tax returns leading to an estimated loss of USD 7 billion (Centre for Policy Dialogue, 2023[13]).

Figure 3.2. Public budget and fiscal space, Bangladesh 2018-23



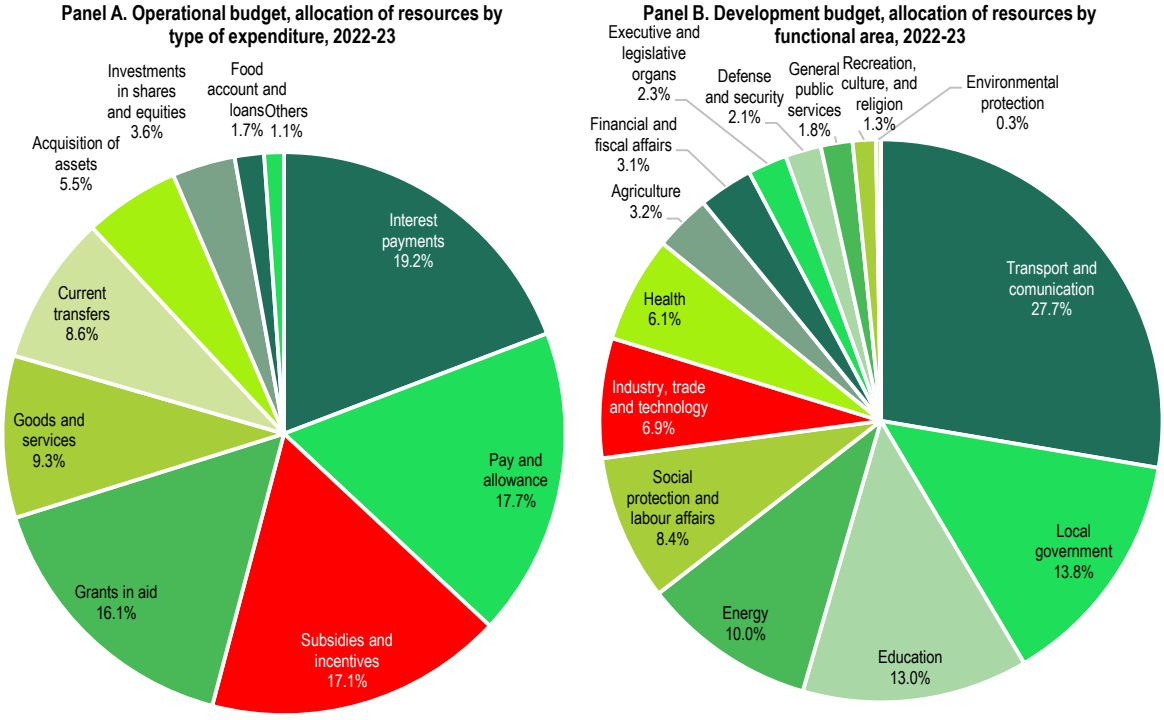
Note: Panel A reports figures in current Taka. * For fiscal year 2022-23 figures are estimated.
Source: Authors' elaboration based on Bangladesh Finance Division, Ministry of Finance, https://mof.portal.gov.bd, *OECD Revenue Statistics in Asia and the Pacific 2022*, https://www.oecd.org/dev/revenue-statistics-in-asia-and-the-pacific-5902c320-en.htm and International Monetary Fund finance statistics, https://data.imf.org/.

Operational expenditure, which accounts for 60% of the public budget, includes current expenses for the function of the state such as salaries and purchases of goods and services as well as subsidies and transfers to local economic and social actors and for the repayment of foreign loans. Subsidies and incentives are the main instruments in place, accounting for 17% of total operational expenditure (Figure 3.3). These include set of cash incentive packages and subsidies for fuels, fertilisers, micro and small medium enterprises (MSMEs), export-oriented industries and for the formalisation of remittances. Total subsidies and cash incentives are estimated to reach approximately USD 7 billion (Ministry of Finance, 2022[14]).

Development expenditure primarily focuses on transport and energy. The remaining 40% of the budget is allocated to development expenditures including the mobilisation of resources for the implementation of the annual development programme, aligned with the priorities of the eighth five-year plan. Together, transport and energy absorb 42% of total development resources, followed by education with 10%. Industry, trade, and technology absorb 6.9% of development budget, or approximately USD 1.6 billion.

Some 85% of latter is mainly driven by capital expenditure related to the construction of the first nuclear power plant in Roopur, which is expected to be operational in 2024.

Figure 3.3. Breakdown of total budget by operational and development expenditure, 2022-23



Note: Development budget refers to Annual Development Program (ADP).
Source: Authors' elaboration based on Bangladesh Finance Division, Ministry of Finance, https://mof.portal.gov.bd.

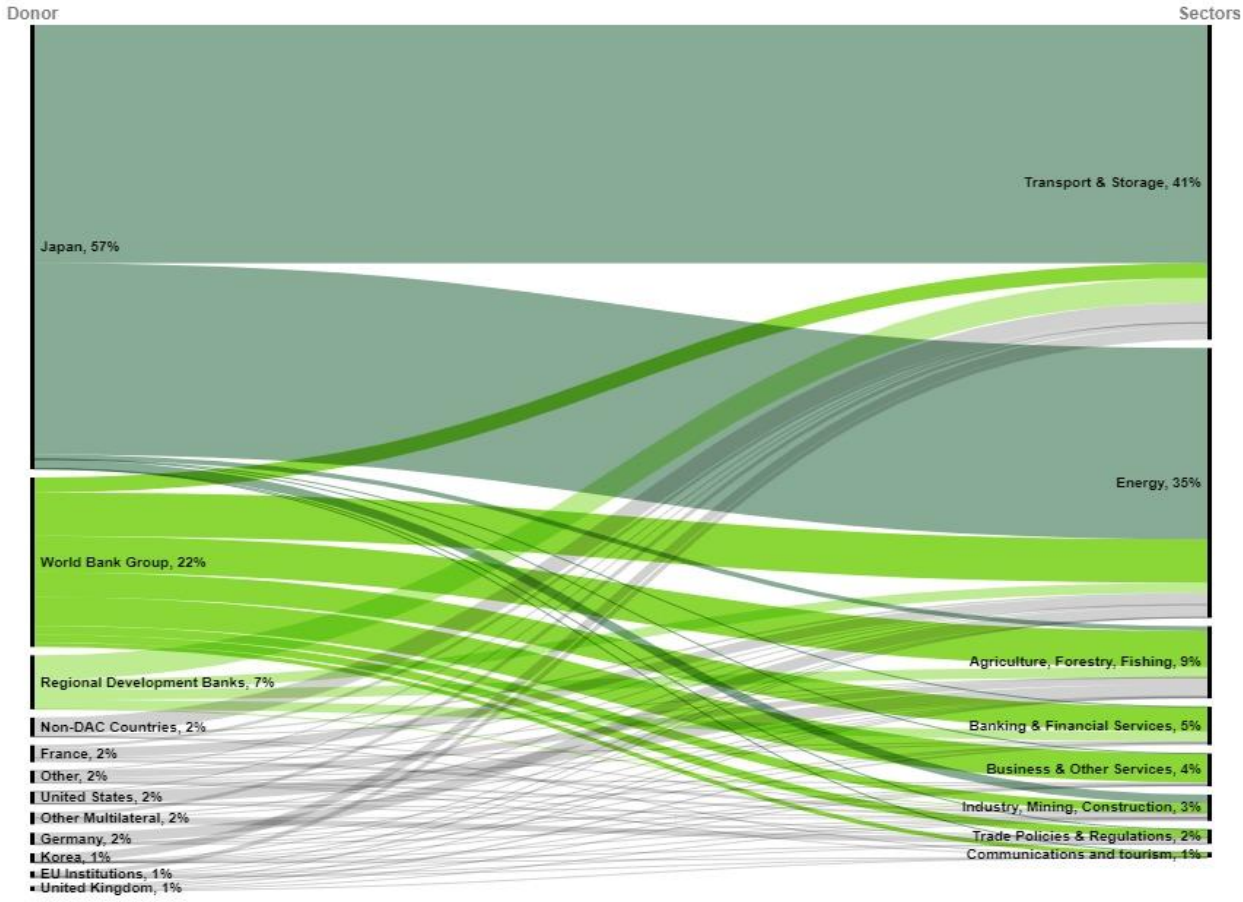
Multiple international partners are active in Bangladesh

International partners have a long history of co-operation with Bangladesh and have been active since its independence. Bangladesh remains today the third-biggest recipient of official development assistance (ODA), after Syria and Egypt (OECD, 2023[15]). While early development co-operation efforts focused on poverty alleviation, rural development and disaster preparedness, currently international partners are increasingly active in supporting Bangladesh's economic transformation. Overall, around 32% of total ODA to Bangladesh between 2018 and 2021, which rounds up to USD 8.9 billion, focused on economic transformation programmes, making Bangladesh one of the countries where ODA focuses the most on economic transformation. Within the ODA for economic transformation, infrastructure and energy account for the most, i.e. 75% of the total (Figure 3.4).

Among DAC donors, Japan is by far the leading partner, accounting for 57% of total ODA targeting production transformation in Bangladesh. Japan is active on multiple fronts from transport projects to special economic zones, energy, including the building of a coal power plant and improvements in the electricity grid. The Japan International Cooperation Agency (JICA) is also involved in building one of the country flagship special economic zone and in two major transport projects, including the Dhaka Mass Rapid Transit System and the expansion of the capital International Airport. Other key players include the World Bank (WB), which has been active in Bangladesh since its independence, and which accounts today for 22% of ODA focused on economic transformation, followed by the Asia Development Bank (ADB), active in the country with 7% of the overall support for economic transformation.

Figure 3.4. More than 75% of ODA for economic transformation targets infrastructure and energy

Gross disbursement of official development assistance (ODA) for economic infrastructure and production sectors by donor, Bangladesh 2018-21



Note: Official development assistance (ODA) is defined as government aid designed to promote the economic development and welfare of developing countries. Loans and credits for military purposes are excluded. Aid may be provided bilaterally, from donor to recipient, or channelled through a multilateral development agency such as the United Nations or the World Bank. Aid includes grants, "soft" loans and the provision of technical assistance. The OECD maintains a list of developing countries and territories; only aid to these countries counts as ODA. The list is periodically updated and currently contains over 150 countries or territories (see DAC List of ODA Recipients: https://oe.cd/dac-list).
Source: Authors' elaboration based on OECD Creditor Reporting System (CRS), https://stats.oecd.org/Index.aspx?DataSetCode=crs1#.

The European Union member states and institutions account, in total, for 5% of total ODA targeting economic transformation and aid related to economic infrastructure and production. After firmly stepping up in the aftermath of the dramatic Rana Plaza accident to promote and enforce responsible business conduct along the whole supply chain and investing in fostering respect of workers' rights and safety, and empowering the female workforce, the EU has recently been updating and crafting a new partnership-based model of collaboration with Bangladesh. The EU is actively involved in cultivating a constructive rapport with the government, fostering domestic and cross-border business dialogue, all in support of pro-business and pro-innovation policy reforms rooted in mutual commitments and shared objectives. In 2016, a collaborative initiative was launched between the Government of Bangladesh and the EU, establishing the EU-Bangladesh Government Business Climate Dialogue. This dialogue, led by Bangladesh's Ministry of Commerce and inclusive of key government and business stakeholders, convenes regularly to pinpoint both enduring transformations and quick wins for enhancing business growth, streamlining trade

processes, and championing innovation. Since its inception, the dialogue has proven to be an effective platform for the exchange of knowledge and the nurturing of trust (Box 3.2).

One concrete outcome of this dialogue is the establishment of the EU Chamber of Commerce. This chamber unites representatives from EU business entities operating within Bangladesh. The formation of this association is anticipated to amplify the articulation of business requirements, hasten policy reforms, foster business-to-business partnerships, and bolster business accountability concerning responsible practices. This encompasses contributions to local development across social and environmental dimensions. Institutions of this nature play a pivotal role in information generation, enhancing transparency, and thus encouraging foreign direct investment. In addition, it promotes both cross-border and domestic pro-business reforms. As the journey progresses, it is important for Bangladesh to adopt an increasingly proactive role, thereby identifying institutional mechanisms to follow up on the diverse matters addressed in the dialogue and propel related domestic reforms.

Bangladesh geostrategic location makes it an important partner for the whole international community. India, the People's Republic of China (hereafter "China") and Russia are also active in Bangladesh, especially in the transport and energy sectors, most specifically in power plants. Bangladesh has recently embarked on ambitious projects to improve its infrastructure and local and regional connectivity. The country inaugurated in 2022 the Padma Multipurpose Bridge that connects the southwest part of the country with Dhaka. The bridge is expected to boost GDP between 1.3-2% and lead to a 10% decrease in travel time to and from Dhaka, which will increase district economic output (JICA, 2005[16]; Ahmad, 2011[17]) by 5.5%. Other ongoing mega projects include the Dhaka-Chittagong Highway Improvement Project, and the Dhaka-Chittagong Port Project, which will connect the two main urban and industrial conglomerates of the country. Of the planned 100 special economic zones (SEZs), most are still at the planning stage, with some already built and linked, individually, to a key partner, including Japan, China and India.

Box 3.2. EU-Bangladesh Business Climate Dialogue: Strengthening trade and investment partnerships

The EU-Bangladesh Business Climate Dialogue (BCD) was launched in May 2016 to facilitate trade and investment from the EU, Bangladesh's largest trading partner and second-largest source of foreign direct investment (FDI). In 2022, Bangladesh's exports to the EU amounted to approximately EUR 23.8 billion, while EU exports to Bangladesh were around EUR 3 billion.

The purpose of the Dialogue is to facilitate economic co-operation between the two parts, including the exchange of information and experience on trade and investment, as well as the promotion of responsible business practices.

The seventh BCD plenary meeting was held in June 2022 and has identified three priority fields of discussion: Tax and Customs, Shipping and logistics, and green business practices. Numerous government authorities, including the Ministry of Commerce, the Bangladesh Investment Development Authority (BIDA), Ministry of Shipping, the Country Board of Revenue (NBR) and Bangladesh Bank, participated in the dialogue, alongside representatives from the EU private sector. Key agreements and next steps include:

- Tax and Customs: a joint committee may be constituted to examine the challenges and opportunities to simplify the customs clearance process for both express and non-express air cargo; policy recommendation from EU companies to introduce a proper risk management system at Customs, using transaction value for determining customs duty, and providing a clear duty structure for importing spare parts.
- Shipping and logistics: accelerate the removal of idle containers from the Chittagong Port premises to increase cargo-handling capacities and improve health and safety; Bangladesh has also agreed to launch a survey to assess the costs and benefits of increasing to 100% the allowed FDI in the logistics sector.
- Green Business Practices: the EU will inform Bangladesh about the upcoming supply chain due diligence requirements in Europe end encourage adaptive actions.

The parties have also agreed on the establishment of a European Union Chamber of Commerce in Bangladesh, which aims to build bridges between the Bangladeshi private and public sector with the EU private sector and investors and help to navigate Bangladesh's transition to post-EBA trade regime in the EU.

Source: Final Joint Statement for BCD (June 2022), https://www.eeas.europa.eu/delegations/bangladesh/7th-eu-bangladesh-business-climate-dialogue_en.

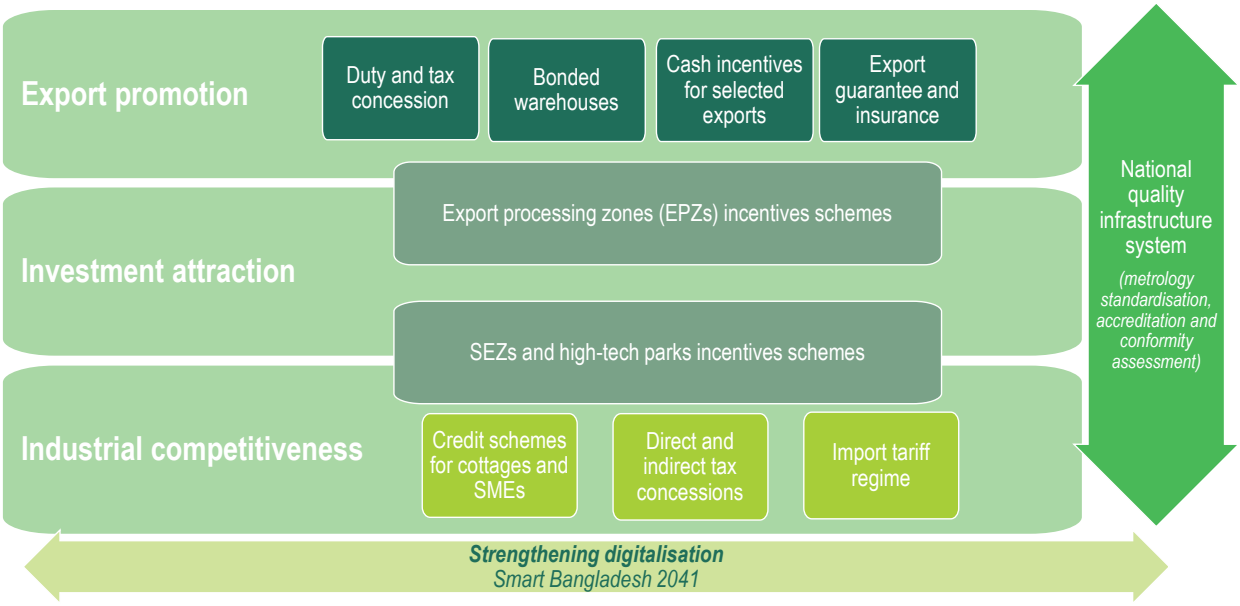
The country is committed to diversifying its economy

To achieve its objective of becoming a high-income country by 2041, Bangladesh is well aware of the need to diversify its economy. RMG accounts for 85% of exports, which is a risk factor to sustainable and inclusive growth in Bangladesh. The export-led growth model based on cheap labour has exhausted its capacity to deliver Bangladesh the inclusive and sustainable growth the world economy and the country needs (see Chapter 2).

To embark on a new trajectory characterised by inclusivity and sustainability, as envisioned in Vision 2041, Bangladesh is strategically harnessing digital technologies to revolutionise its economy. This involves attracting more FDI, increasing export capacities, and enhancing industrial competitiveness. In particular,

the ongoing implementation of the eighth Five-year Plan for 2020-2025, titled *Promoting Prosperity and Fostering Inclusiveness*, places considerable emphasis on enhancing resilience, expediting post-COVID-19 recovery, and addressing the intricacies associated with LDC graduation. The primary objectives seek to maintain a robust average annual GDP growth target of 8%, a pivotal factor in ensuring economic vitality. This aspiration is interconnected with generating employment opportunities, elevating firms' productivity, diminishing poverty rates, and fortifying institutional development and governance structures. Figure 3.5 provides an overview of the main priorities and tools Bangladesh has in place to implement the Vision 2041 under the eighth Five-Year Plan 2020-2025.

Figure 3.5. Overview of Bangladesh's approach to transforming the economy, 2022-23



Note: The figure is not meant to be exhaustive. It provides a snapshot of the main public instruments that the country has in place.
Source: Authors 'elaboration based on official information from Bangladesh Finance Division, Ministry of Finance, Country Budget Speech 2022-2023. Return to the Path of Development Leaving the COVID-19 Behind and Budget speech 2022-23, https://mof.portal.gov.bd and Bank of Bangladesh, Foreign Exchange Policy Department, https://www.bb.org.bd.

A key flagship initiative of the government today is Smart Bangladesh 2041. This initiative builds on the achievements of Digital Bangladesh, which was launched in 2008, and focused on developing digital infrastructure across the country and on fostering access to internet for all citizens. The progress achieved under Digital Bangladesh has been remarkable (see Chapter 2 of this PTPR).

In 2018, Bangladesh launched its first geostationary communication satellite developed in a partnership between Bangladesh Telecommunication Regulatory Commission (BTRC) and the Franco-Italian Thales Alenia Space. The share of individuals using the internet grew from 3% in 2010 to 25% in 2020 and the average broadband speed increased up to 14 Mbps, in 2022. Since 2016, Bangladesh has integrated the Automated System for Customs Data (ASYCUDA) in order to improve the efficiency of customs clearance processes by improving manifest and declaration processing and tax payment mechanisms. In 2021, 73% declarations' duties and taxes were paid within three days (UNCTAD, 2022[18]).

Smart Bangladesh 2041 leverages progresses achieved so far, including the swift and effective use of digital technologies during the COVID-19 pandemic. Smart Bangladesh frames the current government ambition to deeply transform the government, society, citizens' life and the economy through digitalisation. The strategy supports the development of Information and Communication technologies (ICTs) and points to embed digital technologies in business activities. In particular, Smart Bangladesh 2041 prioritises

speeding-up digitalisation and the application of ICTs through 14 action plans targeting specific activities such as agriculture, healthcare, energy and in enabling industry 4.0 in traditional activities, including RMG. Budget allocation is not publicly available, limiting the capacity to track progress. The strategy also aims to nurture a local start-up ecosystem. Bangladesh is now the 12th start-up hub in Asia and through Startup Bangladesh, a government-owned venture capital fund linked to the Ministry of ITC, the government has channelled seed-funding for local startups for 15 million in 2023 (Crunchbase, 2023[19]).

Increasing FDI is among the government's top priorities

One of the main priorities of the Vision 2041 and of the ongoing eighth Five-Year Plan is to increase Foreign Direct Investment (FDI) to the country. This is not a new priority for Bangladesh and the country has been trying to attract FDI though targeted policies since the 1980s. However despite the efforts, FDI to Bangladesh remains limited and concentrated in traditional sectors.

In Bangladesh FDI attraction and operation is governed by the Foreign Private Investment Promotion and Protection Act introduced in 1980. The act has been updated several times but has not undergone any major reform since its introduction. It remains the reference for indicating the conditions for entry and operation of FDI in the country. Overall, despite progress, Bangladesh remains a difficult country for foreign investors to operate in, mostly because of red-tape, the persistence of personalisation in dealing with government-business relations and the high level of complexity in the institutionality.

At present four institutions, created in different moments, co-exist and deal with FDI with slightly different responsibilities. The four agencies provide similar support mechanism and services to investors, including fiscal incentives, import duty and tax exemptions, advantages linked to allowances for full repatriation of capital and dividends (Table 3.2).

- The Bangladesh Export Processing Zones Authority (BEPZA) was set up in 1980 as the main government body in charge of approving investments in the EPZs and is in charge of managing the services provided by the EPZs. In the 1980s, FDI attraction was instrumental to export promotion and was mostly linked to investors in the Export Processing Zones (EPZs). Bangladesh Export Processing Zones Authority (BEPZA). BEPZA today approves all Export Processing Zones (EPZ) projects and is responsible for providing infrastructure facilities, administering tax incentives, issuing work permits for foreign countries in the EPZ. Three types of investment are permitted in the EPZs: 100% foreign-owned; foreign–local joint ventures; and 100% locally owned and industrial units located in EPZs must export at least 90% of their production while 10% to the domestic market subject to payment of customs duties and other local taxes. There are currently nine operative EPZs across the country. Despite the generous incentives that EPZs provides over time, they have struggled to attract foreign investors or generate linkages with local providers. Between 1996 and 2000, EPZs absorbed between 20% and 40% of FDI in the country, while in 2018-2022 they accounted for less than 10% (Bangladesh Bank, 2022[20]). BEPZA is active but new ones have been created to respond to the changing policy approach and objectives of the subsequent governments.
- In 2010, in line with the overall efforts of liberalisation and increasing the role of the private sector in the economy two new agencies were created: the Bangladesh Economic Zones Authority (BEZA), which were set up to manage the privately-owned Special Economic Zones (SEZs) and the Bangladesh Hi-Tech Park Authority (BHPTA), which focuses on fostering industrial and services development in the ICT industry. The Bangladesh Economic Zones Authority (BEZA). Since 2010, BEZA is in charge of establishing and managing the Special Economic Zones (SEZs). Unlike EPZs that are publicly owned, SEZs mainly rely on private capital and expertise. SEZs attempt to attract domestic and international investment in industrial activities, targeting both the domestic and the international markets. In 2018, the government announced the commitment to create up to 100 zones by 2025. Achieving this target seems ambitious as at present only a few

are under construction and a couple are ready to operate. One SEZ is under construction in Araihajar, 30km east of Dhaka, through a join partnership between the private Japanese Developer Sumitomo Corp (70%), and BEZA (30%) with the financial support of the Japan International Cooperation Agency (JICA) (15%). The zone plans to attract 100 companies with expected investment worth USD 1 billion. Discussion for the establishment of additional zones with other international partners are underway. One near Chittagong with the support of a Chinese private developer, which will focus on chemical, automotive garment, and pharmaceutical industries, and another with an Indian developer at the border with West Bengal, focusing specifically on agro-food, light engineering and chemicals.

- The Bangladesh Hi-Tech Park Authority (BHPTA) is in charge of establishing and managing Information, Communication and Technology (ICT) parks in the country. While BEPZA and BEZA have a prominent manufacturing vocation, BHPTA is largely focused on the attraction of ICT-related services. The Authority has a plan for building 28 parks in the country. At present only the Bangabandhu Hi-Tech City (BHTC), located in the north of Dhaka is operational and includes a software technology park and IT training & start-up incubation centre.
- In 2016, the most recent governance effort to attract FDI attraction involved the creation of the Bangladesh Investment Development Authority (BIDA) tasked in serving as a one-stop-shop for international investors. BIDA operates as *primus inter pares* and provides services for both domestic and foreign investors at any location outside the jurisdiction of other investment authorities. In 2021, BIDA launched a one-stop-shop online platform that should ultimately serve as a single window for investors to access the more than 20 public services and procedures affecting FDI in Bangladesh, including company registration, tax certificates, work permit insurance and foreign borrowing approval among others.

Despite the considerable market potential of its economy and numerous initiatives to attract FDI, the progress has remained limited. The institutional arrangements and the policy toolbox for attracting FDI in Bangladesh requires streamlining and further modernisation. Entities such as BEPZA, BEZA, and BIDA operate under the direct purview of the Prime Minister, who chairs each board, while BHPTA falls within the administrative jurisdiction of the Ministry of Post, Telecommunication, and Information Technology. In addition, these agencies have similar or overlapping responsibilities.

This intricate landscape complicates both foreign and domestic investors' access to pertinent information and identifying optimal entry points within the country. Such difficulties are particularly pronounced for new investors lacking prior business history with Bangladesh. Overall, the FDI attraction and operational process exhibits complex and lengthy mechanisms, impeding the country's investment potential. These problems persist despite Bangladesh's advantageous geostrategic location, substantial market size, and established reputation as a reliable business partner. In order for Bangladesh to successfully realise its Vision 2041, it is imperative to streamline and continue modernising the governance and policy framework pertaining to FDI (OECD and ADB, forthcoming[21]).

Table 3.2. Overview of main FDI related incentives by agency in Bangladesh as of May 2023

		Agency			
		BEPZA	**BEZA**	**BHTPA**	**BIDA**
Instruments	**Fiscal**				
	100% Import duty exemption (on some machinery, raw and construction materials)	Yes (also finished goods and others)		Yes	Yes
	Stamp duty exemption on loans, land transfer and lease	Yes	Yes	Yes	No

	Export cash incentive/subsidies for export-oriented industries	Yes	Yes	Yes	Yes
	Tax exemption from VAT and corporate income (for developers, investors, and employees)	Yes	Yes (100% for developers and investors, 50% for expatriates)	Yes (50% for employees)	Yes (50% for export-oriented firms; 100% for PPP projects)
	Bonded warehouse and duty drawback facilities	Yes	Yes	Yes	Yes
	Full repatriation of capital, dividends, and sales proceeds	Yes	Yes	Yes	No
	Repatriation of royalty and technical assistance fees	No	Yes (not exceeding 6% of imported machinery cost)	Yes (not exceeding 6% of imported machinery cost)	No
	Remitting income	Yes (limited amount for residents)	Yes (up to 75% for foreigners; limited amount for residents)	Yes (up to 75% of income and 100% for pensions and actual savings for foreigners; limited amount for residents)	Yes (limited amount for residents)
	Allowance of foreign currency accounts	Yes	Yes	Yes	Yes (foreign investors)
	Non-fiscal				
	One-Stop-Shop (clearance, licenses, import/export permits, foreign banking, etc.)	Yes	Yes	Yes	Yes
Conditionalities	Exporting firm's criteria and Domestic Tariff Area (DTA)	100% Export-oriented firms (can sell up to 10% to DTA)	Export-oriented firms (can sell up to 20% to DTA)		Firms exporting >80%
	FDI ceiling	No FDI ceiling (also foreign ownership fully permissible)	No FDI ceiling (FDI restricted in few sectors and up to 5% of foreign workers)	No FDI ceiling	No FDI ceiling
	Sectoral investment restrictions (22 controlled industries; 4 reserved industries)	Yes	Yes	Yes	Yes
Focus		30 sectors/products	100 planned economic zones	IT/High-tech industries	7 high priority sectors/products and 24 priority sectors/products

Note: The table is not exhaustive and includes only main tools. It has been updated as of May 2023.
Source: Authors' elaboration based on information from BEPZA, BEZA, BHTPA, BIDA, Country Board of Revenue, and Bank of Bangladesh.

Export-promotion continues to benefit mostly garments and textiles

Export promotion has played a pivotal role in Bangladesh's development since the country independency. During that initial phase, the nation directed its efforts towards bolstering traditional exports as a means to sustain growth, foster job creation, and secure foreign exchange reserves. In the 1980s, the government recognised Bangladesh's potential to leverage the evolving global production landscape and the rise of global value chains. It aimed to capitalise on the country's significant population and remarkably low labour costs. With this insight, a proactive stance was taken towards the promotion of labour-intensive industries, particularly the Ready-Made Garment (RMG) sector and the establishment of the SEZs to provide industrial infrastructure. Export promotion became intrinsically linked with the attraction of Foreign Direct Investment (FDI). Fiscal incentives were chiefly employed to facilitate access to essential machinery and materials for export-oriented industries, complemented by tax breaks and streamlined export procedures, primarily benefitting the RMG sector (World Bank, 1978[22]).

After gaining independence in 1972, Bangladesh established the Export Promotion Bureau under the purview of the Ministry of Commerce, aimed at bolstering exports. Concurrently, efforts were made to catalyse industrialisation through the establishment of Export Processing Zones (EPZs). The first Special Economic Zone (SEZ) was initiated in 1983 within the Chittagong region. Chittagong, the country's second-largest city following the capital, Dhaka, is renowned for housing Bangladesh's principal port, further enhancing its strategic significance (House, 1990[5]).

In the 1990s and 2000s, Bangladesh introduced reforms to facilitate trade and started to set up international trade agreements; however, unlike other countries in the region, Bangladesh does not heavily rely on regional supply chains or regional integration, and mostly focuses on nurturing the domestic industry. Bangladesh, as an LDC, benefits from international support measures and special preferential treatment, which have contributed to increasing the competitiveness of its local production. In the process, it has become, in a rather short span of time, a key manufacturing hub for the global textile industry. The generalised system of preference (GSP) and Everything But Arms (EBA) initiative increased the already high-cost competitiveness of the domestic industry, which benefits from duty free and quota free access to international markets.

However, despite progress, the policy approach and the policy toolbox for export promotion remains anchored to the traditional trade policy instruments used in the early stages, including duty and tax concessions, bonded warehouses, export incentives, cash incentives for exporters and additional financial support mechanisms including export finance, insurance and guarantees. The main policy tools include:

- Duty drawbacks and tax concessions, which are implemented to ease production costs for exporters. These include a 50% rebate on taxable income generated from any export business and accelerated depreciation on machinery or plant for industrial units set up between 1977 and 2012. Moreover, to maintain price competitiveness for export products, VAT rebates are granted on a number of export-related services.
- Bonded warehouses allow exporters to import and store raw materials without payment of customs duties for a certain period of time until the manufacturing process is completed. There are currently two types of bonded warehouses: Special Bonded Warehouses for export-oriented RMG industries and General Bonded Warehouse for other industries that both apply 100% duty-free rate. A bond licence is required to make use of bonded warehousing facilities. After obtaining the licence, the licensee may take possession of the imported material under a back-to-back letter of credit without paying any duties or taxes. In case of failure to export, importers are required to pay duty charges and taxes on the goods imported. Companies have reported tax savings of 25-30% as a result of using bonded warehouses.
- Cash incentives are provided to exporters that do not rely on duty drawback or the bonded warehouse facilities. The rate of the incentive is decided by the government, and is updated annually through circulars issued by Bangladesh Bank, which administers the incentive scheme on behalf of the Finance Division of the Ministry of Finance (see Annex Table 3.A.1 for the most recent list of cash incentives). The fiscal weight as a share government budget for these cash incentives has trebled in nominal terms over the last decade. For 2022-23 the total estimated cost of cash incentives of exports is Taka 75.5 million (approximately USD 700 000 million) equivalent to 10% of total subsidy incentives in the operational budget (Finance Division, 2022[23]). These incentives mostly benefit the RMG sector, as, according to most recent available official data from the Government of Bangladesh, 65% of these cash incentives benefitted the garments and textiles industry. The upcoming graduation from the LDC status poses challenges in terms of updating these tools: as they are currently crafted, they could be considered non-compliant with the WTO Agreement on Subsidies and Countervailing Measures (SCM), which explicitly bans or imposes restrictions on the use of all kinds of subsidies for export promotion (Sadiq, 2020[24]).

Bangladesh also provides other instruments to priority sectors. For 2022-23 the government provides a reduction in corporate tax to 12% to export-oriented industries and the textile industry has been granted the extension of a reduced corporate tax of 15% until 2026. Bangladesh provides loans at reduced interest rates, export credits and air transportation facilities on a priority basis for two types of sectors. High priority sectors include RMG, software and IT-enabling services, information communication technology (ICT) products, pharmaceutical products, plastic products, agro-food products and fishing trawlers. Priority sectors, that have export potential but whose production, supply and export bases are not strong enough to compete globally are jute products, electric and electronic products, ceramic products, light engineering products as well as paper and rubber products. Within these policy instruments, the most relevant one is the Export Development Fund (EDF). The EDF is operated by the Bank of Bangladesh to refinance commercial banks for the repayments for the procurement of intermediary inputs. For the fiscal year 2022-23 the EDF has been expanded to Taka 552 billion (USD 4.8 billion) from 276 billion the previous year. Moreover.

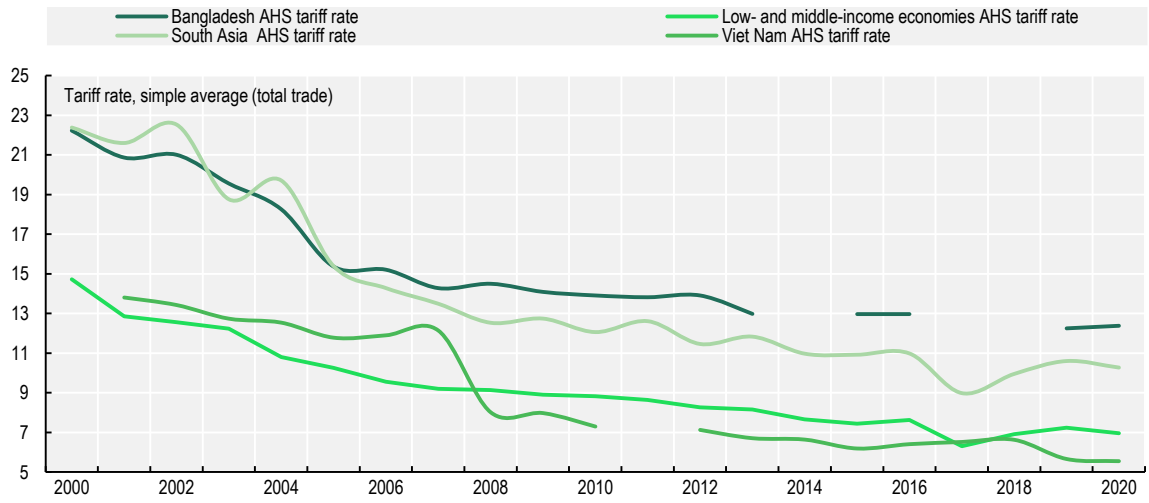
Bangladesh is committed to continue supporting local industrial development. Although over time Bangladesh has reduced the average nominal import tariff (Figure 3.6), the Government has imposed a targeted tariff on specific final goods to promote the development of local fledgling industries by means of import substitution, following the past experiences of other countries such as Brazil and India. While the effectively applied tariff (AHS) is currently 12.4%, which is lower if compared to 22.3% in 2000, other para-tariffs are applied, including supplementary Duties (SD), and Regulatory Duties (RD) and that together with custom duties (CD) contribute to make up a Total Tariff Incidence (TTI) 51.7% in 2020. More concretely, while the custom duty for sport footwear is 25%, the total incidence tax was 73% in 2022 (National Board of Revenue, 2022[25]). The country's strong focus to develop domestic industrial capabilities (through high important tariffs - with the exception of RMG) has created an anti-export bias that discourages local producers from exporting their goods.

Tariffs on certain final or intermediary goods have been increased with the goal of not only protecting local industries but to prevent the depletion of foreign hard currency, which is essential in financing the imports of crucial goods such as energy and foodstuffs. Higher tariffs provide additional tax revenues but are a challenge for a country that is looking to increase resource mobilisation while preserving equity and progress. Total duties on goods and services (imports and supplementary duties) account for 23% of total tax revenues in the country, markedly higher than the 16% in Viet Nam (OECD, 2022[11]).

The government is currently working to reduce anti-export bias as it prepares for further openness. Several institutions including the Bangladesh Trade and Tariff Commission, the Ministry of Commerce and the National Boards of Revenues are working to reform tariffs with a view to supporting further openness of the economy. The measures include among others the abolition of separate tariff systems for different importers, no imposition of regulatory duty except in emergency situations and the abolition of the existing system of minimum value determination by the National Board of Revenue for imported goods within a predefined time horizon. Together these measures are included in the first national tariff policy and will come into effect by 2023. This should also facilitate the upcoming negotiation of regional and bilateral free trade agreements (FTAs).

Figure 3.6. Effectively applied tariff rates are coming down

Effectively applied tariff rates (AHS), 2000-20



Note: AHS tariff rates are simple averages based on total trade.
Source: Authors' elaboration based on World Integrated Trade Solution, World Bank (2022), https://wits.worldbank.org/.

Incentives for industrial competitiveness target agriculture, small firms and energy

Strengthening the competitiveness of local businesses is also among the priorities of the Bangladesh economic transformation strategy. The policy tools that the country leverages to that effect remains linked to traditional fiscal and financial incentives. These include among others:

- Financial support and price controls targeted to agriculture. The Bangladesh Bank provides concessional credits at 4 and 5% interest rate to produce local corps, including oil seeds, spices and maize and subsidises the acquisition of fertiliser and machines. Agricultural subsidies in 2022-23 are budgeted for Taka 160 billion (USD 1.4 billion) the equivalent of 16% of total subsides (Ministry of Finance, 2022[8]). At the same time, the government, in an attempt to stabilise prices, centralises the procurement of specific commodities, including sugar, soybean oil and lentils through the Trading Corporation of Bangladesh, which operates under the Ministry of Commerce.
- Tackling informality in cottage, micro, small and medium-sized enterprises. In addition to what is internationally known as MSMEs, in Bangladesh so-called "cottage firms" operate. These firms are micro-scale enterprises run by the members of the same family either on a full- or part-time basis. These are small and informally operated businesses that many households rely on to generate supplementary income for the household. In this respect, they play a key role in generating the additional income required for poverty reduction. The Bangladesh Bank has encouraged commercial banks and financial institutions to provide loans to these types of firms at a preferential rate and three-month grace period for a one-year term loan, and a three- to six-month grace period for medium- to long-term loans, based on the banker–customer relationship. Refinancing schemes and grants are also provided by Bangladesh Bank and the Ministry of Industry with the support of international donors including the Asian Development Bank and the World Bank (Sadiq, 2020[24]). Of the total USD 145 million development budget of the ministry of Industry, 50% is allocated to refinancing projects to MSMES.
- Direct subsidies for access to energy and electricity. While the country has achieved 96% of access to electricity in 2020, up from 55% in 2010 the supply and electricity and energy at an affordable price remains a challenge. Current installed electricity capacity is 22 GW and total demand is

13.7 GW (BPDB, 2022[26]). The government finances the use of the idle or excess capacity through specific subsidies for power. For 2022-23 electricity and LNG subsidises are expected to reach Taka 340 billion (USD 3 billion) while also providing a 20% rebate on electricity bills for some sectors including agriculture (Ministry of Finance, 2022[8]). Total energy subsidies increased over 2022-23 due to the soaring prices of imported LNG due to the invasion of Russia of Ukraine, thus posing an additional burden on both public finances and end-consumers.

Bangladesh also supports industrial competitiveness through modernisation of the country's quality infrastructure system (NQI) (Box 3.3). Several agencies are responsible for the NQI system in Bangladesh including the Ministry of Industries, which has the overall co-ordination and the Bangladesh Standards and Testing Institute (BSTI) and the Bangladesh Accreditation Board (BAB).

- BSTI is responsible for developing and issuing standards, and for providing technical advice and oversees other important areas such as metrology to ensure traceability and legal metrology, testing activities and conformity assessment. BSTI has been active in developing standards in several areas, including food safety, chemicals and textiles. The organisation is also a member of several international bodies including International Organization for Standardization (ISO) since 1985, the International Electrotechnical Commission (IEC) since 2018, and the South Asian Association for Regional Cooperation (SAARC) since 2014.
- BAB is responsible for accreditation and for assessing the competence of certification bodies. Since 2015 it is the signatory member of the ILAC laboratories that aim to develop cross-country co-operation for facilitating trade by promoting the acceptance of accredited test and calibration results. BAB is also a member of the World Trade Organisation (WTO) Technical Barriers to Trade (TBT) Agreement Committee. BNMI is a research institute responsible for setting up and managing the country's metrology system.

In terms of accreditation, product testing and certification, the majority of the services provided are linked to the garments and textiles, leather and toys sectors, and to some extent to agro-food, including in packaging. There are few laboratories for construction materials (cement, bricks, bitumen, gypsum) and metals and for petroleum products, as well as for pharmaceutical products, paint and surface coatings, and personal protective equipment, even though a positive step is the adoption of ISO/IEC 15189 which is important for assuring correct appliance of analytical methods for probes and disease testing. Electrical testing is only covered by a few laboratories. ISO/IEC 17065 (product certification) and ISO/IEC 17063 (CASCO product certification schemes) are currently not available in Bangladesh, and BSTI is working on their introduction. The certification of management systems is centralised and directly carried out by BSTI, though several international certification bodies are active in the country. ISO/IEC 9001 is currently the dominant certification, followed by ISO/IEC 14001. Introducing ISO/IEC 50001 (energy efficiency), ISO/IEC 18000 (safety working place) and ISO/IEC 27000 (information safety) are important for the country's future development. To go forward, Bangladesh needs to continue its journey of updating its NQI (Table 3.3). A key role can be played by international collaboration in this field, including with key regional partners such as India and Thailand, building on initiatives that are currently underway.

Table 3.3. Bangladesh is working to enhance its quality infrastructure system for industrial competitiveness

Areas	Identified reforms and actions to be implemented
Metrology	– Upgrading existing NML-BSTI and BRICM laboratories according current and future country needs – Improving technical competences – Implementing NMI reference laboratory for electrical magnitudes and an accredited photometry and radiometry calibration laboratory (energy efficiency, renewable energies, digitalisation, industry 4.0) – Strengthen the already existing co-operation with NMIs in neighbouring countries (India, Thailand).
Standardisation	– Review participation in ISO and IEC TCs and existing BSTI-TCs according to changing country needs and new international requirements and compromises

Accreditation	– Completing accreditation services incl. signing IAF-MRA according to country needs
Digitalisation	– NMI scientists instruct IT professionals in applying fundamental metrological concepts (traceability, units of measurement, measurement uncertainty) developing the IT infrastructure. – Digitisation of NQI institutions' certificates and other documents. – Strengthen the co-operation with the Ministry of Ministry of Posts, Telecommunication and Information Technology because of ITU Membership (IT standards)
International and regional co-operation	– Continue use of existing opportunities for developing countries (ISO DEVCO, IEC Affiliate Country Programme, APMP Developing Economies' Committee DEC) – Strengthening the existing regional co-operation possibilities (India, Thailand, Malaysia, Singapore; SAARC)
Governance	– Updating and implementing Country Quality Policy – Improving co-ordination between Ministry of Industries and relevant ministries, public institutions, and stakeholders (food safety, consumer and climate protection, circular economy, digitalisation, energy) – Active role of (private) industry – Separation of Scientific/Industrial Metrology and Legal Metrology – Risk Analysis and cost/benefit analysis for new QI services – Developing QI services along value chains
Outreach and SMEs involvment	– Diffusion of the importance of quality services for industry, commerce, and society (with concrete examples) – Develop and implement special programmes for SMEs all over the territory and along the various value chains – Ensure stable access to the websites of BSTI, BAB and BNMI

Source: Authors' elaborations based on international peer dialogue, domestic stakeholder consultations and official information.

Box 3.3. The role of the national quality infrastructure system as a driver of competitiveness

The National Quality Infrastructure (NQI) system is a comprehensive framework of laws, standards, and regulations designed to ensure the fulfilment of quality standards for products and services. This system not only establishes a foundation for international trade and domestic industrial advancement but also acts as a catalyst for Foreign Direct Investment (FDI) attraction. The significance of an efficient NQI system cannot be understated in fostering industrial competitiveness (OECD/UN/UNIDO, 2019[27]; OECD et al., 2021[28]). This intricate system encompasses four key components: metrology, standardisation, accreditation, and conformity assessment. It caters to a diverse range of stakeholders, including enterprises, universities, and foreign investors, all while prioritising the safeguarding of end consumers.

The crucial role of a well-functioning National Quality Infrastructure (NQI) system in bolstering industrial competitiveness cannot be overstated. NQI encompasses an array of elements such as laws, standards, measurements, testing, and regulations. Its purpose is to guarantee that products and services align with stipulated quality prerequisites. An effectively operating quality infrastructure system holds the potential to elevate competitiveness by refining the caliber of domestic products and services. It simultaneously ensures adherence to international benchmarks, signalling the compliance and caliber of local products and services (Figure 3.7).

Figure 3.7. Elements of NQI for economic diversification and upgrading

Source: Karl-Christian Göthner Senior Expert, German Metrology Insititute (PTB), Peer Learning Group (PLG) Meeting of the PTPR of Bangladesh, 8 September 2022.

Meeting Bangladesh's ambitions requires shifting gears and sharing responsibilities

Bangladesh is ready to shift to a new phase in its development. The upcoming LDC graduation is acting as an important catalyst to modernise country policymaking and to update the international partnerships the country relies on and participates in. The following sections briefly discuss three key issues emerged during the PTPR process that are important to enable Bangladesh to achieve its ambitions and continue succeeding.

Future-ready the state to achieve its vision

The process of building a modern nation state is still in the making. Bangladesh is an institution-rich country. Currently the public sector consists of 42 ministries and a multiplicity of public institutions, agencies and committees often with overlapping responsibilities and reporting lines. The experience of countries with modern and efficient institutional arrangements shows that what matters most for creating an effective state is not the number of institutions *per se* but the quality and clarity of purpose of the institutions and the accountability mechanisms in place to measure impact and track progress. While Bangladesh has created numerous institutions and has made some progress in modernising the machinery of the state, the institutional structure remains unwieldy and top heavy, and in practice flagship initiatives

continue to be driven from the highest level in government, making co-ordination at lower layers of the structure difficult. In the future, Bangladesh should devote more attention to these elements in order to diversify its economy and realise the 2041 vision.

Linked with the establishment of a robust, well-functioning institutional framework in Bangladesh is the task of enhancing domestic resource mobilisation capabilities and furnishing the state with effective implementation capacities. Although significant improvement has been achieved in the ADP execution rate over the last two decades particularly, the execution rate remains a challenge. In the fiscal year 2021, the government agencies executed 18% of the ADP while 19% in 2020 and 20% in 2019. Moreover, Implementation Monitoring and Evaluation Division (IMED) of the government showed that ministries and agencies had spent 19% of the ADP allocations during the five months of the fiscal year 2022 (Finance Division, 2022[23]).

Likewise, because of a lack of costing of plans, strategies or specific instruments it is difficult to determine what is the total annual or medium-term budget or resource allocation for several policies. This is the case for example of the National Industrial Policy 2022 launched in September 2022. Strengthening Bangladesh's capacity for effective policy implementation will also require better co-ordination between strategic bodies such as the planning commission ENEC, NEC and other line ministries that are in charge of designing and implementing policies.

An empowered state, operating through effective institutions is also a transparent and open state. A pivotal objective for Bangladesh in sustaining its trajectory of success is to harness digital technologies and to foster enhanced efficiency and transparency in interactions between citizens, businesses, and the government. This entails facilitating government accountability across policies, investments, and expenditures by ensuring accessible information and responsiveness to the needs of citizens and businesses. The recent decision to amend the Digital Security Act, issued in 2018, with the Data Pro-tection Act 2023 and the upcoming Cyber Security Act (CSA) are positive signs that will require further. While the relevance of these amendments is still under discussion, this announcement underscores the government's commitment to adapt and implement reforms aimed at promoting openness, transparency, and accountability. Several countries and regions globally are adopting regulation and laws to support digitalisation while at the same time safeguarding individual privacy and transparency (Box 3.4).

Box 3.4. The European Union General Data Protection Regulation (GDPR)

The General Data Protection Regulation (GDPR), officially known as Regulation (EU) 2016/679, is a comprehensive and far-reaching legislation adopted by the European Union (EU) to safeguard individuals' privacy and harmonise data protection regulations across its member states. Enforced since May 25, 2018, the GDPR has redefined the way personal data is collected, processed, and managed, setting new standards for data privacy and security in the digital age. The primary aim of the GDPR is to empower individuals with greater control over their personal data while enhancing the responsibilities of organisations handling such data. It applies to any entity that processes personal data of EU citizens, regardless of the entity's location. The regulation incorporates several key principles and provisions to achieve its objectives.

- Transparency and Lawfulness: The GDPR mandates that organisations collect and process personal data lawfully, transparently, and for legitimate purposes. They must provide clear information to data subjects about how their data will be used and obtain their consent when necessary.
- Data Subject Rights: The regulation grants individuals a range of rights, including the right to access their data, rectify inaccuracies, erase data (the "right to be forgotten"), restrict processing, and object to processing for certain purposes such as direct marketing. Organisations are obligated to facilitate these rights.
- Accountability and Data Protection Officers: GDPR emphasises accountability, requiring organisations to maintain records of their data processing activities. Certain organisations must appoint Data Protection Officers (DPOs) to ensure compliance, especially for public authorities or those engaging in large-scale systematic monitoring or processing of sensitive data.
- Data Breach Notification: GDPR mandates prompt notification of data breaches to both the relevant supervisory authority and affected individuals when the breach poses a risk to their rights and freedoms. This enables swift action to mitigate harm and encourages organisations to bolster their cybersecurity measures.
- Cross-Border Data Transfer: Data transfers to countries outside the EU are only permitted if those countries ensure an adequate level of data protection. The GDPR offers various mechanisms, such as Standard Contractual Clauses and Binding Corporate Rules, to facilitate such transfers.
- Privacy by Design and Default: Organisations must integrate data protection into their systems, processes, and products from the outset. Privacy by Design promotes proactive measures to mitigate privacy risks, while Privacy by Default ensures that only necessary personal data is processed.
- Sanctions and Fines: Non-compliance with the GDPR can result in significant penalties. Depending on the violation, organisations can face fines of up to 4% of their annual global turnover or €20 million, whichever is higher. The severity of fines reflects the importance of data protection in the digital age.
- Global Impact and Implementation Challenges: While the GDPR is an EU regulation, its effects are felt globally due to its extraterritorial applicability. Organisations worldwide that handle EU citizens' data must adhere to its provisions. Many jurisdictions have revised or introduced their data protection laws to align with GDPR principles.
- Impact on Business Practices: GDPR has prompted organisations to revaluate their data handling practices, invest in robust cybersecurity measures, and prioritise privacy in product

and service development. This shift has led to increased transparency, improved data subject rights, and better management of personal data.

Source: General Data Protection (GDPR) regulation (EU) 2016/679 of the European parliament and of the council of 27 April 2016.

Manage international partnerships for sustainable and smooth graduation

Bangladesh is on the brink of graduating from its Least Developed Country (LDC) category, which will have significant implications for its access to certain International Support Measures (ISMs). This milestone will push the country to continue the harmonisation of its trade policies and adopt a more strategic and proactive approach also including a modernised tax base structure to favour industrialisation and competitiveness.

While the vast majority of revenues originates from VAT, excise and import duties, revenue productivity for income tax - the amount of revenue generated by an incremental increase in the tax rate- is low, reflecting challenges related to policy design and enforcement, which means that taxes could generate more revenue and become more progressive. Enlarging the tax base and employing efficient and a harmonised set of tax rebates for firms should also be a priority. Also, Bangladesh stands out as the only developing country in Asia that does not collect an environmental tax[2] whereas countries such as Viet Nam, Malaysia, or Bhutan cash out around 0.7 to 1% of GDP from environmental taxes (OECD, 2022[11]).

While Bangladesh has taken tangible steps in readiness for graduation, establishing a special committee chaired by the Principal Secretary to the Prime Minister, operating across various domains to identify challenges and opportunities posed by the transition, there remains a need for a more profound shift in conceiving the role of trade in the nation's development. A more proactive and strategic stance towards trade is imperative. It is closely linked with how it can catalyse transformative changes within the domestic economy and the country's role on the international stage alongside FDI and innovation.

While Bangladesh is recognised as a cost-effective, reliable, and quality-driven participant in global supply chains, it should not solely centre its trade policies around this objective. The country’s focus should shift towards revitalising the domestic industry, enhancing trade performance by transitioning from price-driven competitiveness to value-based competitiveness encompassing quality, inclusivity, and sustainability.

The government has already embarked on a journey towards adopting a more proactive trade approach. Presently, the country counts two bilateral agreements: the United Kingdom-Bangladesh Trade and Investment Partnership and the Bangladesh-Bhutan Trade Agreement. Bangladesh is also actively engaged in negotiations and considering accession to several other agreements, including discussions with the European Union (EU), where a transition towards a potential GSP+ scheme—granting preferential access to up to 66% of tariff lines within the EU market—is under negotiation and is contingent upon upgrading domestic standards and policies on multiple fronts.

An updated and targeted vision concerning the role that Asia can play in Bangladesh's international partnerships is also necessary. Notably, although within diverse global circumstances, regional agreements have provided Viet Nam for example greater market access compared to bilateral agreements (Box 3.5 and Chapter 4 of this report). To achieve this, alongside effectively managing the openness process and negotiating strategic trade agreements, there's a requirement for defining a clear strategy for greater engagement with the South Asia region and ASEAN.

Finally, a change in approach from international partners of Bangladesh is also essential, extending beyond responsible business conduct and transparent supply chains. This shift entails establishing comprehensive partnerships to ensure transparent, inclusive, and sustainable business development, including support for greening Bangladesh's energy landscape.

Box 3.5. From regional to global markets. The case of Viet Nam FTAs

Foreign market access has been central to Viet Nam's rapid economic and export growth and diversification. Viet Nam's share of trade (export and import) to GDP is 200%, one of the highest of any economy (OECD, 2020[29]). Viet Nam has quickly and proactively sought and adopted a series of bilateral and multilateral free-trade agreements (FTAs) since the early 1990s. Starting with the ASEAN Free Trade Agreement (AFTA) in 1995, Viet Nam next signed a bilateral agreement with the United States in 2001. A series of further agreements came more rapidly afterwards. The ASEAN-China FTA was signed in 2004. WTO membership in 2007 was a major milestone, integrating Viet Nam for the first time into the multilateral trading system. A series of bilateral accords followed, with countries including Japan, Chile and Korea. The Viet Nam-EU FTA was concluded in 2020, then the Regional Comprehensive Economic Partnership (RCEP), which came into force in 2022. The different negotiations and agreements allow the country to benefit from differentiated tariff commitments (Table 3.4).

Viet Nam's strategy of joining regional agreements brought greater market access than the bilateral partnerships it negotiated, since it subsequently exposed it to wider relations with other large trading countries such as Japan, India and China (although commitments with these countries were less extensive). Viet Nam's early decision to embark on an ambitious schedule of FTAs has been, overall, key to its success in export development and economic growth since the 1990s, benefitting not only domestic companies but incoming foreign investors, for whom Viet Nam's substantial regional and global market access, as well as its commitment to future liberalisation, are major attractions.

Table 3.4. Viet Nam's regional integration process

FTA	Viet Nam's commitments	Partners' commitments
ATIGA	Remove 98.2% of all tariff lines by 2024	Brunei, Laos, Indonesia, Malaysia, Singapore, Myanmar, Philippines, Singapore and Thailand remove 96.3-100% of tariff lines by 2018.
AIFTA	Remove 69.7% by 2021	Indonesia: remove 50% by 2021 Other countries: remove 70.2-99.9% by 2021
AANZFTA	Remove over 90% by 2022	Singapore to remove 100% in 1st year Brunei, Indonesia, Malaysia, Philippines and Thailand remove 94-100% by 2020 Australia: remove 97% by 2018 NZ: remove 90% by 2016, and 100% by 2020
CPTPP	Remove 66% in 1st year Remove 86.5% within 3 years Remove the remainder within 5-10 years	Remove 77.2-100% in the 1st year
EVFTA	Remove 48.5% in 1st year, 91.8% in 7 years and 9.83% in 10 years	Remove 85.6% in 1st year and 99.2% in 7 years.

Notes: EVFA: Europe-Viet Nam FTA CPTPP: Comprehensive and Progressive Agreement for Trans-Pacific Partnership ANZFTA: ASEAN Australia New Zealand Free Trade Area AIFTA: ASEAN-India Free Trade Area ATIGA: ASEAN Trade in Goods Agreement.
Source: Tran Thon Thang, Director, Department of Industrial Forecast and Enterprise Development (DIFED), Peer Learning Group (PLG) Meeting of the PTPR of Bangladesh, 8 September 2022.

Update the policy toolbox to foster an innovative and diversified industry

To further its successes, Bangladesh needs to diversify its industrial and export base. It also requires a profound transformation in how manufacturing and services are conducted to foster a denser network of productive linkages within and across sectors. The industrial landscape in Bangladesh must shift towards environmentally sustainable practices and the creation of quality jobs. Bangladesh's trading tradition predates its independence, and since gaining autonomy, the country has been fostering export-oriented industrial development.

However, the current policy toolbox and institutional framework fall short of the ambitions the nation holds for its future. This impedes innovation investments in domestic and foreign enterprises and dampens foreign investors' enthusiasm for engaging with the country, despite its significant market potential and strategic geographic location. Bangladesh must further reduce red tape, enhance both digital and physical infrastructure, and simplify the complexities of conducting business within its borders.

Additionally, the policy toolbox for industrial development needs to be upgraded. If the overreliance on traditional subsidies and incentives towards exports might raise concerns in light of the LDC graduation, it also seems to favour incumbent firms. Indeed, the country's approach protects the status quo where it should be looking ahead and implementing a modern and sound policy mix. This framework should encourage learning, risk-taking, and innovation while at the same time providing new business opportunities for new firms and sectors. Bangladesh possesses numerous advantages to leverage in advancing on this front, particularly its growing domestic market potential, established reputation as a trustworthy business partner, and a history of homegrown brands and companies. Bangladesh, known for its entrepreneurial spirit and trading acumen, must undertake an economic transformation, transitioning into an innovative and inclusive nation.

Achieving this goal requires a reformed and updated policy toolbox that effectively supports innovation. The country would also benefit from effectively embedding instruments that foster innovation. For example, the ICT division that oversees the High-Tech Park Authority, which in practice should be the reference point for advancement in technological advancement, together with the Ministry of Science and Technology has budgets for 2021-22 of only USD 900 000 for R&D projects. This is a mere 0.6% of its budget. It goes without saying that this allocation is insufficient for a trade-oriented economy of Bangladesh's size and industrial capacity. Without targeted support for innovation, there is a risk that the country's current successful model will lose momentum in driving it towards future prosperity. Prioritising innovation would also contribute to continuing to expand the nation's knowledge and science foundation. Innovation would also go a long way in enabling the country to modernise and strengthen its education and research sectors.

Similarly, the policy toolbox for attracting foreign direct investment (FDI) could benefit from further refinement. Simplifying and clarifying the institutional structure—currently comprising four different agencies with overlapping roles—would facilitate business operations, both domestic and international. Further leveraging the FDI attraction policy could enhance economic diversification and promote a greener and more innovative industrial base. Modernising incentive packages to ensure local industrial development, innovation, and learning is necessary. Currently, FDI incentive packages remain rather conventional and lack conditionalities tied to investment amounts or technological/innovation components, except for targeted support to the ICT sector by BHPTA. While adopting a non-targeted approach to FDI attraction is common for countries in the initial stages of attracting FDI and establishing themselves on the global investor map, successful countries gradually shift to more sophisticated approaches. These evolved strategies view FDI and business partnerships as essential drivers for achieving economic transformation. Countries like Costa Rica, Malaysia, Morocco, and Viet Nam have undergone similar transformations (OECD, 2012[30]) and Box 3.6). This change necessitates a shift to a simplified, business-centric institutional structure and policy toolbox, designing modern incentive packages with local innovation and development conditions, and concurrently implementing policies to foster domestic industrial growth.

Vigilance is required to prevent the formation of FDI enclaves in Bangladesh, and careful management of Special Economic Zones (SEZs) is crucial.

In the process of recalibrating its policy mix to potentially allocate more resources towards industrial trade, investment, and innovation, the country should undertake a comprehensive review and impact assessment of its existing package of fiscal and financial incentives as well as cash transfer programmes. A judicious approach would involve analysing the interplay between foregone tax revenues resulting from fiscal incentives and their actual effectiveness in stimulating crucial areas such as exports and investment, This would enable to gain a clearer understanding of the most effective policy tools, and subsequently facilitate a process of rationalisation and refinement. This approach could ensure that policy decisions are based on evidence-based assessment of the potential outcomes, and aligns with the nation's aspirations for balanced and impactful economic development (OECD/UNCTAD/ECLAC, 2020[31]; Bloom, Van Reenen and Williams, 2019[32]).

Finally, prioritisation should be more strategic. Rather than sector specific, the identification of new opportunities should be challenge-driven, including innovation-related aspects and environmental sustainability. Currently, there are more than 30 priority sectors in both manufacturing and services. Institutions including BIDA, Ministry of Commerce and Ministry of Industry with rivaling priorities are vying for resources. A more strategic approach to prioritisation, which avoids the risk of capture by using existing government bodies (e.g., Planning Commission and a stronger co-ordination among the recently created different committees for graduation) is advisable to break silos and increase efficiency and strategic foresight.

Box 3.6. Attracting FDI in Malaysia

FDI has been a key component in Malaysia's development strategy.

Tax incentive packages

Malaysia offers FDI incentives under the Promotion of Investments Act 1986 and the Income Tax Act of 1967. The Malaysian Investment Development Authority (MIDA) is the autonomous agency under the Ministry of Industry (MITI), in charge of the promotion and co-ordination of industrial development in the country that also oversees and drives foreign investment in Malaysia.

It offers two main incentive packages: Pioneer Status and the Investment Tax Allowance.

- The Pioneer Status (PS) provides an income tax exemption of 70% of statutory income for 5 years. Unabsorbed capital allowances and accumulated losses incurred during the pioneer period can be carried forward and deducted from the post-pioneer status of the company.
- The Investment Tax Allowance (ITA) provides an allowance of 60% on qualifying capital expenditure (factory, plant, machinery or other equipment used for the approved project) incurred within 5 years from the date the first qualifying capital expenditure is incurred.

The exception and deduction for both PS and ITA can be extended up to 100% and to 10 years if the activity of the company is related to strategic activities defined by the government. Promoted strategic activities include automation of production, high-technology industries, provision of technical and vocational training, strengthening industrial linkages, value creation from oil palm biomass, in-house R&D, and green technology.

In addition, since 2015 Malaysia has introduced a principal hub (PH) scheme that provides a preferential corporate income tax at tiered rates (0%, 5%, or 10%) for a period of up to 10 years to foreign companies. These firms must use Malaysia as a base for conducting regional and global business and

operations through management, control, and support of key functions, such as management of risk, strategic decisions, finance, and human resources. The PH scheme is subject to:

- A paid-up capital of USD 580 000;
- Serving and controlling a network of at least 10 to 15 of companies;
- At least 50% of the high-value jobs must be filled by Malaysians and must provide structured internship and training programmes approved by the Malaysian Talent Corporation.

Promoting linkages

The Industrial Linkage Programme (ILP), managed by the Small and Medium Enterprises Corporation (SMEs Corp) of the Ministry of Industry and MIDA, offers tax incentives to local SMEs and foreign affiliates to develop local SMEs capabilities. Local SMEs that are capable of achieving world-class standards of price, quality and capacity, are granted a tax exemption of 100% on statutory income for five years and Investment Tax Allowance of 60% on qualifying capital expenditure incurred within a period of five years. On the other hand, multinationals can claim tax deductions for costs involved in providing support to local suppliers, including training, product development and testing, and factory auditing to ensure local supplier quality.

Investing in skills

Malaysia facilitates access to foreign talent. Companies can hire expatriate personnel through two mechanisms: key post and time post. A key post is a high-level managerial post that can be held indefinitely by a foreigner that is essential for companies to safeguard their interests and investments. A term post is a post approved for up to five years that requires technical skills with professional qualifications and working experience in the related field. In the case of time post, Malaysians must be trained to eventually take over. The eligibility for expatriate posts is subject to a minimum paid-up capital as follows.

Time posts

- USD 60 000 for 100% Malaysian-owned company;
- USD 80 000 for jointly owned firms by foreign and Malaysian;
- USD 115 000 for 100% foreign-owned company.

Key posts

The key posts are subject to the condition that the company must be incorporated in Malaysia and must have capital of at least USD 250 000.

Source: (MIDA, 2021[33]), Investment in the Manufacturing Sector 2020: Policies, Investment and Facilities, Malaysia.

Conclusions

Bangladesh, strategically located in South Asia, is a key Indo-Pacific player with considerable development potential. Since independence in 1971, the country has achieved notable progress. Today, Bangladesh confronts considerable challenges. The complex global economic landscape compounds internal risk factors, including heightened and growing exposure to natural disasters, limited domestic resource mobilisation capacity, substantial external financing dependence, and an overreliance on a single export sector.

The export-driven growth model, hinged on competitive labour costs and partially supported by trade preferences linked to LDC status, has reached its developmental limitations. After 52 years of

independence, Bangladesh's committed leadership and the accomplishments achieved so far prepared the country to transition to a new development model centred on inclusivity, sustainability and innovation.

The country has the ambition to achieve high-income status by 2041. To do so, Bangladesh must be committed to diversifying its economy, to attracting more FDI and to unleashing the transformative potential of digital technologies. To achieve its aspirations, Bangladesh can leverage several assets: an ambitious vision supported by a committed and strong government leadership, a geostrategic location, a global economic potential, powered by a growing and young workforce, and an accumulated knowledge of how to do business embedded in local, home-grown firms.

To continue to succeed, Bangladesh needs to update its governance and its approach to policies and partnerships to meet the challenges of today and tomorrow. Bangladesh needs to future-proof the state to endow it with the necessary institutionalised processes, transparency and accountability mechanisms and domestic resource mobilisation capacities to operate as a modern, value-driven and rules-based system. The country needs to update it public operational capacities and reform the policy mix to respond to the evolving and increasingly complex demands of its society and the world economy. Bangladesh also needs to craft a strategic network of international partnerships, as well as trade and investment agreements tailored to support sustainable local industrial development. As graduation from LDC status is on track to for 2026, taking full effect by 2029—and considering the challenging global economic outlook—Bangladesh is at a pivotal juncture to implement reforms to continue progressing. This moment presents an opportunity for the nation to set the foundation for a smooth, sustainable, and irreversible graduation. In doing so, it has also the chance to become a role model to other graduating LDCs.

Future-proofing the state and updating Bangladesh's policy approach is not only necessary as a proactive response to the graduation from the LDC status, it is prerequisite for the country to take an active role in the global pursuit of resilient, secure, safe, and sustainable supply chains. It is also a condition, sine qua non, of an acceleration of green industrial transformation. Bangladesh's future success depends on its capacity to transform and upgrade its industrial profile. And, as a trading nation, the country needs to take an active role in the reshaping of global and local production, consumption, and trade modes. To achieve this, the nation must transition into a new development phase: driven by innovation, enabled by digitalisation, and powered by global partnerships.

Bangladesh has a track record of accomplishments and a proven capacity to implement reforms and address pitfalls. The country can build on what has been achieved and should accelerate reforms to continue succeeding. A private sector ready to innovate and international partners engaging on an equal footing with local stakeholders are key to go forward. Bangladesh's prosperous future depends as much on its own domestic efforts as it does on the readiness of international partners to share responsibilities to cushion the country's fragilities and to jointly craft a mutually beneficial way of managing openness and doing business. Success is doable, and requires completing the journey towards building a modern, value-based state and on shared responsibilities between the government, the private sector and international partners. In this journey, the role of international partners is critical in supporting Bangladesh through the graduation process to the last mile.

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Annex 3.A. Export incentives

Annex Table 3.A.1. Export incentives scheme, Bangladesh 2022-23

Name of Export Product	Applicable rate of incentive
Alternative cash assistance in lieu of duty bond and duty draw-back in export oriented domestic textile sector	4%
All small and medium industries including export oriented garment sector (knits, knits and sweaters	4%
Product/New Market (Textile Sector) Expansion Assistance (Except America/Canada/EU/UK)	4%
Special Assistance Additional to Existing 8% for Textile Exporters in Euro Area	2%
Made Special cash assistance to garment sector	1%
Export subsidy on agricultural products (vegetables/fruits) and processed (ago-processing) agricultural products	20%
Hanka Export subsidy on engineering goods export sector	15%
Cash subsidy on jute goods export sector *a) Diversified Jute Products (715151750 [00 27900063)* *b) Jute Finishes (Hessian, Seking & CBC)* *c) Jute Yarn (Yarn & Twine)*	 20% 12% 7%
Active Pharmaceutical Ingredients (API) Export subsidy for exports	20%
100% Halal meat and 100% Halal processed meat products Export subsidy	20%
Cash assistance to frozen shrimp and other fish export sector: (a) Ice cover rate for frozen shrimp export Up to 20% Above 20% to 30% Above 30% to 40% Above 40% (b) Ice cover rate in frozen other fish exports Up to 20%, Above 20% to 30%, Above 30% to 40%, Above 40%	 10%, 9%, 8%, 2% 5%, 4%, 3%, 2%
Cash assistance in leather goods export sector Savar has factories located in leather industrial city and own ETP located outside Savar. Export subsidy for export of crust and finished leather produced in such factories	15% 10%
Cash assistance in potato export sector	20%
Export subsidy for export of carbon and jute particle board produced from jute wood	20%
Export subsidy for export of furniture	15%
Export subsidy for export of seeds of grains and vegetables	20%
Export subsidy for export of agar and attar	20%
Export subsidy for export of accumulator batteries (9 0050: 8507.10 and 8507.20)	15%
Export subsidy for the export of footwear and bags made of a mixture of synthetics and fabrics	15%
Export subsidy for the export of plastic products	10%
Export Subsidy on Export of Paper and Paper Products Manufactured in the Country a) Software, ITES from Bangladesh and Export Subsidy for Export of Hardware b) Export for Individual Financiers for Export of Software and ITES Services	10% 10% 4%
Export Subsidy for Export of Ships	10%
Pharmaceutical Products (Medical/Surgical)	10%
Handicrafts (hogla, straw, sugarcane/coconut husks, leaves/shells, garment yarn) cloth etc.)	10%
Export subsidy for export of cow buffalo pulse, rind, horn and sinew (excluding bone) (a) Pet bottle-frex Export subsidy for export (b) PET bottle -Export for export of polyester staple fibre produced from Frex	10% 10% 10%
Export subsidy for export of Photovoltaic Module	10%
Export subsidy for export of motorcycles	10%
Export subsidy for the exports of Chemical products (chlorine, hydrochloric acid, caustic soda and hydrogen peroxide)	10%
Export Subsidy for Export of Razors and Razor Blades	10%
Export Subsidy for Export of Ceramic Products	10%
Export Subsidy for Export of Hats	10%
Export Subsidy for Export of Crabs and Shells (Live, Frozen and Softshell)	10%
Export Subsidy for Export of Galvanized sheets/Coils (Coated with Zinc, Coated with aluminium)	10%

Export Subsidy on Export of Consumer Electronics, Electrical Home and Kitchen Appliances Products	10%
Export Subsidy on Rice Export	15%
in Specialized Zones (Beja, Bepja and Hi-Tech Park) Export Subsidy in favor of established establishments 1) Sub-paragraph (a) of first paragraph 8% subsidy on export payments made under the respective circular (made payment under FE Circular No. 01, dated 7 January 2020 export subsidy for export of processed agricultural products (specific excluding cash assistance) 2) Type-A and Type-B institutions under sub-paragraph (b) of the first paragraph; 3) Special cash assistance to the garment sector under FE Circular No. 01, dated 7 January 2020 under sub-clause (a) of the first paragraph and (c) exports for exports of other products of all categories of establishments under sub-clause (c) subsidy	4% 4% 1%
Export subsidy for export of tea manufactured in 40 countries	4%
Export subsidy for export of bicycles and their parts	4%
MS Steel products	4%
Cement sheets	4%

Source: Bank of Bangladesh, Foreign Exchange Policy Department Circular No. 26 of September 2022, https://www.bb.org.bd/en/index.php/mediaroom/circular.

Notes

[1] In Bangladesh, the fiscal year starts on July 1st and ends the following 30th June.

[2] Environmentally related taxes, and price-based policy instruments more generally, play an increasingly significant role in many countries to support a transition to sustainable and low-carbon economic growth. By incorporating a price signal into consumer and producer decisions, these taxes give effect to the polluter-pays principle and encourage businesses and households to consider the environmental costs of their behaviour. Although environmentally related tax revenues (ERTR) are not separately identified in the standard OECD tax classification, they can be identified through the detailed list of specific taxes included for most countries within this overarching classification. It is on this basis that they are included in the OECD Policy Instruments for the Environment (PINE) database.

4 Transforming industries: Perspectives from electronics and pharmaceuticals in Bangladesh

Bangladesh needs to upgrade its domestic industry and diversify its export basket. Targeted policies since the 1980s have nurtured manufacturing. These measures, backed by favourable trade preferences tied to its LDC status, have spurred industry growth. With LDC graduation slated for 2026, Bangladesh must sustain its industrial evolution, focusing on innovation, sustainability, and inclusivity. This necessitates updating trade policies for business innovation. This chapter examines Bangladesh's electronics and pharmaceuticals sectors, which serve domestic needs and have export potential. Drawing on international dialogue and domestic consultation, this chapter explores the key priorities Bangladesh will have to focus on if it is to unlock its transformative potential.

Introduction

The Production Transformation Policy Review (PTPR) process for Bangladesh involved an in-depth look into two industries that have been nurtured by targeted policies to develop local industrial capabilities to meet local demand: electronics and pharmaceuticals. These two industries are deeply different, but both have export-potential, and both can play a key role in sustaining Bangladesh's shift to its next innovation- and quality-driven development phase.

This fourth chapter of the PTPR of Bangladesh complements the industrial assessment of the Bangladesh manufacturing industry presented in Chapter 2 and Bangladesh's policy model presented in Chapter 3. It draws on domestic stakeholders' consultation and international peer learning, including insights from Viet Nam from the United Nations Committee for Development Policy (CDP). The chapter is structured into two sections each providing an overview of the origin and evolution of the sector in the country, an analysis of the main policy approach impacting the sectoral industrial development and a conclusion indicating key steps in going forward. In both cases, reference is made to the key issues at stake in the aftermath of graduation, given the potential termination of intellectual property waivers and the impact they might have on the industry in going forward.

The electronics industry in Bangladesh is still maturing

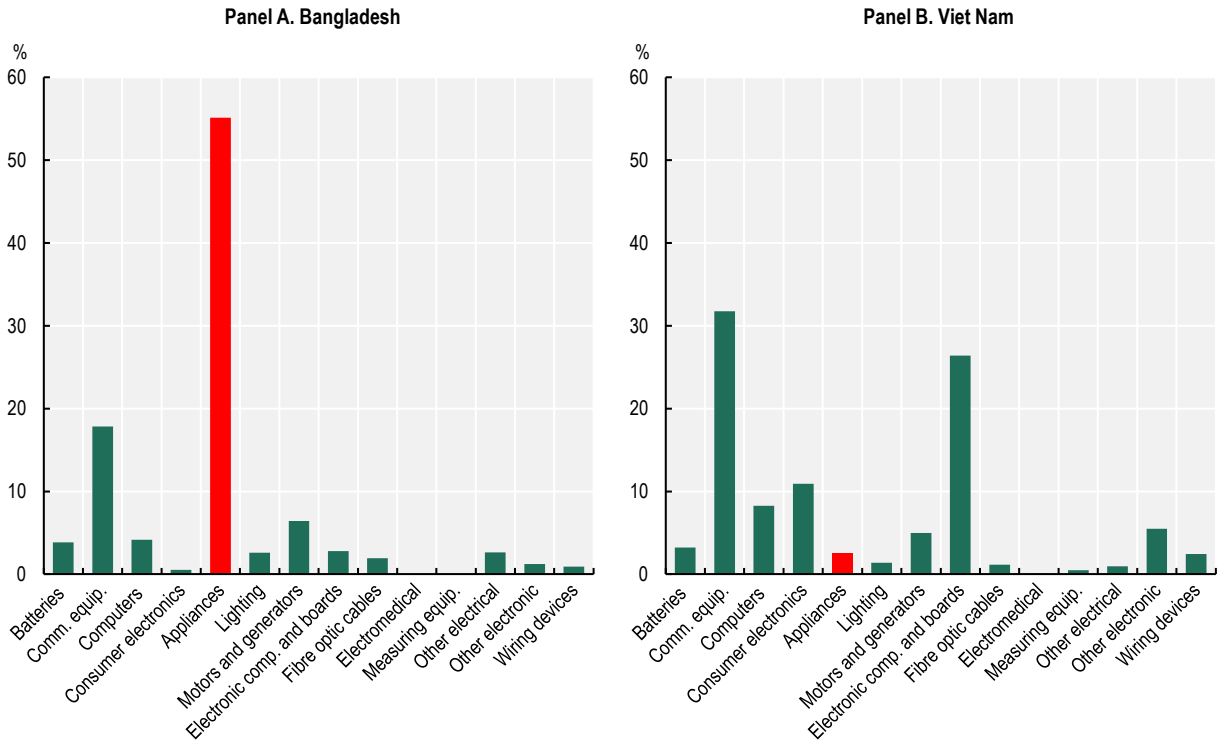
Electronics and electrical equipment (E&E) is one of the largest industries globally in terms of output, employment and exports. Since the 1960s when the integrated circuit board ushered in a period of continuous miniaturisation and increasing calculating power in electronics, the industry increased in size, going from 9% of global manufacturing value added (MVA) then to 13% today, approximately equal to the GDP of Brazil (authors' elaboration based on UNIDO, 2022). About 27 million people work in E&E globally, slightly higher than the entire population of Australia, on par with employees in the textile and apparel industry and marginally above the level for food and beverages. The top world producer is the People's Republic of China (hereafter "China"), accounting for a third of the world's total (34%), followed by the United States (15%) and Japan (9.7%), while the EU as a whole accounted for 11%. The industry is also known for its highly internationalised value chains, with components and parts crossing borders several times until final assembly and exports. As a result, the industry accounts for a high share of world exports, at 21.7% during 2019-21 (CEPII, 2023[1]). China accounted for 28% of value-added that is exported globally (data for 2018), followed by the United States (19%) and Korea (9%).

In global terms, the size of Bangladesh's E&E sector is on par with that of Morocco and South Africa, accounting for around 0.07% of world MVA. It remains, however, smaller than the size of this industry in other Asian hubs such as Singapore (2.1%), Viet Nam (1%) and Malaysia (1.5%), where E&E has been established as a major industry (48%, 27% and 24% respectively of their total MVA) (authors' elaboration based on UNIDO, 2022). Domestically, E&E accounts for a small share of industrial activities, estimated at 2% of its MVA (i.e., approximately 0.3% of its GDP), and 1.2% of its manufacturing employment. By contrast, textiles and apparel, the top industry, generates more than half of MVA (58%) and absorbs three quarters (74%) of manufacturing employment (see Chapter 2 of this PTPR).

E&E production in Bangladesh is concentrated in lower-tech consumer products that are mostly sold on the domestic market. Home appliances – such as refrigerators and air conditioners – account for just over half (55%) of employment in the sector (Figure 4.1). A further 18% of the E&E workforce is absorbed in the manufacture of communication equipment – particularly mobile phones. By comparison, production in Viet Nam is relatively more diversified and more oriented towards higher technology goods. Communication equipment generated 31.7% of E&E employment in Viet Nam and electronic components an additional 26.4%.

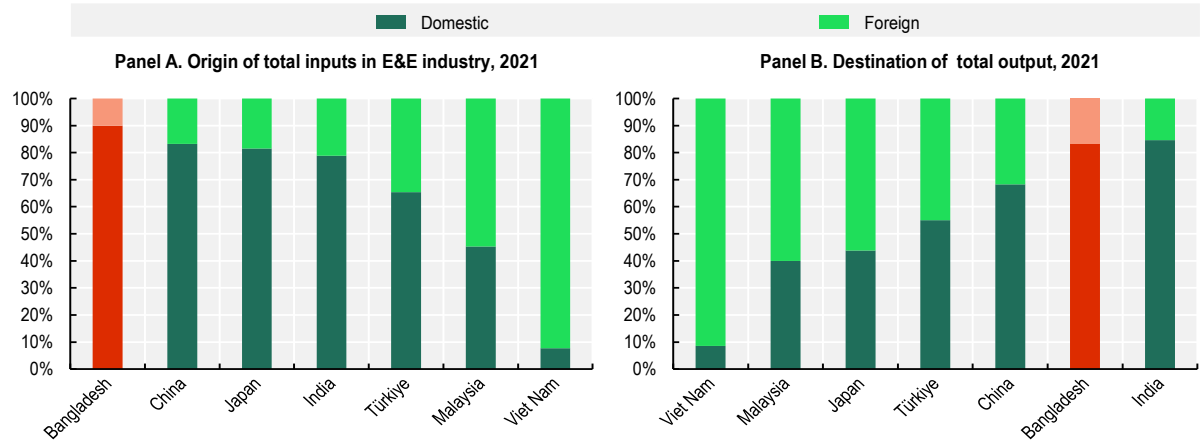
Figure 4.1. Structure of E&E industry by employment, Bangladesh and Viet Nam, 2018

ISIC – 4 digits, share of total E&E employment (%)



Note: ISIC descriptions have been shortened for visual purposes.
Source: Authors' elaboration based on UNIDO (2020), INDSTAT 4 2023, ISIC Revision 4 (https://stat.unido.org/database).

Figure 4.2. Input origins and output destination of the Bangladeshi E&E industry

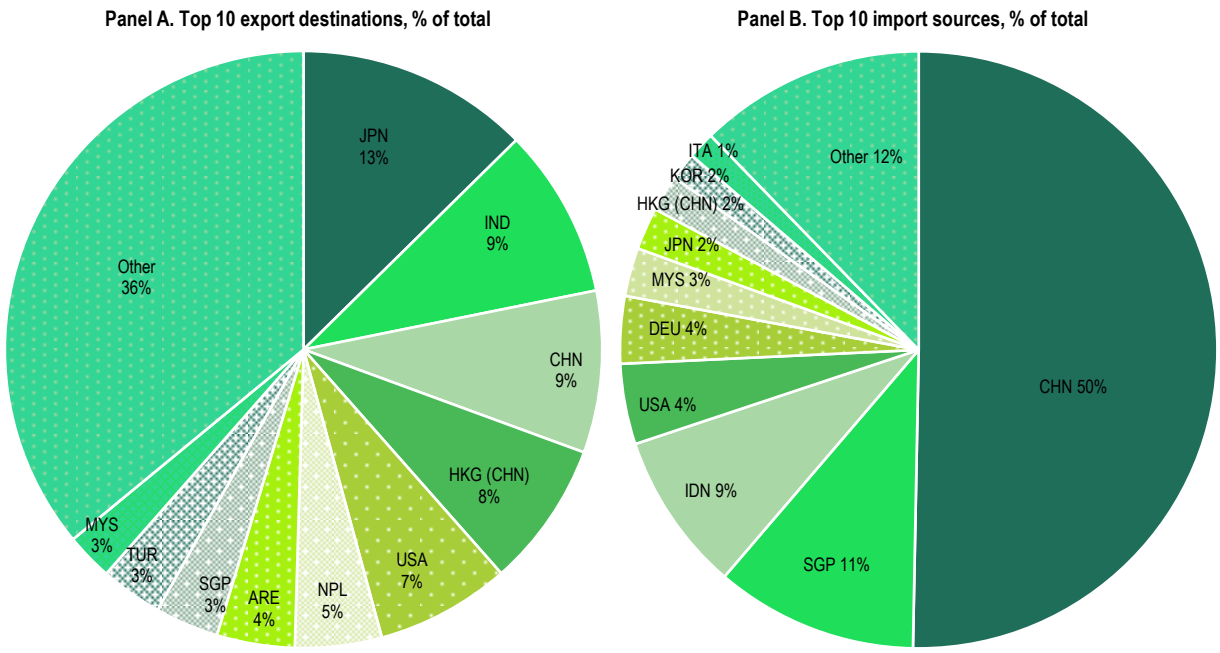


Note: Nominal values in current USD.
Source: Authors' elaboration based on ADB-MRIO (Input-Output tables), 2021.

About 83% of Bangladesh's E&E output is marketed locally (Figure 4.2). This is similar to other large markets in the region, such as India, where 85% of output is absorbed by the domestic market, and China

(68%). By contrast, Southeast Asian countries serve mostly as FDI-led export hubs, with most output assembled and then shipped for further processing or for final consumption, including in Viet Nam where 91% of all production goes to export markets, Malaysia (60%) and the Philippines (54%). This difference in production and export models is also reflected in the sourcing of inputs to the industry. Bangladesh sources 89.9% of its total E&E inputs domestically, compared with, for example, 7.7% in Viet Nam and 45.3% in Malaysia. Most of the inputs into the E&E industry include metals (20%), transport and business services (18%), financial intermediation (7.5%) and utilities and construction (12.4%). As a result of the industry's orientation, the country's overall exports in E&E are small, amounting to about USD 164 million annually on average during 2019-2021, about 13 times lower than Bangladesh's imports in this sector. As a share of the country's total exports, the share of E&E is around 0.35%, a share that has been relatively stable in the last decade (CEPII, 2023[1]). These exports flow to various regional markets, including Japan (13%), India (9%), and China (9%), as well as some LDC markets, such as Nepal (5%) (Figure 4.3). Imported goods come mostly from China (50%), both for final consumption and also components to be assembled, Singapore (11%) and India (9%).

Figure 4.3. Bangladesh top 10 export destinations and import sources for E&E, 2019-2021

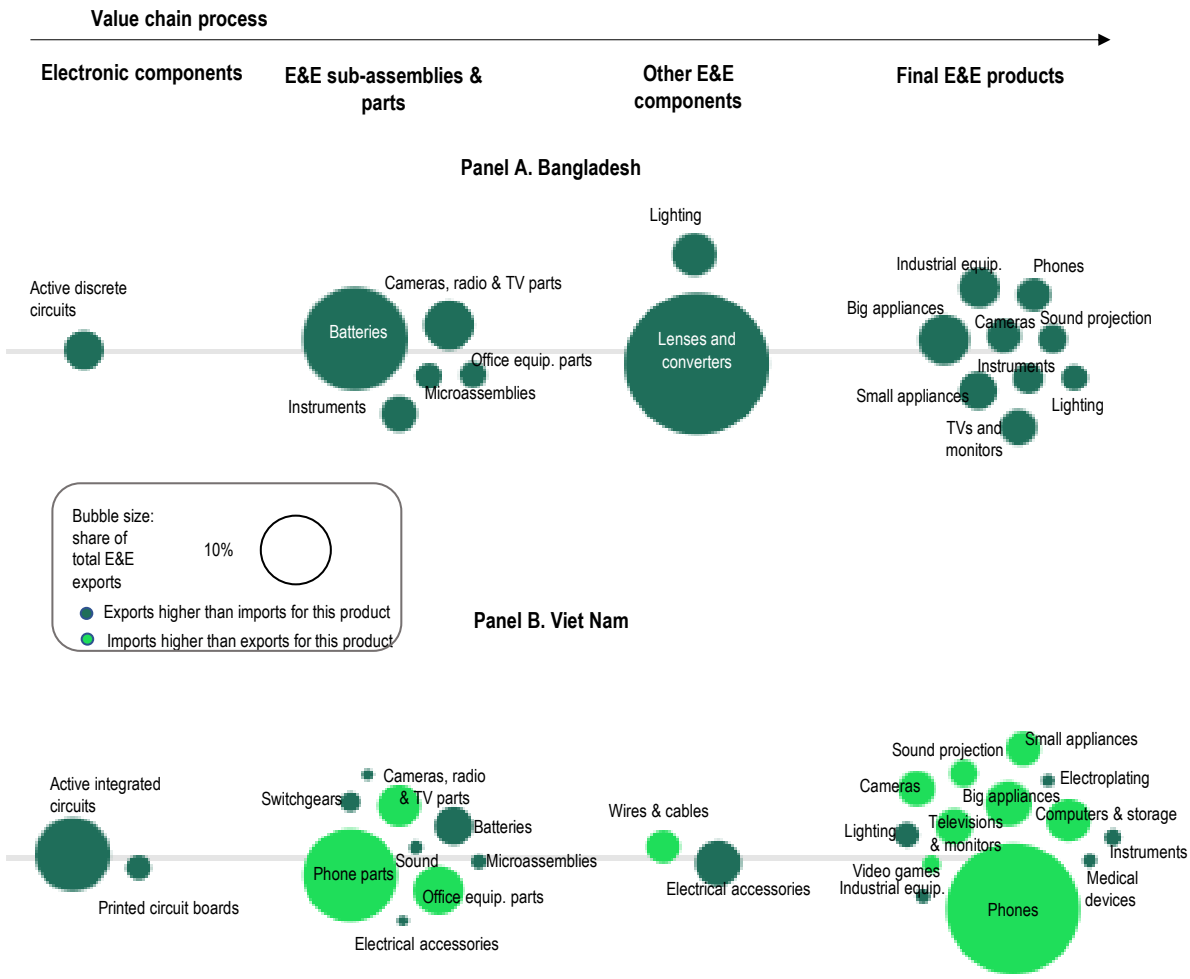


Source: Authors' elaboration based on UN Comtrade (2021), database, https://comtrade.un.org/data.

Bangladesh's engagement with E&E value chains is currently small and fragmented. The country's exports of E&E are concentrated in low-tech electrical parts and components, which account for about 75% of total E&E exports (Figure 4.4). In particular, the two largest categories of exports in Bangladesh are lenses and static converters (40%) and batteries (21%). Typically, the largest opportunities for value addition lie in the upstream parts of the value chain, in the design and manufacturing of integrated circuits and other sophisticated components that are skill and technology intensive. The export of final goods that reap the benefits of branding can also be sources of value addition, particularly if they embed locally made upstream components. In Bangladesh, the export of electronic components is small, and so are the exports of finished goods where Bangladeshi firms are active in the domestic market. Large domestic appliances (e.g. fridges) and small ones account for 5% and 3% of exports respectively, and phones for 2%. Other countries in Asia have tapped into value chains by exporting final goods based on the assembly of imported parts. For example, about 34% of Viet Nam's exports are mobile phones, and a further 17% are phone

parts. In addition, Viet Nam is a more diversified producer with 26 products accounting for more than 0.1% of its E&E exports, compared to 17 in Bangladesh. This indicates that Viet Nam has a relatively more mature ecosystem with higher expertise in a number of areas that can be attractive for investors.

Figure 4.4. E&E exports from Bangladesh and Viet Nam, by value chain segment, 2019-21



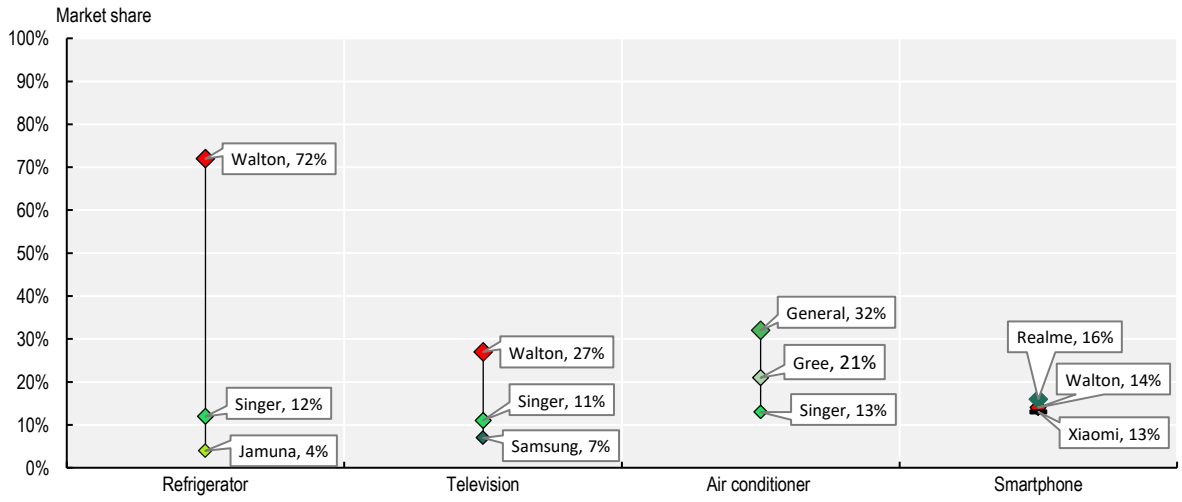
Note: Value segment definition based on a combination and aggregation of categories found in (Gereffi, Frederick and Bamber, 2019[2]), Costa Rica in the Electronics Global Value Chain: Opportunities for Upgrading, https://gvcc.duke.edu/wp-content/uploads/2013-08-20_Ch2_Medical_Devices.pdf and (Frederick and Gereffi, 2016[3]), The Philippines in the Electronics and Electrical Global Value Chain, https://gvcc.duke.edu/wpcontent/uploads/2016_Philippines_Electronics_Electrical_Global_Value_Chain.pdf. Only product categories with more than 0.1% of exports are included for visibility purposes.
Source: Authors' elaboration based on ITC (2023), trademap, https://www.trademap.org/.

Bangladesh is now home to several homegrown brands. Several of these local firms were established in the 1970s and 1980s and originally started as importers, distributors and retailers of foreign brands, moving towards vertically integrating and manufacturing products in the past decade, such as Walton, Jamuna Electronics and Butterfly Group. Bangladesh's growing consumer market is an important factor driving industry growth, as well as targeted policy incentives, including the use of tariff barriers for specific activities, such as mobile phones and home appliances. For example, 9% of households in Bangladesh have a computer, 41% have a refrigerator and 62% have a TV according to the \ and the Bangladesh Bureau of Statistics ((Bangladesh Bureau of Statistics, 2022[4])). Local brands now have large shares in entry level categories, for example, in refrigerators, where Walton accounts for 72% of the local market

and Jamuna for 4% (Figure 4.5). Local firms have used diverse strategies to grow their capabilities, relying on a mix of acquisitions and partnering with foreign partners for joint ventures. Nevertheless, firms in E&E in Bangladesh invest little in research and development (Box 4.1). For example, in 2018, Butterfly partnered with LG for making TVs. Joint-ventures are also common for foreign firms to enter and operate in the local market. Samsung, for example, partnered in 2017 with Transcom Group and Fair Electronics for manufacturing consumer electronics and Singer with Arcelik also for consumer electronics and appliances in 2022.

Bangladeshi firms are rapidly growing their capabilities in mobile phone production. In 2017 only 2% of all phones sold in the local market were assembled locally, but by 2022 the figure rose to 78%. As of fiscal year 2021-22, around 15 companies had been licensed to assemble and market mobiles in Bangladesh, including some of the country's largest E&E conglomerates – such as Walton or Edison Industries, where the former has increased domestic manufacturing capabilities (e.g., including compressor manufacturing through foreign technology acquisition). Several foreign brands have also set up operations, such as Samsung, Nokia and China-based Transsion, Vivo and Oppo (BTRC 2022). Nevertheless, Bangladesh's production remains small by global standards in this area. Viet Nam, for example, which assembles phones largely for export markets, manufactured about 233 million devices in 2021, compared to Bangladesh's 35.5 million, with Samsung alone producing the bulk of it in its mega-factories (The Investor, 2013). Moreover, production has been hit recently by inflationary pressures, with monthly production of phones about 50% lower in the first quarter of 2023 compared to the beginning of 2022, a decrease that is sharper than the global decline in smartphone shipments (around 12% reportedly).

Figure 4.5. Domestic market shares of top 3 firms in Bangladesh by E&E product



Note: Market shares should be taken as indicative, as different sources may differ in their approach.
Source: Authors' elaboration based on UCB Asset Research (2021) and Counterpoint Research Bangladesh Handset Tracker (2021).

Box 4.1. Homegrown electronics brands are developing quickly

Walton Hi-Tech Industries is a consumer electronics and appliances manufacturer that was established in 1977 in Gazipur, Bangladesh (then as Rezvi & Brothers). The company started with the import of appliances and progressed to setting up its own manufacturing facilities, first for consumer appliances in 2007, for televisions in 2013 and for mobile phones and for refrigerator compressors in 2017. Walton is engaging in improving its technological capabilities through its own R&D and other innovation activities (currently investing around 0.01% of revenue in R&D and with 6.4% of its workforce being engineers). It also licenses and acquires brands and technologies from abroad. In 2022, the group acquired the trademarks in selected countries and other intellectual property including patents, design and software patents of ACC, Zanussi Elettromeccanica (ZEM) and Verdichter (VOE). Walton also joined forces with a Korean design house, for instance, in 2022, to improve production. The company has started to export to foreign markets, although these are still small, accounting for about 3% of total sales.

Butterfly Group is an electronics and home appliances firm established in 1987. The firm started with retail-only operations and then moved in 1995 to license and distribute foreign brands. This started with Korea-based LG and later others, including China-based Hisense. Since 2012, the company moved to engage in manufacturing operations with the establishment of manufacturing facilities jointly with LG and Hisense, respectively, to produce and assemble LED TVs, refrigerators and air conditioners.

Source: Firms' annual reports and webpages (About Walton (waltonbd.com), accessed 21 April 2023.

The country is nurturing local manufacturing capacities in electronics

The E&E industry has been among Bangladesh's potential growth industries since the 1990s. The electrical and electronics industry, as well as small scale engineering, are among the industries which the country and its development partners have been supporting in the past few decades in Bangladesh. Some of the challenges linked to E&E industrial development identified in the 1980s persist, and include the limited engineering knowledge base in the country, as well as lack of institutional support and infrastructure for research, development and innovation.

This industry is considered critical to the development of the Information and Communication Technologies (ICT) industry and digital and mobile services, as—increasingly—the value added comes from software embedded in electrical and electronics hardware.

The responsibility of fostering E&E development is diffused among the different institutions that undertake industrial development in areas related to investment (e.g., BIDA, BHTPA), export promotion (e.g., Ministry of Commerce, financial incentives (e.g., Ministry of Finance) and quality and standards (e.g., Ministry of Industries). The telecommunications segment is also a key focus of the Bangladesh Telecommunication Regulatory Commission (BTRC), an agency established under the Ministry of Posts, Telecommunication and Information Technology, in 2002 with the goal of developing the telecommunications sector and ensuring reliable and affordable access to services, while increasing competitiveness in this area.

Bangladesh has progressively changed its policy support for this industry by continuing to support domestic manufacturing and at the same time making it gradually easier for foreign businesses to operate in the country and by attempting to bolster exports: Custom duties for E&E imports have been reduced, but total tax incidence (TTI), which considers para-tariffs and taxes, has been modified according to specific product lines on the basis of their domestic manufacturing potential. One example is that of mobile phones.

Imported mobile handsets are subject to a 25% customs duty rate (up from 5% in 2016), 15% VAT, 5% advanced income tax (AIT), 3% regulatory duty (RD) and 5% advance tax (AT), bringing the total TTI to 53% in fiscal year 2022-23. By contrast, local factories pay between 1% and 10% duty on parts (which can have up to 10-25% custom duty rates normally) depending on whether they are bringing in parts as "completely knocked down" (CKD) or "semi-knocked down" (SKD). Moreover, no regulatory duty is assessed and their VAT is reduced to 5% (advance tax and advance income tax is still charged on parts imports). The TTI is also high for other priority products, such as air conditioners (212.2%) and refrigerators (104.7%).

Table 4.1. Average custom duty tariffs and total tax incidence (TTI) on E&E products, 2011-2023 (%)

		2011-12	2015-16	2018-19	2020-21	2022-23
Custom duty	Computers and peripheral equipment	8.3	5.6	5.0	5.0	6.1
	Communication equipment	17.5	10.3	11.8	13.3	18.3
	Consumer electronic equipment	24.6	23.0	23.0	23.0	23.8
	Electronic components	11.9	9.8	10.7	10.7	11.6
	Miscellaneous	19.5	14.5	16.7	16.7	21.7
TTI	Computers and peripheral equipment	34.7	19.2	19.4	20.9	31.0
	Communication equipment	59.6	45.6	46.2	41.3	56.4
	Consumer electronic equipment	75.4	67.5	64.9	61.2	59.1
	Electronic components	92.1	40.4	42.1	39.6	79.0
	Miscellaneous	140.9	56.2	53.5	42.5	69.8

Note: TTI stands for ''Total Tax Incidence'' and accounts for total taxes applied to imports: Custom Duties (CD), Regulatory Duties (RD), Supplementary Duties (SD), Value Added Tax (VAT), Advance Income Tax (AIT), and Advance Trade Tax (ATV). Classification is based on UNCTAD's revised version of OECD's ICT goods classification.
Source: Authors' elaboration based on national tariffs tables from the National Board of Revenues (https://nbr.gov.bd).

Bangladesh regulates the E&E industry through import and production licensing. In line with Bangladesh's Import Policy Order, which sets out the country's regulatory environment for imports, while most products that enter Bangladesh do not need a specific license, the importers of radio transmitters and wireless equipment – including for instance mobile phones, tablets and IoT devices – need a no-objection certificate (NOC) called "Radio Equipment Importer and Vendor Enlistment" from BTRC. In addition, for handsets an additional certificate exists, which is issued upon submission of samples and relevant quality reports, as well as upon ensuring the pre-installation of Bangla keyboards. In 2017, BTRC also introduced guidelines for licensing mobile phone manufacturing and assembly facilities that produce for the domestic market. There are two levels of production license, Category A, which refers to those operations that import parts CKD (and have their own testing lab according to BTRC quality and standard specifications) and category B which refers to those that import SKD and have to rely on external testing labs. The license costs between USD 25 000 to USD 50 000 and needs to be renewed every three years. The guidelines also specify the types of testing capacities that must be present in a testing lab, such as for PCB/PCBA, displays and batteries.

Similar to firms operating in other sectors, E&E firms (in particular those that produce electronic components, computer hardware, mobile phones, LED TVs, transformers, consumer appliances, hardware, robotics and AI applications) are eligible for corporate income tax (CIT) incentives. E&E firms are eligible for reduced benefits of 5 to 10 years depending on location, similar to industries such as plastics, chemicals and furniture. For some products, specific CIT rates are set, such as 5% to 10% for air conditioners and freezers (normal rate 20%-30%). Some operations are entirely exempt from CIT, including those that produce parts for light engineering, hardware and robotics or income derived from software development, similar to those that produce Active Pharmaceutical Ingredients (APIs). All manufacturers, including E&E ones, are also eligible for additional incentives, such as reduced rates on

import duties for capital machinery and duty exemptions for raw materials. Finally, Bangladesh has also set up various Export Processing Zones (EPZs) and hi-tech parks that offer their own incentives, which are not sector-specific and are more generous than for operations that target the domestic market (see Chapter 3). EPZs offer a 5-10 year tax holiday depending on their year of establishment (duration was reduced for firms established after 2012) and location, duty free imports of construction materials, capital machineries, raw materials and relaxed rules on foreign ownership among others.

The country is actively engaged in supporting E&E exports through grants for exporting firms and tax exemptions for income derived from exports. Similar to other sectors, E&E firms are eligible for cash subsidies, but these vary in size depending on the product. For instance, for accumulators (batteries) there is a subsidy of up to 15% of exported value, and for 10% in the case of photovoltaic modules, consumer electronics and kitchen appliances. By comparison, for APIs and vegetable, fruits and processed agricultural produce and handicrafts the rate is 20%. Additionally, all exporting firms are entitled to a 50% tax exemption of income derived from exports and no VAT imposition on the export goods. LDC graduation is not expected to have any tariff-related impact on E&E exports, because Bangladesh's E&E exports to the EU will remain duty free under the GSP scheme, which theoretically will replace Everything but Arms (EBA). However, any cash incentives for export (in all industries, not only E&E) will need to be revisited after graduation to ensure that they comply with the Agreement on Subsidies and Countervailing measures. Article 27.2 and Annex VII (a) allows LDCs to use export subsidies, and Bangladesh will no longer have access to this kind of crutch after graduation.

Bangladesh's policy approach to support the E&E industry is focused on nurturing the domestic industry, leveraging the potential of the domestic market. While the use of Export Processing Zones is similar to other Asian electronics hubs to generate employment and technological upgrade, the overall policy approach differs and retains an emphasis on import controls, as it has since independence. While Bangladesh will benefit from updating its policy approach considering its ambition to diversify production and exports, to attract more FDI and to augment the country's preparedness to face the post-LDC graduation trading landscape, the country will benefit from updating in a strategic way its policy approach to allow nurturing a competitive industry. To do so, Bangladesh would benefit from strengthening its direct and indirect support to innovation and to define a targeted strategy to better structure its international partnerships (Figure 4.6).

Viet Nam, like other Southeast Asian hubs such as Malaysia and Singapore, has followed a model that has centred on attracting FDI for assembly, gradually developing local capabilities and making its ecosystem more dense and sophisticated (Table 4.2). By contrast, Bangladesh has focused on fostering domestic capabilities first, and is gradually looking to attract foreign investments and export, a trajectory mirroring that of China. Bangladesh and Viet Nam both use widespread financial incentives for industrial investments, but in Viet Nam these are geared towards supporting higher technology industries and applications, and more recently to encourage innovation with various tax exemptions, and rental reductions and non-repayable financial contributions for high-tech enterprises (in all sectors), start-ups, R&D centres and other similar technology-intensive activities. By contrast, Bangladesh supports innovation only through a tax exemption on royalties and technical assistance fees.

Table 4.2. Policy mix, E&E, Bangladesh and Viet Nam, 2023

	Bangladesh		**Viet Nam**	
	Tools	Prioritisation and conditionalities	Tools	Prioritisation and conditionalities
		Fostering industrial development		
Financial incentives	VAT exemptions	Within E&E: freezers, compressors, air conditioners, motorcycles, spare parts	VAT declaration facilitations	Revenue of prioritised SI products for development may choose to declare value-added tax on a monthly, yearly, and quarterly basis.

	Reduced CIT 5-10% (normal rate 22.5-30%)	Within E&E: freezers, compressors, air conditioners, motorcycles, spare parts	Reduced CIT to 10% -17%, from 10 years to project lifetime	Greenfield investment in economic zones; Investment projects in disadvantaged areas and certain activities (IT, automation tech, supporting products for high-tech)
	CIT exemptions for those starting operations 2021-2030	Within E&E: Parts of light engineering, agr. machineries, appliances and technical or vocational skills institutes. Hardware, robotics, nanotech.	CIT exemptions for 2-4 years, and 50% reduction for up to 4-9 more years	Economic zones; disadvantaged areas and certain activities (IT, automation tech, supporting products for high-tech); large scale; of social importance; high-tech enterprises
	Import duty exemptions for capital machinery and reduced rates for raw materials and molds	For all manufacturers	Import duty exemptions	For goods imported to create fixed assets; For software products or scientific research and cannot be produced domestically
Tariff barriers	Higher tariffs on imported goods, escalating for final goods	Differs according to product	No tariffs on most IT and electronic imported goods	
Non-tariff trade barriers	Vendor enlistments / non-objection certificates	Differs according to product		
Loans and credits	Investment credit at reduced rates	Light engineering sector	Short-term loans at reduced rates up to 70% - 75% of total investment	SMEs producing SI products. Up to 75% for SIs using over 85% of raw materials from domestic sources to manufacture SI industrial products
			Borrowing at the loan interest rate from the investment credit source of the State	Supporting industries on the encouraged list.
			Land rental exemption for 3 years of construction time, and 15 years to whole life after	Special sectors or areas; Investment projects in the economic zones; Investment projects to build infrastructure for economic zones.
Boosting exports				
Non-repayable financial contr.	Export cash incentive of 10%-15%	For all exporters, but rates differ according to sector/product. Rates here for E&E	Land rental exemption for 7 years	Export processing enterprises
Fiscal incentives	50% CIT exemption for income derived from exports	For all exporters	CIT exemption for 2 years and discount for 50% in the next 4 years	Export processing enterprises
	CIT exemptions	For those located in EPZs	Import duty exemptions	For raw materials, supplies and components imported for production of export goods. For exports from non-tariff zones to foreign countries.
	Import duty exemptions	Construction materials, capital machinery, raw materials in EPZs		
	0% VAT on exports	For all exporters	0% VAT on exports	All exports with few exceptions (e.g. unprocessed minerals / nat. resources
Loans and credits	Export credit at reduced rates	Light engineering sector		
Fostering innovation				
Fiscal incentives	Tax exemption on royalties and technical assistance fees		Land rental incentives	For high-tech enterprises, STI firms/ org. TTOs, start-ups etc.
			Exemptions and reduced CIT rates	For income from the hi-tech sector, for scientific research and technology development contracts; income from products produced by first-time applied

				technology in Viet Nam and by technology in pilot period.
			Import duty exemptions	For specialised scientific documents, used for scientific research &, technology development. Equipment needed for R&D, high-tech projects, incubation etc.
Non-repayable financial contr.			Funding up to 50% of investment cost and land (given or leased) by the state	For building R&D facilities

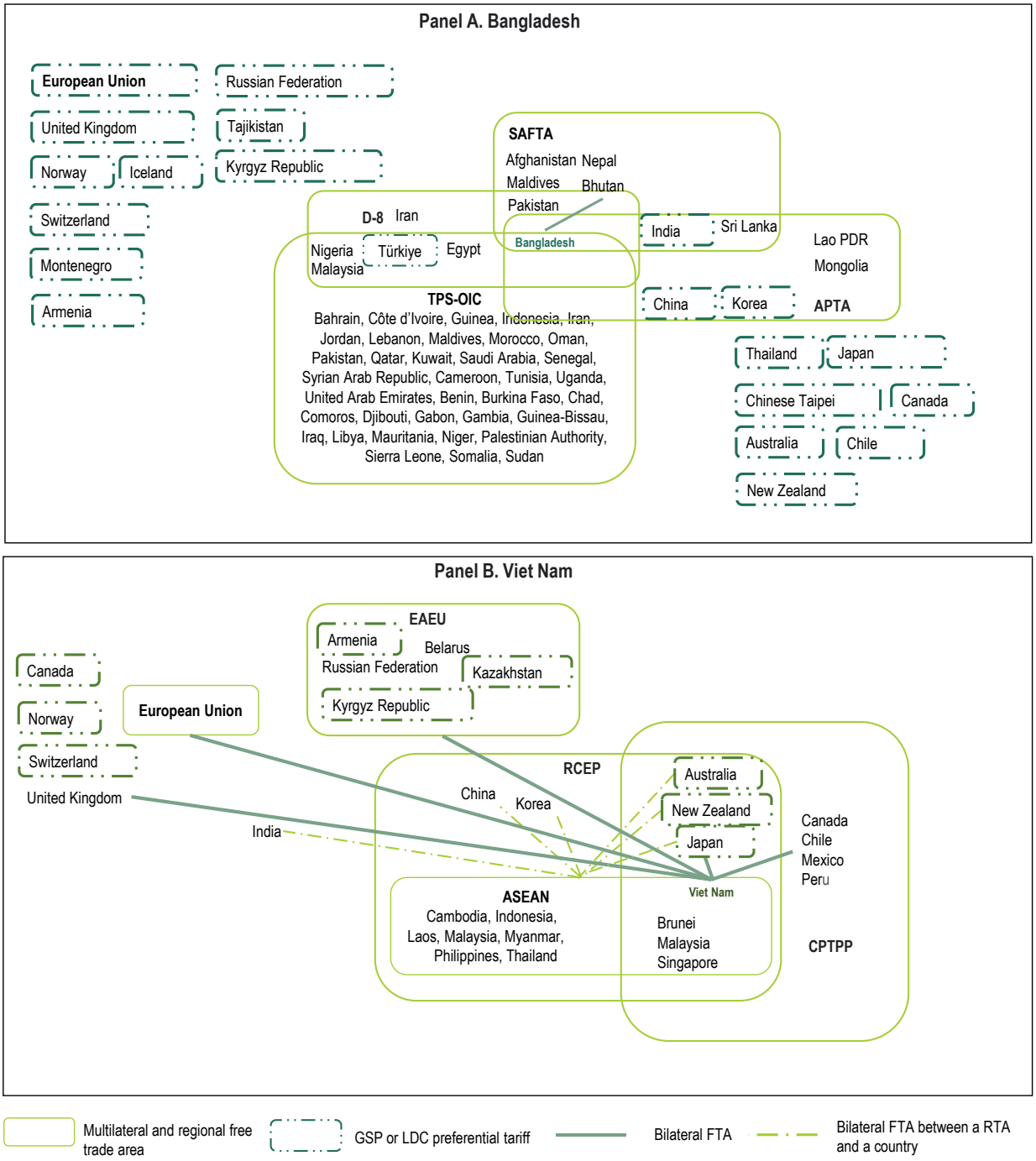
Notes: SI = Supporting industries; RDI = Research, development and innovation.
Source: Authors' elaboration based on official information from Bangladesh and Viet Nam.

Bangladesh could benefit more from trade (Figure 4.7). Diversifying its export basket and win-win international partnerships are intertwined goals for Bangladesh. The country has not yet tapped into regional trade networks sufficiently, and regional value chains are key in sustaining the competitiveness of the E&E industry in the Asian region. Regional and bilateral free trade agreements (FTAs) have been a driving force for the expansion of the E&E industry in Asia, becoming denser over time as industrial capabilities strengthened in participating countries, and to encourage the relocation of investment and complex trade arrangements that often underpin E&E production. Bangladesh has one bilateral Preferential Trade Agreement (PTA), with Bhutan.

Bangladesh needs to develop a trade and investment network that matches its ambitions of achieving high-income status by 2041 and that habilitates production and trade diversification rooted in innovation, and not purely on competitive labour costs. Viet Nam has a different story and is faced with different challenges and pursuing a similar strategy for Bangladesh might not be the most effective option. For Viet Nam, embeddedness into regional trade areas has been a cornerstone of national development. Viet Nam today enjoys a structured and organised international trade network thanks to deep regional integration. Viet Nam is one of the founding members of ASEAN (the Association for Southeast Asian Nations), and through its membership to ASEAN has benefitted from bilateral FTAs with China, India, Japan, Korea, Australia and New Zealand, all of which – with the exception of India - were consolidated into the recent RCEP (Regional Comprehensive Economic Partnership). It also has bilateral FTAs with key partners such as the EU, the US and Japan. Bangladesh has trade agreements with some 40 countries (WTO, 2019[5]), but only one is an FTA. Bangladesh, with the exception of SAFTA, is not a member of any of the major Asian regional agreements that have emerged in the past few decades. It is a member of the Asia Pacific Trade Agreement (APTA) (since 1975) and the South Asia Free Trade Area (SAFTA) (since 2006). It is also a member of the TPS-OIC (Trade Preferential System among the Member States of the Organization of Islamic Cooperation) and the D8 (Group of Eight Developing Countries). As an LDC, it benefits from several GSP schemes, such as from Canada, the European Union, Australia and Japan among others, and preferential LDC tariffs from China, India, Korea and Thailand. In particular under SAFTA, India provides larger tariff reductions for the four LDC members (Afghanistan, Bangladesh, Bhutan, and Nepal).

What Bangladesh can learn from Viet Nam is learning how to negotiate and focus on pursuing closer linkages with regional partners to attract investments with an interest in regional production and trade networks. It could draw inspiration from its neighbour to better navigate an increasingly geopolitical trade landscape by sharing spaces for common dialogue and co-creation of trade and investment rules. This will necessitate a change in mindset from short-term gains based on market access and cost competitiveness, to foster innovation and strategic use of trade and investment agreements to nurture a competitive, open and transparent local and outward-oriented business environment.

Figure 4.6. Preferential trade agreements with Bangladesh and Viet Nam as parties, 2023



Note: ASEAN: Association of Southeast Asian Nations; APTA: Asia-Pacific Trade Agreement; CPTPP: Comprehensive and Progressive Agreement for Trans-Pacific Partnership; D8: Group of Eight Developing Countries; EAEU: Eurasian Economic Union; RCEP: Regional Comprehensive Economic Partnership; SAFTA: South Asian Free Trade Area; TPS-OIC: Trade Preferential System among the Member States of the Organization of Islamic Cooperation. D8 and TPS-OIC have not been notified to the WTO.

Source: Authors' elaboration based on WTO (2023), Preferential trade agreements (database), http://ptadb.wto.org/; WTO (2023), Regional trade agreements (database), http://rtais.wto.org; and Asian Development Bank (2023), Free trade agreements (database), https://aric.adb.org/fta/.

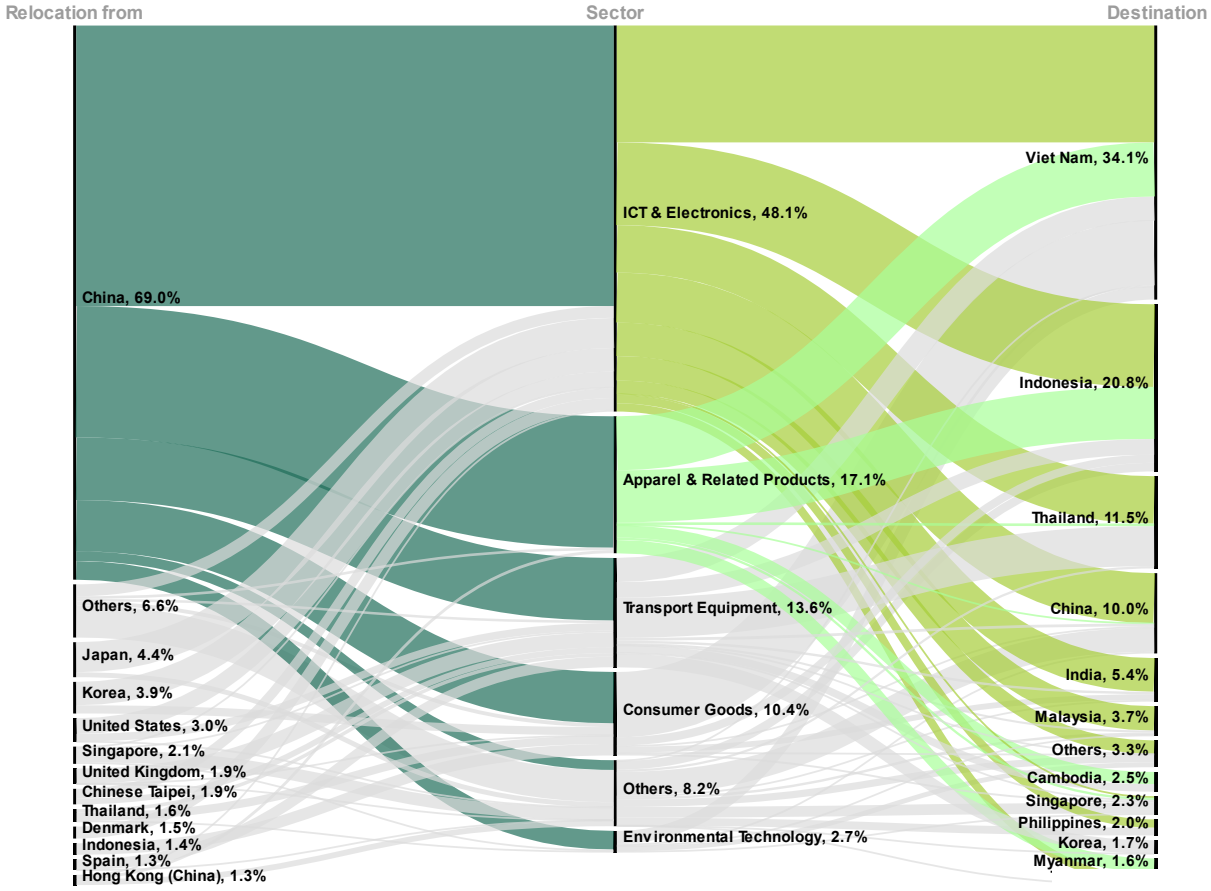
International partnerships and innovation will underpin the future of electronics

The global E&E industry is undergoing a significant transformation due to a combination of shifting geopolitical landscapes, new technological imperatives, and new consumer demands. Two main trends stand out.

First, the geography centre of the industry has shifted in recent years, in an effort to deal with rising production costs and the need to balance cost-effectiveness with a more diverse, secure and reliable supply chain base, particularly after the supply chain shocks experienced during the COVID-19 pandemic. The shift has also come as a result of mounting trade and geopolitical tensions in the industry and in the Indo-Pacific region. A third of global relocations flow to Asia. Withing the region 69.7% originate from China. The top sector for relocation in Asia is electronics, which accounts for 46%. In turn, the main destinations for relocations in Asia are Viet Nam (36.4% of total) and Indonesia (18.7%). The growing search for new production bases could mean opportunities for newcomers to attract shifting investments (Figure 4.7).

Second, the industry has been witnessing a gradual blurring of the barrier between devices and services, which is increasing demand for new products and components. E&E products are becoming more than just physical goods (e.g. streaming is turning mobile phones into entertainment devices), and with smart components used in other objects (e.g. cars now use a growing amount of digital content). On the one hand, this is increasing demand for new types of components, such as sensors. On the other hand, it is also opening up opportunities for new firms to enter the industry leveraging on their strengths as digital service providers.

Figure 4.7. Global relocations in Asia by source, sector and final destination, 2013-20



Note: The sector classification follows the North American Industry Classification System (NAICS) 2007.
Source: Authors' elaboration based on Financial Times, FDI Market database, 2021, https://www.fdimarkets.com/.

Bangladesh has a unique window of opportunity to progress from assembler for the local market to leveraging its local E&E players and transforming them into incubators for innovation in the digital economy. The country also has the potential for this journey to leverage more foreign investment and the regional market. Bangladesh can draw on several strengths in this respect: a large and growing consumer market of 160 million consumers, a strategic location in South Asia, linking India, China, and ASEAN countries, and a large ICT industry (see Chapter 2), which could create synergies with its existing manufacturing ecosystem. To achieve this transformation, Bangladesh would benefit from:

- Developing a more diversified and updated policy toolkit. Bangladesh's policy mix for fostering production and upgrading in E&E focuses mostly on protecting domestic firms in selected areas and fostering exports through cash subsidies. However, the structure of instruments implemented has led to a two-track regime, rather than helping firms improve their industrial capabilities and innovate. A more strategic approach to the industry with a 'whole of value chain' approach would help to bridge these gaps and amplify opportunities for learning, while addressing the risks producers face in investing in upgrading. First, developing instruments to enable local firms to engage in innovation is crucial, especially in relation to energy efficient appliances and devices. Successful economies usually implement a mix of approaches, combining tax exemptions with grants and services This is the case of Malaysia, for instance, which combines fiscal incentives with R&D and technology investment grants (Box 4.2). Second, export development should also

be complemented with instruments that address key challenges firms face in export-readiness, such as obtaining market information, engaging with foreign suppliers and barriers, addressing skills shortages, and improving quality production and branding. Third, the experience of successful exporters has shown that FDI can have a catalytic role in infusing local ecosystems with talent and knowledge, provided that instruments are in place that encourage linkages with local manufacturers.

- Investing in the resources and institutions needed for Industry 4.0 and automation. As production becomes smarter, and the E&E industry becomes more digital-intensive, Bangladesh will benefit from investing in bridging gaps for adopting and creating digital technologies. Engineering skills, for instance, are crucial. In Bangladesh, about 11% of tertiary education graduates come from Science, Technology, Engineering and Mathematics (STEM), half to one-third the proportion in countries that are creating digital technologies. In India, the proportion is 34%, in Korea 30% and in Germany 20% (UNESCO data). Targeted institutions are also needed to enable the diffusion of new technologies, particularly by SMEs. For instance, Italy has established Digital Innovation Hubs (DIHs) and Industry 4.0 Competence Centres (I4.0), which aim at increasing awareness of new technologies, providing training and fostering partnerships with the private sector and academia (OECD et al., 2021[6]). The standards for the digital economy are still being shaped. As Industry 4.0 relies on the confluence and integration of a number of different scientific and technical fields, it is important to invest in improving the quality of standardisation, certification and metrology systems while encouraging closer collaboration across fields in this area. Bangladesh should also ensure it has a voice in shaping the standards of tomorrow by participating in relevant international fora and dialogue spaces.
- Enhancing collaboration with players across the value chain. Bangladesh could harness synergies between players involved in different parts of the value chain to stimulate innovation, including in ICT. There is also potential to enhance linkages between start-ups and E&E firms. In Bangladesh, electronics is among the top five sectors for start-ups (6% of total), which is unique among hubs in South and Southeast Asia. On the one hand, start-ups could tap into manufacturers to be able to prototype their products fast and cheaply. On the other hand, E&E firms could look to start-ups to strengthen their capacity to use digital technologies in manufacturing and in their product offerings. For example, Bangladesh could think of designing tools that encourage start-ups and manufacturers to work together on solutions, by encouraging open innovation and corporate venture capital, and the location of start-ups near manufacturing zones and hubs. Linking Bangladesh's players to more advanced hubs in the region could also serve to increase financing for common solutions, and opportunities for talent. Membership of regional agreements such as RCEP could help connect E&E firms with others in the region.
- Improving infrastructure and logistics. A robust infrastructure is crucial for the E&E industry, and Bangladesh must prioritise improvements in transportation, energy, and telecommunications to support the growth and expansion of this sector. For instance, ensuring a stable, reliable, and broadly accessible supply of electricity is needed, particularly for more high-tech operations, but this remains a challenge in Bangladesh. Additionally, good transport infrastructure (including air cargo) is essential for reducing delivery times in an industry that is fast-paced, especially in consumer electronics, which has a short design cycle and shelf life. Recent transport infrastructure developments in Bangladesh hold promise to improve the efficiency of logistics, including the Matarbari deep sea port, expected to come into operation in 2026, the first such port to be constructed in Bangladesh. Reducing red tape is also essential in this respect. It takes 216 hours to import and 168 to export (border compliance) in Bangladesh, compared to 56 and 55 respectively in Viet Nam, 33 and 10 in Singapore, to mention just a few examples.

Box 4.2. Updating the policy toolkit to encourage learning: Examples from Southeast Asia in the E&E industry

In Southeast Asia, the E&E industry took root in the 1960s and thereafter accelerated as production was shifted away from advanced economies and more routine, labour-intensive activities were offshored or relocated to low-cost manufacturing hubs. In the last decade, countries have been updating their policy mix to better connect these FDI operations to their local economies and to encourage progression from simple assembly to industrial upgrading and innovation.

Boosting the role of supporting industries in Viet Nam

Viet Nam has been incentivising the creation of industries since the mid-2000s to complement assembly operations and reap higher local value addition. Currently Viet Nam has a dedicated strategy for promoting supporting industries from 2020-30 in electronics, mechanical engineering, hi-tech and automotive industries, with the aim of meeting more than 70% of essential needs for production and consumption domestically. To do so, the government is providing a corporate income tax (CIT) incentive of 10% for 15 years and a 50% reduction in CIT for nine years after, favourable interest rates (up to 5% difference in interest rates can subsidised by the state), investment credit and exemption from rents charged for land. Funding for training activities is also available. The government is also facilitating business connections between firms in Viet Nam and foreign investors and planning to build and operate technical centres to support technology transfer and development.

Fostering linkages across the value chain in Singapore

Singapore introduced the Partnerships for Capability Transformation (PACT) scheme in 2010 to encourage linkages between original equipment manufacturers (OEMs) and their suppliers. The scheme allows OEM suppliers to defray up to 50% of costs incurred in bringing their procedures into compliance with the OEM's requirements. The scheme also offers wage support for OEMs (up to 70%) to hire and train managers that handle the process of identifying and managing procurement. It also covers productivity improvements and knowledge transfer, as well as co-innovation activities, such as joint product development between OEMs and suppliers, and joint business development. In 2018, PACT was extended to cover start-ups, instead of partnerships between large firms and SMEs only.

Diversifying tools to foster industrial upgrading in Malaysia

Malaysia has over time diversified the tools used to progressively encourage more sophisticated activities and update their conditions. On the one hand, the various fiscal incentives that have been introduced since the late 1950s have become stricter over time, and are now allocated only for designated high-tech activities. For example, before 2012 Pioneer Status was granted to firms operating along the entire E&E value chain. After 2012, this was restricted to semiconductor design and fabrication, advanced displays, equipment for digital convergence and other advanced components and equipment. Moreover, the incentive is higher for high-technology firms, which are defined as those with at least 7% of their workforce being science and technology (S&T) graduates and at least 1% of gross sales devoted to R&D. On the other hand, more tools have been added. The Domestic Investment Strategic Fund, launched in 2012 with a size of RM 1 billion (approx. USD 324 million), provides 1:1 matching grants to firms engaging in R&D, training, modernisation or upgrading of facilities, licencing or purchasing of new/high technologies, and obtaining international standards and certifications.

Source: OECD (2021[6]), *Production Transformation Policy Review of Egypt: Embracing Change, Achieving Prosperity*, https://doi.org/10.1787/302fec4b-en and official information from Viet Nam and Singapore official sources.

Bangladesh has been nurturing domestic pharmaceutical manufacturing since the 1980s

Domestic policies and international policy space have been pivotal in enabling local manufacturing

The rise of Bangladesh's pharmaceutical industry dates to the early industrialisation efforts of the 1980s. After independence in 1971, Bangladesh confronted substantial health and nutrition challenges. Essential medicines availability and affordability was a pressing issue, as before independence, most essential pharmaceutical needs were met with supplies coming from West Pakistan. A Drug Controller operating in the Central Government of Pakistan oversaw and regulated medicines sales and provision in the territory. At that time, estimates indicate that about eight multinational firms accounted for approximately 75% of the domestic pharmaceutical supply (Islam et al., 2022[7]; Murshid and Haque, 2019[8]).

In 1982, the government approved the first National Drug Policy and issued the Drug Control Ordinance, the National Drug Policy stated the government's priority of ensuring availability and affordability of essential drugs to the population and outlined a vision for promoting domestic manufacturing capabilities. The Policy and Ordinance responded to a two-pronged objective. On the one hand, it was meant to ensure the provision of affordable drugs to a population which was among the world's poorest by reducing dependency on an handful of multinationals. Indeed, at the time they were selling or already manufacturing in the country and, on the other hand, they were part of an overall national industrialisation strategy reliant on supporting local manufacturing and nurturing a diversified industrial base.

The Ordinance redefined the drugs market in Bangladesh with immediate effect, leaving to the government the right to define prices for drugs and raw materials for drugs manufacturing and it established a detailed list of which drugs could be manufactured and sold in the country with a detailed phasing out with different timeframes for the stocks that were already available in the country. It restricted and regulated the imports of raw materials for drugs manufacturing and it defined the conditions for manufacturing under licensing agreement in Bangladesh. It stated that any manufacturer in Bangladesh can be allowed to *manufacture any drug under any written contract with any manufacturing plant in Bangladesh* and that *any foreign manufacturer may be allowed to manufacture any drug under licensing agreement with any manufacturer in Bangladesh if it is registered under the same brand name in a given list of countries* (Legislative and Parliamentary Affairs Division, 1982[9]).

The 1982 Ordinance established the creation of the Drug Control Committee. This committee continues to operate today, under the Directorate General of Drug Administration (DGDA), together with several other committees, including the Standing Committee for procurement and import of raw materials and finished drugs and the Pricing Committee. The Drug Control Committee decides which medicine, of any type, can be manufactured, sold, imported, distributed, exhibited or stocked in the country. Upon recommendation of the Committee the licensing authority registers the drugs and issues a license which, unless suspended earlier, is valid for a period of five years.

In 1992, regulatory efforts resulted in major achievements. In a decade, the availability of essential medicines increased from 20% to 90%. Through price controls, the government managed to keep the price of essential drugs to 8% while overall consumer prices rose 170% in the same time frame (i.e. between 1982 and 1992) (Srinivasan, 1996[10]). Bangladesh also advanced on safety with the share of substandard drugs falling from 36% in 1970 to a mere 2% in 2002 (Srinivasan, 1996[10]).

Bangladesh has continued to nurture domestic pharmaceuticals manufacturing by updating its policies and institutions. In 1998, the government issued an import restriction, in place still today, on finished drugs that are produced in *sufficient quantity* by more than two domestic firms. While attaining quite well its healthcare objective, these policies also led to the building on an emergent industrial sector. In fact, the pharmaceuticals industrial sector started to consolidate and increased their role in government-business

dialogues. The National Drug Policy of 1982 has been updated twice so far: in 2005 and in 2016. These policies maintain their focus on availability and affordability of essential drugs for the domestic market but also gradually allow more margin of manoeuvre to the private sector, by reducing the number of drugs considered essential and by reducing caps on prices for essential medicines. These changes, albeit pro-market, led to price increases and raised affordability issues (Murshid and Haque, 2019[8]).

In terms of institutional changes, since 2010, the DGDA acts as the national Drug Regulatory Authority and as the Licensing Authority. One of the chief missions of the DGDA is to ensure availability, accessibility and affordability and rational use of essential medicines in the country and to develop a regulatory framework that support international standards compliance, research and innovation. The DGDA implements all drug regulations and regulates all activities linked to import, procurement of raw materials and packaging, production and import of finished drugs, exports and prices for all drugs, including Ayurvedic, Unani, Herbal and Homoeopathic medicines. It also issues licenses to manufacture, store, sell, import and export all drugs and medicines, upon recommendation of the Drug Control Committee. The DGDA operates in all national territory, with 58 district offices, which also acts as inspectors in the territory.

Bangladesh's domestic pharmaceutical production primarily focuses on the manufacture of generic medicines. Among the roughly 5 600 medicine brands produced within the country, about 80% consist of domestically produced branded generics off-patent. Additionally, approximately 15% of the medicines comprise generic versions of patented drugs. Bangladesh, a WTO LDC member benefits from a targeted waiver and specific provisions under the Trade-Related Aspects of Intellectual Property Rights (TRIPS) agreement. These include the possibility to exclude patentability of given drugs and to manufacture generic variants of patented medicines. Bangladesh also benefits from the TRIPS amendments from the 2001 Doha Declaration on Public Health, which permits, for reasons of public health and under precise circumstances, parallel imports, pre-competitive research and compulsory licensing (UNDESA, 2020[11]). Final drug prices are affected by intellectual property rights, as for example the cost of Sofosbuvir in Bangladesh is USD 6.0 (compared to USD 1 000 abroad) and Rosuvastatin is USD 0.25 (contrasting with USD 7.25) (Islam et al., 2022[7]). The country also has also issued licenses to 206 Ayurvedic, 285 Unani, 38 Herbal and 71 Homeopathic manufacturing companies, which are all under the regulatory and licensing power of the DGDA.

Bangladesh pharmaceutical industry albeit growing, remains at incipient stages

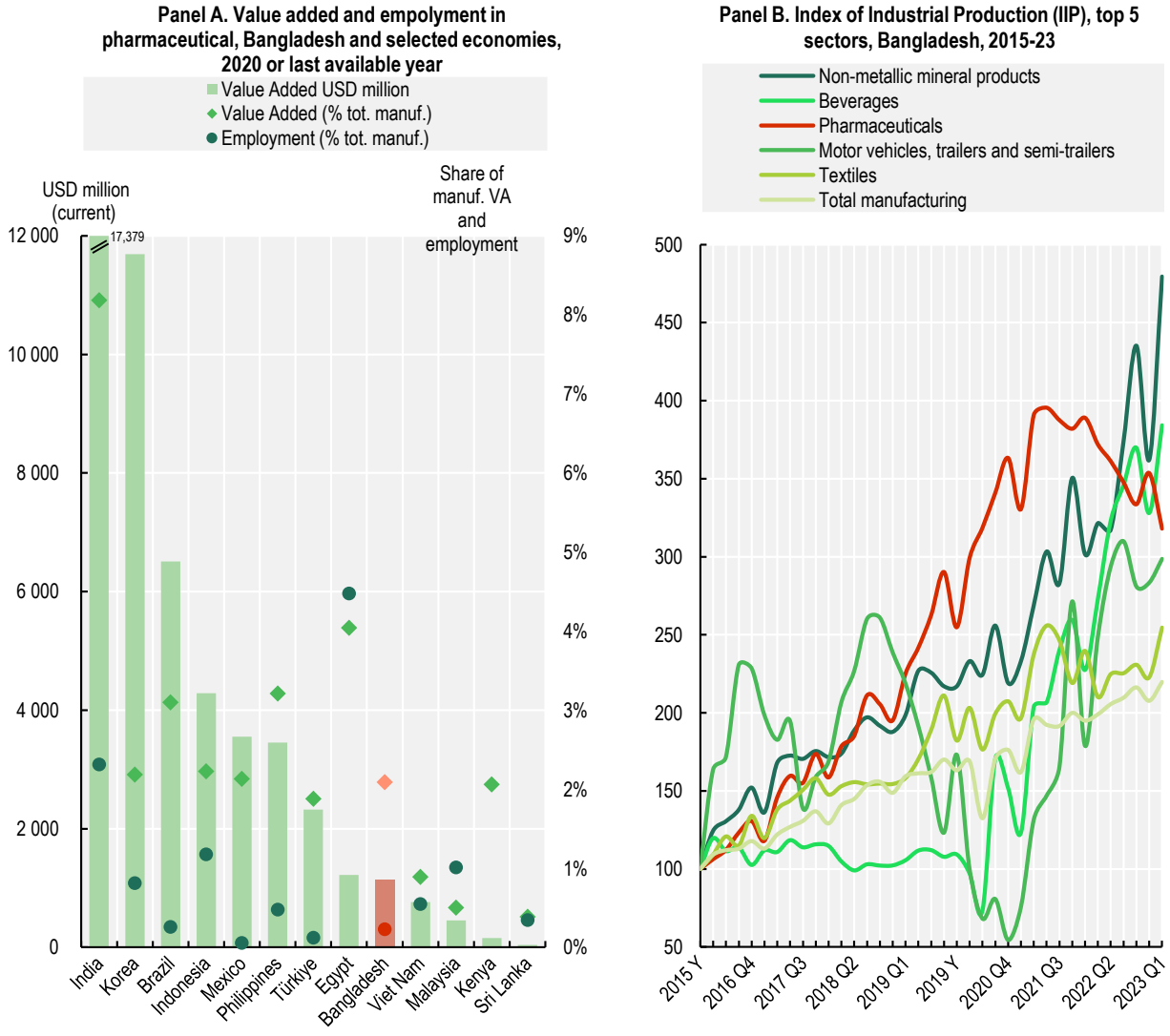
Since the establishment of the Drug Control Ordinance in 1982, and thanks to the policy space granted by the WTO to LDCs, including TRIPS, Bangladesh has managed to develop domestic manufacturing capacities in pharmaceuticals and now meets 98% of its essential pharmaceutical needs with domestic production. However, the country remains dependent on imports of more sophisticated medicines, including vaccines, which account for 47% of Bangladesh’s pharmaceutical imports (Authors’ calculations based on ITC 2023).

While Bangladesh's presence in the global pharmaceutical manufacturing arena remains relatively modest, the industry is relevant and growing in the country. The number of firms active in the sector has increased over time. According to data from the DGDA, currently in Bangladesh there are 301 drug manufacturing firms. These firms focus on manufacturing generics, branded generics and on performing contract manufacturing. Local players now dominate the market. The top ten firms, all of Bangladeshi ownership, have 70% of the market share (Islam et al., 2022[7]; Wouters, McKee and Luyten, 2020[12]). Foreign Direct Investment (FDI) plays a minimal role. In Bangladesh, FDI stocks and flows are quite small and this is particularly true in the pharmaceutical sector. As of 2022, the country's FDI stock stood at USD 21 billion and the pharmaceutical sector accounted for a only 1.4% of the country's total FDI stock.

In Bangladesh, total value added for pharmaceuticals is USD 1.5 billion and accounts for 0.2% of the worldwide aggregate, comparable to countries like Egypt, Thailand, and Viet Nam, but trailing behind India (4%). In 2020, the industry accounted for 2% of the country's total manufacturing value added (MVA) and

contributing 0.4% to its GDP (Figure 4.8, Panel A). Despite constituting only 0.5% of the manufacturing workforce, pharmaceutical companies offer salaries 2.6 times higher than the average manufacturing job, underscoring the sector's significant economic impact (Bangladesh Bureau of Statistics, 2020[13]). This sector is also one of the fastest-growing industries in the country. From 2015 to 2023, pharmaceuticals have grown, although its growth has been considerably shaped by the COVID-19 pandemic, including the production and manufacturing of coronavirus-related products such as Remdesivir, Favipiravir, Ivermectin, Isopropyl Alcohol, and Hydroxychloroquine. A handful of local companies also engage in contract manufacturing, often targeting foreign markets, including the United States (Rahman et al., 2020[14]).

Figure 4.8. The Bangladesh pharmaceutical industry accounts for 2% of national manufacturing



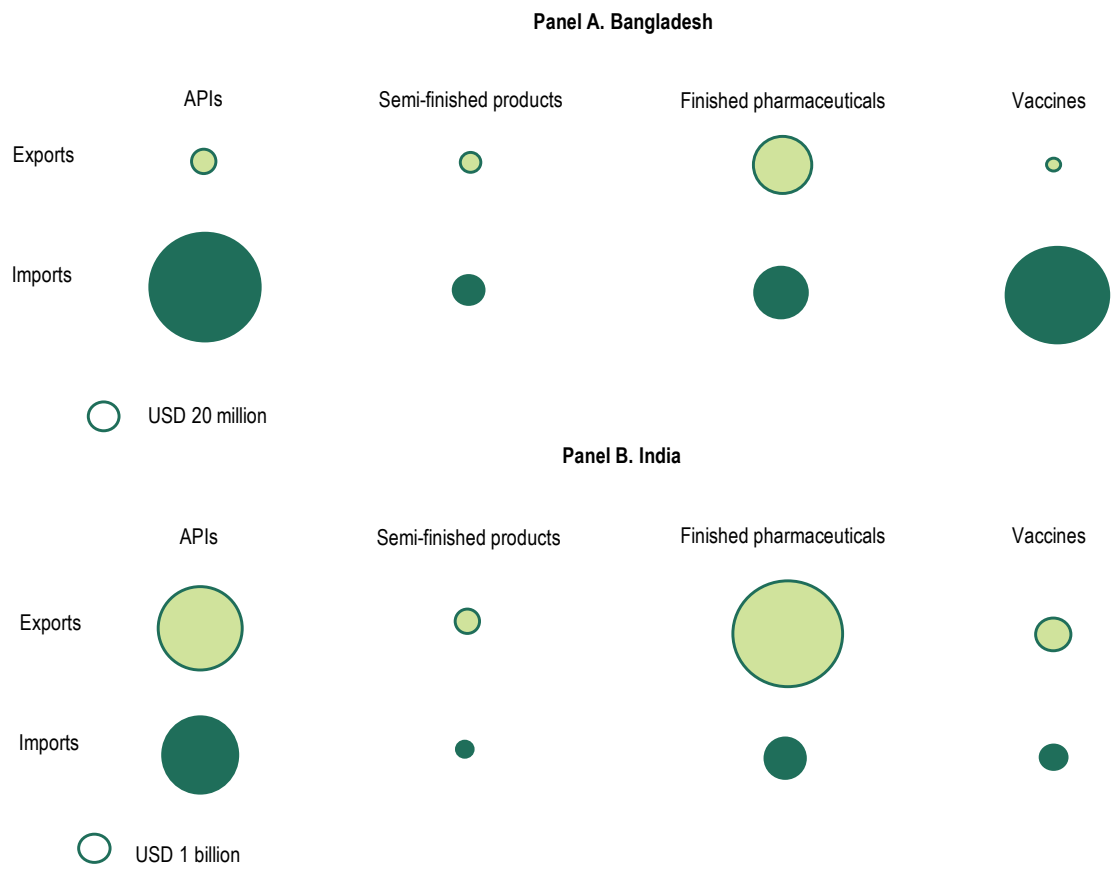
Note: Panel A. Bangladesh 2018. Panel B. Index of Industrial Production (IIP) measures the growth of the volume of industrial production in real terms, free from price fluctuations. Given the temporal nature of estimates, output growth provides the best approximation of value added growth, assuming that the input-output relationship is relatively stable during the observation period.
Source: Authors' elaboration based on UNIDO INDSTAT 4, https://stat.unido.org/ and 2019 Bangladesh Survey of Manufacturing Industries, https://www.bbs.gov.bd/site/page/175a795a-df34-4118-9ed6-1ec769fa03de/Industrial-Statistics.

Despite the progresses, Bangladesh has not yet developed a full-fledged pharmaceutical industry:

- **Pharma in Bangladesh remains domestic oriented and import dependent.** It almost entirely relies on imports of sophisticated raw materials including active pharmaceutical ingredients (API) which nowadays account for 47% of all pharmaceutical imports. In fact, according to estimates, 90% of Bangladesh API demand is met by imports and about 95% of the raw materials, worth about USD 844.5 million were imported in FY 2018-19 (Rahman et al., 2020[14]). The import-dependency of the sector makes it susceptible to current macro-economic challenges, including inflation and growing import costs.
- **Bangladesh's trade structure reflects a relatively simple pharmaceuticals industry.** When compared with India, Bangladesh displays a simpler organisation. India, albeit also specialised in generics, has a bigger, more diversified, export-oriented and R&D intense pharma industry linked to national industrial and healthcare services. India is also a net pharma exporter, with most exports concentrated in finished pharmaceuticals (62%) and APIs (33%). India is also the largest exporter of APIs to Bangladesh (39% of total during 2019-2021), followed by China (38%) and Singapore (4%) (Figure 4.9, Panel B). Moreover, when we look at Bangladesh's domestic final consumption of pharmaceutical products 25% of the value added originates from abroad. In India, where upstream industrial capacities are higher, this share is 8% (Figure 4.10).

Figure 4.9. Trade in pharmaceuticals, by category and flow, Bangladesh and India, 2019-2021

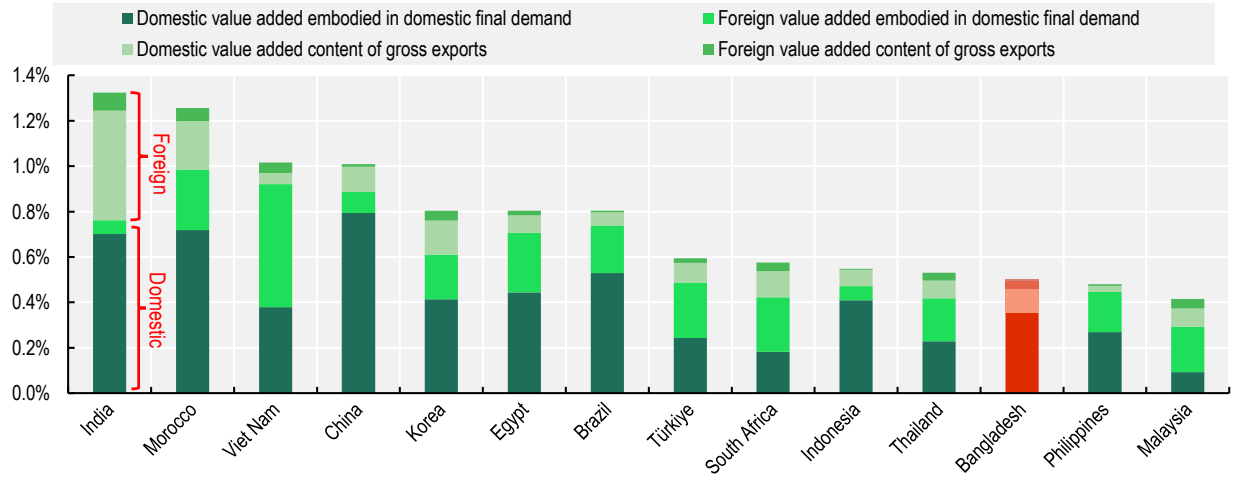
Annual average size of exports or imports during 2019-2021, USD million



Note: Different scales apply to each panel to increase legibility. APIs: Active pharmaceutical ingredients. Data for Bangladesh is mirrored. The categories are based on European Centre for International Political Economy (2020), Key trade data points on the EU-27 pharmaceutical supply chain, https://www.efpia.eu/media/554792/key-trade-data-points-on-the-eu27-pharmaceutical-supply-chain.pdf.
Source: Authors' elaboration based on ITC (2023), trademap (database), https://www.trademap.org.

Figure 4.10. Foreign value added accounts for 25% of the domestic demand in Bangladesh

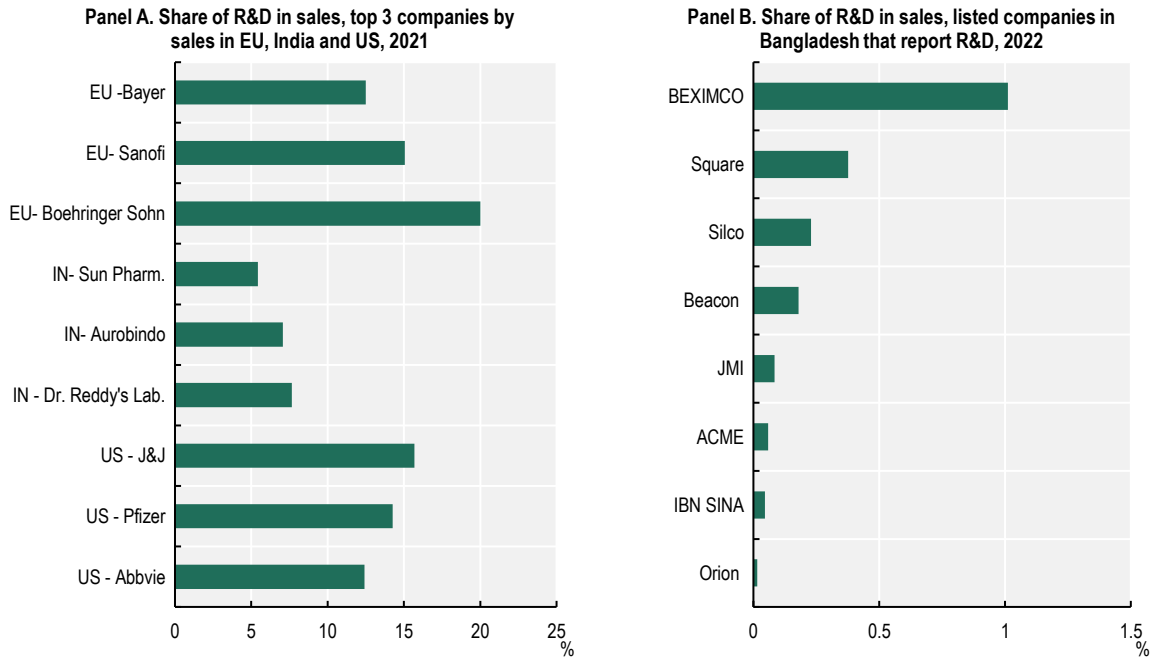
Breakdown of pharmaceuticals domestic demand and exports, as a share of total economy value added, 2018-20



Source: Authors' elaboration based on OECD Trade in Value Added Database (TiVA), 2023, http://oe.cd/tiva.

- **Bangladesh is at an incipient phase in developing manufacturing capacities in more sophisticated pharmaceutical areas**, including vaccines. Despite the progress made during the COVID-19 pandemic, overall vaccines account for 42% of Bangladesh's pharmaceutical imports (Figure 4.9, Panel A).
- **Pharma in Bangladesh invests little in R&D.** Among local pharma conglomerates, Beximco and Square Pharmaceuticals stand out as the top two R&D investing firms in pharma. In 2022, they allocated BDT 350 million (USD 3.5 million) and BDT 210 million (USD 2.1 million) to R&D, equivalent to 1% and 0.4% of their business turnover, respectively (Figure 4.11). While these figures are relatively higher than R&D investments made by other manufacturing firms in Bangladesh, they remain considerably lower than the average investment of 15.7% made by leading pharma companies worldwide (European Commission, 2022[15]).

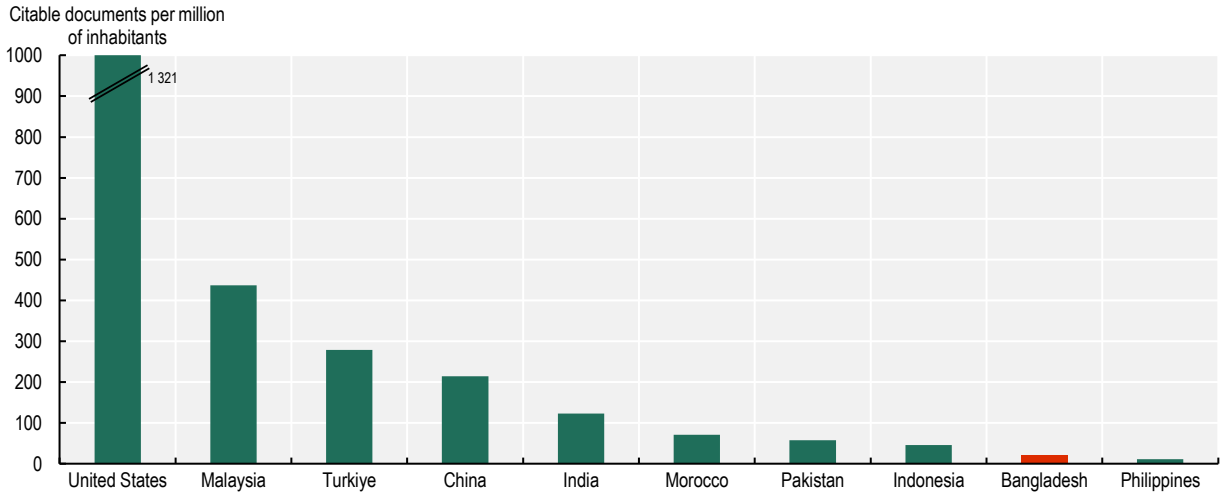
Figure 4.11. Bangladesh's pharmaceutical firms invest little in R&D



Note: Panel A is calculated based on net sales which is defined as sales excluding sales taxes and shares of sales of joint ventures and associates. Panel B is calculated based on gross revenue/sales.
Source: Source: Authors' elaboration based on EU (2022), The 2022 EU Industrial R&D Investment Scoreboard, https://iri.jrc.ec.europa.eu/scoreboard/2022-eu-industrial-rd-investment-scoreboard, and Marketwatch (2023), stock financial statistics (database), https://www.marketwatch.com/investing.

- **Bangladesh science and research base for healthcare could be denser and more effective**. The country counts with 22 academic and research institutions among the world's top 3 000 in pharmaceuticals. However, all of them are universities, except for two which are government affiliated: the International Centre for Diarrhoeal Disease Research and the Bangladesh Council of Scientific and Industrial Research. In other countries, governments host more public institutes and research centres of excellence linked to healthcare and pharmaceuticals, this is true in India, Brazil as well as in the US. The quality of research can also be improved. In Bangladesh citable documents in pharmacology, toxicology, and pharmaceuticals per million people are 22 versus 1 321 in the US and 124 in India (Figure 4.12).

Figure 4.12. Publications in Pharmacology, Toxicology and Pharmaceutics, Bangladesh and selected countries, 1996-2022



Note: Citable documents are the sum over 1996-2022 period. RCA is computed as (Country's publication in Pharmacology/Country's Total publication)/(World's publication in Pharmacology/World's Total publication).
Source: Authors' elaboration based on Scimagojr, https://www.scimagojr.com/.

Table 4.3. Institutions in pharmacology, toxicology and pharmaceutics, Bangladesh

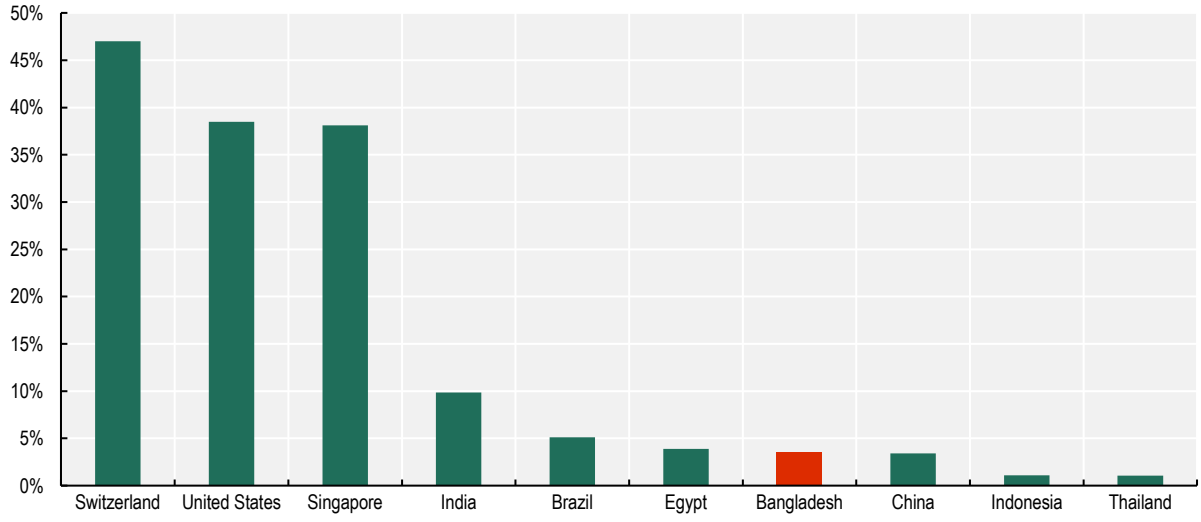
Institution name	Pharmacology, toxicology and pharmaceutics rank	Overall rank	Type
University of Dhaka	2057	4566	University
University of Chittagong	2672	4744	University
International Centre for Diarrheal Disease Research	2677	2892	Health
Southeast University Dhaka	2809	4447	University
Bangladeshi Council of Scientific and Industrial Research	2975	5897	Government

Note: Scimago includes 8 433 institutions, 4 136 of which are ranked in pharmacology, toxicology and pharmaceutics.
Source: Authors' elaboration based on Scimagojr, https://www.scimagojr.com/.

- **There is room to improve compliance with global standards**. Only about 4% of Bangladesh's pharmaceutical establishments adhere to Good Manufacturing Practices (GMP), which sets essential production standards for manufacturers exporting to the EU market. This figure is comparable to Egypt but falls below India's rate of 10% and notably lags behind the two primary EU exporters: Switzerland (47%) and the United States (39%). While the EU may not be the primary target for Bangladesh pharmaceutical exports, adhering to these practices could facilitate access to safe, reliable, and affordable medicines for Least Developed Countries (LDCs) and other developing countries to which Bangladesh could be a provider of safe and affordable drugs (Figure 4.13).

Figure 4.13. GMP certificate, Bangladesh and selected countries, 2023

Share of manufacturing establishments with a GMP certificate, Bangladesh and selected countries, 2023



Note: Certificates for unique organisations and locations have been taken into account.
Source: Authors' elaboration based on EMA (2023), EudraGMDP (database), http://eudragmdp.ema.europa.eu/, UNIDO, DGDA (2023), Allopathic Drug Manufacturers, https://dgda.portal.gov.bd/, SwissStats (2022), Switzerland by numbers, https://www.swissstats.bfs.admin.ch; National Bureau of Statistics of China (2022), China Statistical Yearbook, http://www.stats.gov.cn/sj/ndsj/2022/indexeh.htm.

The pharmaceutical industry in Bangladesh is evolving

Exports remain limited, but are growing

Despite its international vocation, pharmaceuticals remain one of the least export-oriented manufacturing activities in Bangladesh. Pharma accounts for 1% of Bangladesh's exports, however pharmaceutical exports have almost doubled over a decade, from USD 56 million in 2008-09 to USD 105 million in 2018-19, but they've grown at 6%, slower than total exports (9%) due to the rapid expansion of the RMG industry. Data for 2021 shows that Bangladesh exports reached USD 169 million (Export Promotion Bureau, 2023[16]).

About 90% of Bangladesh's exports are finished pharmaceuticals, a category where the country is a slight net exporter. Of the whole value added generated by the pharmaceutical industry in Bangladesh, 7% is exported, setting it apart from countries like Thailand, South Africa, Türkiye, and India, where a larger share of value added comes from export revenues.

Over the last decade, Bangladesh exports have become more concentrated, with the top three export markets accounting for 46% of total exports in 2018-19, up from 27% in 2008-09. Bangladesh pharma is increasingly looking East, with Viet Nam, Myanmar and Philippines being among the top five export destinations together accounting for 44% of total pharma exports. Bangladesh's exports, although small, are playing and could play an important role in providing LDCs with safe and affordable drugs.

Pharmaceutical firms in Bangladesh are increasingly engaging with foreign firms. They are carrying out joint ventures and are starting to invest abroad. Square Pharmaceuticals, Bangladesh's largest company, invested USD 75 million in a new facility near Nairobi, Kenya, to produce 2 billion tablets and 60 million liquid medicine bottles yearly. Half will serve the local market, and the rest will be exported regionally. Beximco, a major conglomerate, was the first Bangladeshi firm listed on London Stock Exchange in 2005.

In 2021, Beximco acquired 54.6% of Sanofi's Bangladeshi subsidiary. In 2017, they partnered with BioCare Manufacturing in Malaysia for a 30-70 joint venture making specialised medical products, like inhalers (Beximco Pharma, 2021[17]; Square Pharmaceuticals, 2022[18]).

Table 4.4. Top five destinations of Bangladeshi pharmaceutical exports

	2008-09			2018-19	
Destination	USD millions	Share of total	Destination	USD millions	Share of total
Austria	6	11%	Viet Nam	21	20%
Brazil	5	9%	Myanmar	14	14%
Germany	4	7%	USA	12	12%
Myanmar	4	7%	Philippines	11	10%
Panama	3	6%	Kenya	6	6%
Total	**23**	**40%**	**Total**	**65**	**62%**

Source: Authors' elaboration based on CEPII BACI data.

The government is engaged in supporting API manufacturing capacities

In its continuous effort to ensure availability, access and affordability of essential drugs and to sustain industrial development and export diversification, the government issued in 2018 the Active Pharmaceutical Ingredients (API) and Reagents Production and Export Policy. This policy aims to reduce the excessive dependency on API imports with a view to reducing drugs prices in Bangladesh and fostering API exports. The policy could reduce import dependence to 80%, attracting USD 1 billion in foreign investment, and increasing the number of domestically produced API molecules (from 41 to 370 over 12 years) (Ministry of Commerce, 2018[19]). API holds promise to support export diversification due to the forecast for growing demand, also coming from Africa and Latin America, where countries are looking to strengthen pharmaceuticals industries after the wake up call of the COVID-19 pandemic.

These policies use traditional trade control tools for imports, manufacturing and exports, similar to the ones in use for manufacturing pharmaceuticals and with specific and often higher preferences accorded to API manufacturing plants. The policy includes preferential financing and tax benefits for API and reagent producers, as well as cash incentives that are contingent upon a certain percentage of usage domestic value-added. Firms manufacturing five or more API molecules per year will continue to pay no tax until 2032 and those with at least three are awarded a 75% exemption until 2032. APIs and reagent imports are duty-free until December 2025 and exempted from advance income taxes until 2024. To encourage API development, firms engaged in their manufacturing receive priority in obtaining land in industrial parks and zones. The API policies also explicitly fosters exports by introducing specific tax incentives and grants to API exporting firms.

The government is investing in setting up an API and Reagents Industrial Park offering priority plot allocation and reduced government administrative procedures in a special economic zone at Munshiganj, 37km from Dhaka. The park, whose facilities have been completed in 2022, faces several operational challenges, including stable and affordable energy supply. The API Park seems a well-conceived initiative which, during the pandemic, underwent a difficult gestation period and which needs to be given time to assess its capacity to succeed.

Investing in R&D, innovation and regulatory upgrades will be key after graduation

The pharmaceutical industry could play a key role in Bangladesh's next development phase. Bangladesh needs to update its economic model to continue succeeding (See Chapters 2 and 3 of this PTPR). To do it, it needs to diversify its export base, develop a strategic network of international partnerships and foster a more innovation and quality based industrial development. It also needs to overcome the duality of its industrial model with an export oriented RMG sector and highly protected industries operating for the domestic market.

The pharmaceutical industry can be a precious ally in the ongoing transformation of Bangladesh's socio-economic structure. Pharma is an industry with major industrial linkages and spillovers, from agrifood to chemicals. It is an industry that operates in international networks, thus requiring a sound local science and research and development base. It is also an industry with major social implications, from its capacity to ensure availability and affordability of drugs to its well-paid direct and indirect jobs. The COVID-19 pandemic has also shown the need for the world to count on more and increasingly geographically dispersed drugs manufacturing capacities and centres of excellence in pharmaceuticals. Availability and affordability of essential drugs remain an unmet goal for over 2 billion people in the world, according to WHO estimates (WHO, 2018[20]). A sound, trustable, innovative and effective pharmaceutical interest in Bangladesh is in the interest of the country, and of the world.

The pharma industry in Bangladesh has made a remarkable journey so far. Bangladesh has worked to safeguard and bolster its domestic pharmaceutical industry, mostly aiming to address access to essential drugs to its population. The country is poised to further develop this industry and make it a driver of innovation, transformation, and new forms of international partnerships in its next development phase. The pharmaceutical industry is in fact a powerful diver of dense and varied innovation and industrial ecosystems.

So far, the policy toolbox used by Bangladesh mostly focused on enabling domestic manufacturing capacities leveraging trade, industrial and intellectual property policies. The policy toolbox included the suspension of pharmaceutical patents, shorter patent protection terms, and the implementation of broad compulsory licensing and patent revocation provisions, suspending or revoking prior medicine registrations, restricting imports, and offering incentives to encourage local production or export by both domestic and foreign companies. More recently, the government has extended direct subsidies, tax incentives, and specialised financing access to entice companies to venture into the sector for active pharmaceutical ingredients (APIs) and reagents, key components for medicine production.

Going forward, an update of business mindset and of policy approach will be needed. The accomplishments of the industry relied on a combination of targeted domestic policies and a supportive international framework that allowed Bangladesh to substantially diverge from WTO rules on trade and intellectual property. In the context of the WTO, LDCs benefit from temporary pharmaceutical patent protection exemptions until January 1, 2033, as outlined in the TRIPS Council decision of 6 November 2015. LDC are empowered also to enact import restrictions, adjust tariff rates, strategically support exports, and suspend pharmaceutical patents, thereby deploying policies to cultivate and diversify their economies, shielding them from global competition temporarily (UNDESA, 2020[11]).

LDC graduation will affect Bangladesh's flexibility to continue nurturing industrial capacities and poses questions on the compliance of specific policies adopted with the regime applicable to other (i.e. non-LDC) developing countries (Table 4.5). In practice, graduation might entail the withdrawal of these exemptions as of 2026, depending on the outcomes of ongoing negotiations to potentially extend the TRIPS waiver beyond Bangladesh's graduation date, so to match the deadline set for all LDCs in 2033. The outcomes of these negotiations are quite significant for the industry and for the country. If the extension will not be granted, as of 2026 Bangladesh will have to process and grant 1 190 patent applications from 2006-14

through the mailbox mechanism.[1] If the waiver period will be granted until 2033 the patents obtained up to 2013 will no longer have any remaining patent duration, consequently, the country will only need to grant patents for applications filed in 2014, and even then, these patents will only be valid for a single year (Islam and Rizwan Apurbo, 2023[21]). Faced with these prospective challenges, Bangladesh must navigate this transition prudently.

Table 4.5. Compliance of Bangladesh health, industrial and investment policies with the WTO regime for developing countries other than LDCs

Bangladesh Health, Industrial and IP Policies	WTO Compliant
Strategic cancellation or suspension of medicine registration/licensing	No.
Import bans on strategic products	No.
Local manufacturing and joint venture requirements (1982)	Yes.
Administrative rules providing government review of licensing agreements, supervision by local personnel, and strict enforcement of unlicensed imports (1982)	Possible
Export performance requirements for foreign manufacturers	No.
Government use licensing carve-out for emergencies (2016)	Possible
Required donations to local research and development organisations/institutions (or tax benefits contingent on those donations) (2016, 2018)	Yes
Tax benefits and cash incentives contingent on domestic value added (2018)	Possible
Access to preferred finance for API and reagent producers	Yes, but challengeable
Removal of red tape for API and Reagent producers	Yes, but challengeable
Priority plot allocation in special economic zones for API and reagent producers	Yes, but challengeable
Suspended pharmaceutical patents	No
Non-specific exclusionary rights for patent holders	No
Shortened patent term	No
Compulsory licensing rules	Possible
Patent revocation rules; “working” requirement (4 years)	Possible

Source: Adapted from (Rahman et al., 2020[14]).

Regardless of the outcomes of the ongoing negotiations, the country needs to prepare and update its policy framework and make it more innovation oriented, and globally compliant. The country is already adapting national regulations and laws to align with international agreements and to strengthen institutional capacities in intellectual property and innovation management. For instance, in 2022, Bangladesh approved a new Patent Act to replace the prior version signed back in 1911 (Box 4.3). Gradual adaptations, including improved scientific and innovation capabilities, and legislative reforms are pivotal for a balanced and sustainable transition. Bangladesh needs to continue advance in improving its national quality infrastructure system (see Chapter 3). This is key to ensure traceability, safety and standards compliance. All essential attributes of competitiveness in an industry that is heavily regulated.

Box 4.3. Enhancing intellectual property regulation in Bangladesh: The Bangladesh Patents Act, 2022

Against the backdrop of Bangladesh's impending transition from a Least Developed Country (LDC) to a Developing Country status by 2026, aligning its patent law with the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) has gained paramount importance. Bangladesh's membership in the TRIPS framework has provided certain concessions, including an extended transition period until 2034 for TRIPS compliance. To ensure a seamless transition amidst challenges posed by the pandemic, the graduation timeline was extended to 2026. In response to these dynamics, the enactment of the Bangladesh Patents Act, 2022 (BPA 2022), has played a pivotal role, acting as a catalyst for comprehensive analysis.

The BPA 2022 introduces significant advancements that address critical aspects, which were absent in the previous 1911 Act. The new legislation bridges gaps to align with TRIPS principles and the Paris Agreement, while concurrently acknowledging the dual significance of fostering innovation and safeguarding public interests. Key innovations encompass:

- Definition of Patentable Invention: In alignment with TRIPS, the BPA 2022 embraces patent protection for novel, inventive, and industrially applicable products and processes.
- Provision against Evergreening: Analogous to the Indian Patents Act, the BPA 2022 prevents patent protection for known substances in new forms lacking developmental significance. This serves as a barrier against "evergreening," a practice pursuing additional patents for minor variations to existing products.
- Excluded Subject Matters: Reflecting both TRIPS and domestic priorities, the BPA 2022 enumerates excluded subject matters, encompassing discoveries, scientific theories, business methods, and more.
- Priority Rights: Granting priority rights to patent applicants mirrors TRIPS and leverages international experiences. This adherence to the Paris Convention and WTO member state principles enhances consistency and international co-operation.
- Compulsory Licensing: The BPA 2022 encompasses provisions for compulsory licensing based on public interest, national security, and anti-competitive behaviour. This echoes Article 31 of TRIPS exemptions. However, specific criteria for compulsory licenses during emergencies are lacking. Including explicit guidelines, akin to international practices, would enhance clarity and effectiveness.

While the BPA 2022 represents a step forward, some challenges persist. Addressing the 'mailbox issue' demands careful attention to prevent unforeseen disputes. Categorising mailbox patents by filing date and judiciously granting or denying patents could yield a balanced resolution. Incorporating the 'Bolar exception,' as employed in India, could support local generic producers as patents approach exhaustion. Embedding clear local working requirements would ensure intended benefits for the domestic economy. Equally, providing explicit guidelines for remuneration determination in compulsory licensing, informed by international benchmarks, would ensure fair compensation for all stakeholders. The BPA 2022's promising introduction of utility models could be optimised through precise definitions and criteria. International experiences, notably those from India, Brazil, and Viet Nam, offer invaluable insights, allowing Bangladesh to craft a cohesive and forward-looking intellectual property regime that bolsters its aspirations on the global stage.

Source: (Islam and Rizwan Apurbo, 2023[21]).

The pharmaceutical industry has grown into a small and consolidated industrial sector that can and should take up responsibilities in operating in a global business environment. It should be a key player in the domestic and global innovation ecosystem in addition to continue engaging in effectively serving the domestic market. The private sector should step-up to comply with international standards and should invest to explore new development areas, including exploring partnerships to serve essential drugs needs in LDCs and other poor countries in need. The industry should also engage more in prospective studies to identify future options and to meaningfully propose partnerships with local research centres. For example, by 2027 there is an expected patent cliff of estimated value of USD 190 billion which could open up opportunities also linked to biosimilars. Biosimilars are similar to approved reference biological products, offering affordable alternatives to costly biologic drugs, which can improve patient access to effective treatments (IQVIA, 2023[22]). Key to advancing in this field is progress on standards, regulations and investment in research and development.

The government and the private sector should continue to engage in a constructive dialogue and achieve a shared commitment to prioritise innovation in the future.

- The government should persist in its effort to modernise its policy approach in order to encourage innovation. The current policies and tools do not sufficiently foster a conducive environment for innovators yet. Bangladesh should leverage its digitalisation efforts and advancements and identify ways in which Smart Bangladesh could support transforming the pharmaceutical industry. While automation and digitalisation of production processes have been common features of pharma manufacturing for a long time, pharma and related healthcare technologies and services are increasingly exploring the use of digital technologies including artificial intelligence (AI). This extends to drug discovery; Bangladesh should be updating its policies to enable the country to explore this frontier.
- The private sector should step up its investments in R&D and innovation. The limited inclination towards R&D of the pharmaceutical industry is striking in contrast with global pharmaceutical business that operates in connection with the science and research base more deeply. This inclination also reflects the overall incentives, which despite the changes since 1982, have never been reformed with innovation as a core objective. Bangladesh big domestic pharma should step up in their innovation efforts and could play a more active role in fostering the development of a local innovation ecosystem. It could also benefit from the growing start-up scene in the country, while generating linkages with public health hospitals and research institutes. Also, international scientific co-operation mechanisms are available for further expand and strengthen the knowledge base of the country. For example, some low- to middle-income countries including Bangladesh are eligible for funding within the framework of the EU's funding programme for research and innovation such as Horizon Europe (European Parliament, 2021[23])

If transformed and upgraded, this industry could have a major potential in supporting Bangladesh's transition towards innovation-driven growth. In addition to shifting business mindsets and updating its policy frameworks, Bangladesh will need to develop strategic partnerships to ensure a smooth and sustainable transition of the healthcare system. International partnerships will be key in both bringing Bangladesh's healthcare system to the next level so to ensure it delivers the services all patients need.

Conclusion

Bangladesh has made commendable efforts to grow into a respected international business partner and develop an industrial base over a short span of time. This chapter focused on two peculiar industries in Bangladesh which show both the advancements and the limitations of the domestic industrial base. Bangladesh remains anchored to an export-led growth model that relies on extremely competitive labour costs and a highly flexible business model capable of swiftly processing international orders. However, the

country has also been capable of accumulating business know-how in more high-tech industries. Bangladesh has an incipient but burgeoning electronics industry, of which 83% of the total output is marketed locally. Also, its pharmaceutical industry is focused on manufacturing generic drugs that meets 98% of the young nation's basic pharmaceutical needs. These industries are both domestic oriented and depend on importing key raw materials, sophisticated machinery and energy, making them highly vulnerable to external factors.

Although exports, value added and employment are limited they have the potential to grow and play a key role in the country's next phase of development based on two factors: innovation and inclusiveness. To advance Bangladesh needs to address the weaknesses in the policy framework and the business mindset. Policies will need to be updated considering the ongoing graduation taking effect in 2026 and will need to shift from focusing on market access negotiations and tariff management to more modern policy tools. Businesses will also need to step up and invest more in innovation and research and development. Three issues stand out in going forward: innovation, compliance with international processes and standards of quality and safety and renewed international business-oriented partnerships.

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Note

[1] Since 2015, Bangladesh, like other LDCs, has been relieved of the obligation to grant patents for pharmaceuticals and is not required to implement the mailbox mechanism, as per the TRIPS Council decision of 2015. This means that the country is no longer bound to process or grant pharmaceutical patent applications through the mailbox. However, this decision applies specifically to mailbox applications submitted after 2014. For more information see Extension of the transition period under article 66.1 of the TRIPS agreement for least developed country members for certain obligations with respect to pharmaceutical products IP/C/73.

OECD Development Pathways

Production Transformation Policy Review of Bangladesh

INVESTING IN THE FUTURE OF A TRADING NATION

Half a century after independence, Bangladesh has achieved impressive progress. The country has transformed from one of the poorest nations into a global textile manufacturing hub capable of meeting its medical needs almost entirely through domestic pharmaceutical production. The country will graduate from the least developed country (LDC) category in 2026 and aspires to be a high-income nation through industrialisation by 2041. Meeting this challenge requires accelerating economic transformation through diversification and innovation. This *Production Transformation Policy Review (PTPR)*, implemented with the support and collaboration of the European Union (EU), and in partnership with the UN Conference on Trade and Development (UNCTAD), identifies concrete options for supporting Bangladesh's development. It calls for leveraging digitalisation to address persistent fragilities and it advocates for a new pact based on shared responsibilities between the national government, the private sector and international partners to shift to a new development phase and ensure sustainable, smooth and irreversible graduation.

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