



United Nations Conference on Trade and Development

Distr.: General
29 September 2025

Original: English

Trade and Development Board
Trade and Development Commission
Multi-year Expert Meeting on Commodities and Development
Sixteenth session
Geneva, 9–10 December 2025
Item 4 of the provisional agenda

Strategic diversification for commodity-dependent developing countries

Note by the UNCTAD secretariat

Summary

Diversification can help reduce the vulnerabilities faced in commodity-dependent developing countries. Using the right policy mix within a public and private sector complementary framework, countries can transition from a reliance on raw commodity exports to including more value added production. Such a transformation has the potential to enhance economic resilience, generate more well-paid and good-quality formal jobs and foster the adoption of technological capabilities. Aligning diversification strategies with global trends, such as with regard to the use of renewable energy to reduce carbon emissions, digitalization and circular economy principles, has the potential to further strengthen a transformational path. Insights are offered in this note into how policies to support diversification can help transform natural-resource abundance into a driver for sustainable and inclusive development.



Introduction

1. The critical role of economic diversification in resource-rich developing countries, particularly those heavily dependent on commodities, is explored in this note, including a proposed multidimensional policy approach aimed at fostering private-sector-led productive and export diversification, as well as value addition. The focus is on identifying policy pathways that can support the development and trade of new products that build upon existing productive capacities, while also enhancing value addition for raw materials. The processing of commodities remains essential and value added exports are key in achieving the Sustainable Development Goals, yet significant diversification opportunities exist in adjacent or entirely different sectors, including manufacturing, services and renewable energy, that is, sectors that leverage similar skills, infrastructure and technology-related capabilities.

I. Vulnerabilities related to commodity dependence

2. Commodity dependence is widespread across developing countries. In 2021–2023, commodities accounted for 32.7 per cent of global goods exports. Ninety-five countries, over two thirds of developing countries, are classified as commodity dependent, defined as deriving 60 per cent or more of merchandise export revenues from primary commodities, that is, the economy of the country relies on the export of a narrow set of primary commodities.¹ Commodity dependence is often accompanied by limited industrial productive capacity and low levels of technological development. The work of UNCTAD has shown the persistence of commodity dependence and there are many national examples; for example, Nigeria and Zambia have been dependent on oil and copper exports, respectively, for nearly six decades; petroleum oils accounted for 76.7 per cent of the exports of Nigeria in 2021–2023 and copper represented 64.3 per cent of the exports of Zambia.²

3. Commodity-dependent economies are exposed to boom-and-bust cycles in commodity markets that are largely beyond their control, along with high commodity price volatility resulting from diverse supply- or demand-side shocks that may disrupt macroeconomic management and undermine government revenues and long-term planning. Such instability has the potential to affect fiscal balances, debt sustainability and infrastructure development, ultimately reinforcing commodity dependence. When commodity prices rise, there is an expectation that commodity-related revenues will remain high, and Governments may take on more debt to finance infrastructure projects, social programmes or other development initiatives; this could contribute to a significant rise in government expenditures, which then results in increased debt. However, if commodity prices decline, the resulting debt burden could become unsustainable. Debt distress may lead to reduced access to international financial markets, decreased investment and reduced government spending in critical areas such as health and education. For example, in the 1980s, many developing countries experienced debt distress following a decline in commodity prices, which led to a sharp increase in debt-to-gross domestic product ratios.³ This debt crisis led to a lost decade of economic growth and development in many low-income countries. For example, in 2014–2016, a decrease in oil prices led to an increase in public debt in several oil-exporting countries, such as Nigeria.⁴

¹ UNCTAD, 2025, *The State of Commodity Dependence 2025* (United Nations publication, Sales No. E.25.II.D.33, Geneva).

² UNCTAD, 2025. See various editions of *Commodities and Development Report* and UNCTAD, 2019, *Commodity Dependence: A Twenty-Year Perspective* (United Nations publication, Sales No. E.19.II.D.16, Geneva).

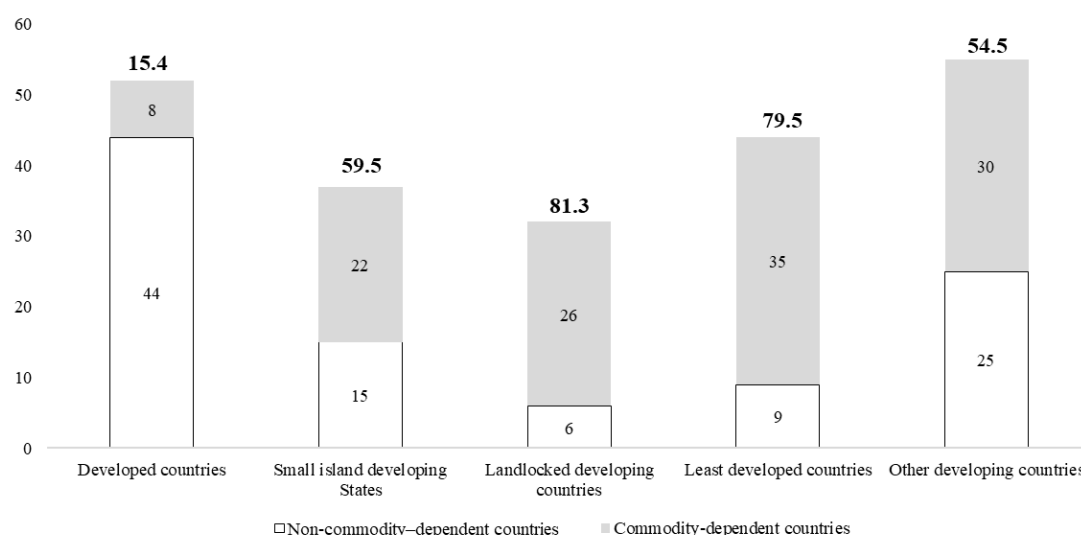
³ Fischer S, 1988, Economic development and the debt crisis, Policy research working paper No. 17, World Bank.

⁴ See <https://thedocs.worldbank.org/en/doc/910311512412250749-0050022017/original/GlobalEconomicProspectsJan2018TopicalIssueoilpricecollapse.pdf>.

4. Commodity dependence is particularly significant among landlocked developing countries, the least developed countries and small island developing States (figure 1). Of the 32 countries with the lowest Human Development Index scores, 29 are commodity dependent, underscoring the close link between commodity dependence and development constraints.⁵

Figure 1

Commodity dependence prevalent in developing countries: Number of commodity-dependent countries, by development grouping



Source: UNCTAD secretariat calculations, based on data from the UNCTADstat database, 2021–2023.

Note: The figure above each column indicates the share (percentage) of commodity-dependent countries in each grouping.

5. Different factors contribute to the persistence of commodity dependence, including the following:

(a) Dual economies. Commodity sectors often evolve separately from the broader domestic economy; linked to international markets, such sectors attract substantial foreign investment, particularly during commodity booms, into infrastructure, while much of the rest of the economy remains underdeveloped. Growth in the commodity sector does not automatically spread across the entire economy for many possible reasons, such as bottlenecks in the availability of complementary infrastructure such as energy and transport, use of modern production methods and others.⁶ In addition, large inflows of foreign currency due to commodity exports can lead to exchange rate appreciation, undermining the competitiveness of other tradable sectors (a phenomenon commonly known as Dutch disease). This further deepens the structural divide between the commodity sector and the rest of economy.⁷ As the resource sector thrives, labour and investment shift away from manufacturing, weakening the sector over time, a dynamic that reinforces increasing commodity dependence, and there are difficulties in maintaining the share of non-commodity sectors in the economy;

⁵ UNCTAD, 2023, *Commodities and Development Report 2023: Inclusive Diversification and Energy Transition* (United Nations publication, sales No. E.23.II.D.9, Geneva).

⁶ There is extensive literature on sectorial heterogeneity and resource misallocation in developing countries and the relationship with economic growth; for example, see Gollin D, 2014, The Lewis model: A 60-year retrospective, *Journal of Economic Perspectives*, 28(3):71–88.

⁷ UNCTAD, 2021, *Commodities and Development Report 2021: Escaping from the Commodity Dependence Trap through Technology and Innovation* (United Nations publication, Sales No. E.21.II.D.14, Geneva).

(b) Technological exclusion. Commodity dependence typically goes together with lower levels of technological capability and underdeveloped productive capacities in both manufactured goods and services; countries overreliant on the extraction of primary commodities may miss out on learning and adapting to new technologies, falling further behind as the global economy evolves. Commodity dependence, if associated with underdeveloped productive capacities in goods and services, can result in insufficient productivity growth across the economy;⁸

(c) Falling behind in value addition. Primary goods often generate low and unstable income, as their prices are volatile and several, such as base metals and fossil fuels, allow little capacity for vertical differentiation;

(d) Lack of local economic linkages. Economies dominated by commodity exports often have weak connections between different sectors; without dense local linkages, such as those among suppliers, specialized services and support industries, it becomes difficult for new sectors to emerge naturally and economic activity remains narrow and vulnerable;⁹

(e) Lack of strong governance frameworks. Weak governance frameworks, limited policy coordination and inadequate long-term planning often prevent Governments from effectively promoting economic diversification. In many cases, public revenues from commodities are not strategically reinvested into productive sectors, infrastructure or human capital. In addition, political economy dynamics, such as rent-seeking behaviour and vested interests in the commodity sector, can obstruct reform efforts and entrench reliance on primary exports.¹⁰ Insufficient national investment is one of several channels through which commodity dependence can hinder development.¹¹ The volatility of national income in commodity-dependent developing countries can make aggregate investment procyclical and, therefore, volatile. A negative commodity price shock can reduce the expected profitability of investment in the commodity sector and also limit the availability of domestic savings to finance investment in non-commodity sectors and in the provision of essential public services, as well as social and welfare programmes.

II. Towards diversification

6. Diversification is key in advancing inclusive, resilient and sustainable economic development in developing countries. Economic diversification, that is, the expansion of the productive and export base of a country into more products and sectors, is essential in addressing commodity dependence. However, not all forms of diversification contribute to long-term development. For example, diversification into low-value or volatile commodities may offer short-term gains but fail to foster structural transformation or the building of resilience; this can entrench existing limitations rather than help overcome them. Diversification should be a process aimed at achieving structural transformation, technological upgrading and social and environmental objectives; as part of the process of structural transformation, diversification requires technological upgrading and the respect for social and environmental objectives to be sustainable.

⁸ Ibid.

⁹ See Hausmann R, Hidalgo CA, Bustos S, Coscia M, Simoes A and Yildirim MA, 2013, *The Atlas of Economic Complexity: Mapping Paths to Prosperity* (Massachusetts Institute of Technology and Centre for International Development, Harvard University, United States of America).

¹⁰ UNCTAD, 2024, *Trade and Development Report 2024: Rethinking Development in the Age of Discontent* (United Nations publication, Sales No. E.24.II.D.23, Geneva).

¹¹ TD/B/C.I/MEM.2/42.

7. In commodity-dependent developing countries, particularly those dealing with high-debt burdens, significant infrastructure and capacity gaps, as well as heightened vulnerability such as that experienced in landlocked developing countries, the least developed countries and small island developing States, a multidimensional policy approach is essential in order to foster sustainable structural transformation. These countries face complex and interlinked challenges that cannot be addressed through isolated interventions alone. Policies simultaneously need to promote macroeconomic stability; build institutional and human capacities; support investment into infrastructure, including transport and energy in particular; and support innovation and entrepreneurship. Balancing short-term needs such as debt management and social protection with long-term goals such as economic diversification and climate resilience requires persistent and coordinated efforts across the public and private sectors.

8. Trade is a critical enabler within such a multidimensional framework. It provides firms in developing countries with access to larger markets and increased access to technologies, for example through the import of capital goods and interfirm and intrafirm exchanges resulting from greater integration into global value chains, which can accelerate diversification and value addition. In landlocked developing countries and small island developing States, integrating into regional and global value chains can also help overcome geography-related constraints. Targeted trade policies within the multilateral trading framework can support the development of new industries. Trade facilitation, standard compliance and export promotion activities, including fostering integration into global value chains, can serve as important policy tools.

9. International cooperation can also play an important role in supporting diversification and value addition, for example, through trade-related capacity-building and technical assistance that can help commodity-dependent developing countries meet economic, environmental and social sustainability goals, ensuring that diversification efforts contribute to broader development objectives.

A. The rationale for multidimensional policy support for diversification

10. Diversification is usually not a neutral or random process; it is path-dependent and what a country currently produces largely determines what it will be able to produce in future.¹² This is because productive capabilities, including those related to institutions, physical infrastructure, skills, supply chains and technical knowledge, are cumulative and product-specific. New products are more likely to emerge from existing capabilities than from sectors without prior activity. A growing body of empirical work shows that countries and regions tend to diversify into products or industries closely related to the current productive structure, because they share similar or complementary capabilities already in place.¹³ Empirical evidence shows that related diversification is often the most common pathway for economic upgrading, since it leverages existing capabilities and minimizes entry barriers into new sectors.¹⁴ Studies show that regions and countries diversifying into products related to current specializations tend to achieve greater productivity growth, improved competitiveness and greater resilience to external shocks.¹⁵ However, the direction of diversification matters; economic development is typically associated with diversification into more complex and knowledge-intensive products, yet there is no automatic mechanism to guarantee that such upgrading will occur or that new production

¹² See <https://growthlab.hks.harvard.edu/publications/product-space-conditions-development-nations> and <https://growthlab.hks.harvard.edu/publications/what-you-export-matters>.

¹³ Neffke F, Henning M and Boschma R, 2011, How do regions diversify over time? Industry relatedness and the development of new growth paths in regions, *Economic Geography*, 87(3):237–265.

¹⁴ Hausmann R and Rodrik D, 2003, Economic development as self-discovery, *Journal of Development Economics*, 72(2):603–633; see <https://research.cbs.dk/en/publications/the-principle-of-relatedness>.

¹⁵ Hartmann D, Zagato L, Gala P and Pinheiro FL, 2021, Why did some countries catch up, while others got stuck in the middle? Stages of productive sophistication and smart industrial policies, *Structural Change and Economic Dynamics*, 58:1–13.

will be associated with social, economic and environmental benefits. The following four elements are critical:

(a) Achieving a suitable balance of horizontal and vertical policies, according to local conditions, is critical for effective diversification and value addition in commodity-dependent developing countries. Horizontal policies, such as reducing the infrastructure gap in the wider economy, beyond natural resource exporting sectors, and building human capital, can help create the basis for productivity and competitiveness improvements across all sectors. Vertical policies can help address coordination issues and market failures in areas or sectors that hinder sectoral development, value addition and export competitiveness. The close alignment of both is necessary to avoid costly resource misallocations in commodity-dependent developing countries, in particular the least developed countries. Trade plays a key role in both horizontal and vertical strategies, enabling access to inputs, markets and know-how that can reinforce the effectiveness of both strategy areas;

(b) Not all related products are equally valuable in future diversification. Some products are located in sparse areas of the product space, in which linkages to other sectors are weak, and diversification into such products may generate short-term gains but offers less potential for future structural transformation; in contrast, diversification into dense areas of the product space, in which there are many nearby opportunities, can catalyse further diversification and support the emergence of dynamic industrial ecosystems.¹⁶ Public policy supporting diversification should balance both;

(c) The types of products into which an economy diversifies have significant implications with regard to inequality.¹⁷ Evidence shows that diversification can in some instances increase inequality, particularly if it leads to capital-intensive or enclave sectors.¹⁸ To support inclusive development, diversification into sectors that create decent jobs, particularly for women, youth and vulnerable populations, is desirable. Sectors that can contribute the most to reducing inequality through productive and export diversification include labour-intensive manufacturing, services with high employment multipliers and industries that offer higher labour remuneration due to greater productivity and value addition;

(d) The environmental sustainability of diversification needs to be considered. Relatedness does not inherently lead to greener production.¹⁹ Countries may be drawn into sectors that are environmentally harmful, particularly if those sectors offer quick returns or strong external demand. Policy efforts in support of diversification should therefore align with broader sustainability goals, aligning investment-incentive production towards low-carbon, resource-efficient and environmentally sound activities. In a world increasingly shaped by climate-related constraints, such an alignment is not only desirable but essential in ensuring long-term competitiveness and global integration.

11. Diversification tends to follow the path of least resistance, driven by existing capabilities and market incentives, yet a multidimensional policy framework in support of sustainable diversification and value addition is needed in order to ensure that it contributes to structural transformation, environmental sustainability and social inclusion. Without such guidance, countries might diversify, but not in ways that support development.

¹⁶ Ibid. The product space is a network representation of the global economy that maps how products are related to each other based on the capabilities required to produce them; products that require similar sets of capabilities are located close to each other in the space and those that require different capabilities are further apart.

¹⁷ Hartmann D and Pinheiro FL, 2025, Economic complexity and inequality at the national and regional levels, in Chen P, Elsner W and Pyka A, eds., *Routledge International Handbook of Complexity Economics* (Routledge, Abingdon, United Kingdom of Great Britain and Northern Ireland):551–566.

¹⁸ Dominguez S and Nkurunziza JD, 2024, Economic diversification: Its relationship with inequality and ensuing policy options, Working paper No. 1, UNCTAD.

¹⁹ Caldarola B, Mazzilli D, Napolitano L, Patelli A and Sbardella A, 2024, Economic complexity and the sustainability transition: A review of data, methods and literature, *Journal of Physics: Complexity*, 5(2).

B. Diversification pathways

12. Diversification policy frameworks need to be tailored to national and subnational contexts, considering the resource base, existing industrial capabilities, infrastructure and institutional readiness.²⁰ Broadly, countries can diversify through the following three interconnected pathways: vertical integration into upstream and downstream stages of existing value chains; horizontal expansion into sectors related to current strengths; and diversification into unrelated but dynamic sectors that offer a long-term development potential. Vertical integration includes activities such as the processing of raw minerals into refined materials or transforming agricultural outputs into processed food exports. Horizontal diversification leverages related capabilities, for example, logistics firms may branch into cold-chain services and fisheries may develop packaging and export operations. Unrelated diversification is aimed at building new industrial capabilities, often in high-value sectors such as pharmaceuticals, chemicals, electrical equipment and digital services.

13. The optimal mix of related and unrelated diversification depends on the characteristics and position of each economy and sector. Economies with production and exports concentrated in low-complexity products may need to invest in targeted unrelated activities, to access higher-value opportunities; more advanced economies may prioritize related activities, to deepen existing capabilities.²¹ This underscores the need for a nuanced, context-specific approach to selecting policies that can strengthen different diversification pathways. Successful productive and export diversification entails the development of sectors that involve higher than country-average complexity, higher value added, economic feasibility through genuine competitiveness, environmental sustainability and strong potential for job creation, while expanding the technological base of the economy.

C. Tools and policy instruments

14. Achieving diversification requires a coherent policy mix that supports structural transformation across multiple dimensions, which involves enabling horizontal policies and suitable vertical policies, tailored to particular contexts.²²

15. Horizontal policies are essential in addressing economy-wide constraints that hinder diversification. Strengthening macroeconomic stability throughout the commodity cycle is particularly important, given the multiple challenges faced in many commodity-dependent developing countries, including high levels of indebtedness, shallow tax bases and an overreliance on revenues from natural resource exports. Enhancing infrastructure, particularly in energy, transport and digital connectivity, is a key enabler of diversification. Equally important is improving access to finance, by both expanding access to formal credit and developing domestic or regional capital markets that allow firms in commodity-dependent developing countries to secure financing in local currency.

16. The adoption of suitable vertical policies, when carefully designed, can also contribute to technological upgrading, value chain development and productive capacity-building. Transparent public procurement policies and suitable local content regulations can strengthen the domestic industry while creating linkages with foreign investors. In addition, special economic zones and industrial parks can provide platforms for experimentation and the scaling of new sectors.

²⁰ TD/B/70/3.

²¹ Boschma R, 2025, Designing smart specialization policy: Relatedness, unrelatedness or what? in Andersson M, Karlsson C and Wixe S, eds., *The Oxford Handbook of Spatial Diversity and Business Economics* (Oxford University Press, United Kingdom):59–79.

²² TD/B/C.I/MEM.2/42.

17. Tools such as economic complexity analysis, input-output mapping and feasibility diagnostics, among others, can provide complementary perspectives, to inform decisions on structural transformation. Economic complexity analysis can help in identifying sectors in which countries are best positioned to diversify, based on existing capabilities and latent comparative advantages. However, its effectiveness may be limited in contexts where data collection is challenging, among other constraints.²³ Input-output mapping offers a granular view of linkages across sectors, enabling policymakers to trace upstream and downstream dependencies and assess how strategic interventions in one industry might generate spillover and demand in others. Feasibility diagnostics focus on the institutional, financial and infrastructural conditions required to take advantage of industrial opportunities, helping to distinguish between sectors that are theoretically competitive and those that are practically implementable. Both input-output mapping and feasibility diagnostics are limited by a reliance on static assumptions and may fail to capture the dynamic evolution of market forces and technological innovation, which can influence the long-term viability of sectors.²⁴

18. Institutional coordination is critical. Effective diversification strategies depend on collaboration among different public-sector stakeholders, including ministries of trade, industry, finance and education, as well as engagement with the private sector, academia and civil society. International cooperation can support processes through financing, knowledge-sharing and regional integration. Diversification does not merely involve changing what countries produce, but also involves transforming how economies function, building resilience, enhancing inclusion and enabling sustainable development.²⁵

III. Insights from the practical application of industrial policy frameworks

19. Industrial policy has become an essential instrument in structural transformation, particularly in economies seeking to diversify exports, build resilience and move up value chains. Practical experiences in Costa Rica, Indonesia and Viet Nam serve to illustrate how tailored combinations of horizontal and vertical policy approaches can effectively drive economic diversification and industrial upgrading. Costa Rica transitioned from a reliance on traditional agricultural exports to a diversified economy centred on high-value manufacturing, information and communications technology services and ecotourism, a shift supported by targeted policies to attract foreign direct investment. In Indonesia, the vertically focused strategy in the nickel sector shows how targeted industrial policy can unlock domestic value addition and attract foreign investment, particularly through downstream processing and technology transfer. In Viet Nam, the transformation was anchored in manufacturing-led horizontal diversification, driven by reforms, infrastructure development and integration into global trade networks. These examples offer lessons on aligning industrial policy frameworks with national development objectives, leveraging comparative advantages and responding to global market dynamics.

²³ See <https://growthlab.hks.harvard.edu/publications/economic-complexity-namibia-roadmap-productive-diversification>.

²⁴ Kowalewski J, 2009, Methodology of the input-output analysis, available at <https://www.econstor.eu/handle/10419/48249>.

²⁵ TD/B/C.I/MEM.2/53.

A. Costa Rica: From commodities to advanced manufacturing

20. Costa Rica provides an example of horizontal diversification, shifting exports away from coffee and bananas towards high-value manufacturing, information and communications technology services and ecotourism. This transformation began in 1986 with the move away from an import-substitution industrialization model and the adoption of policies promoting export diversification, yielding significant results one decade later. In 1993, Costa Rica was the world's second-largest exporter of bananas and, in 1992, the fifth-largest exporter of coffee, accounting for approximately 20 per cent of global banana exports and 4 per cent of global coffee exports.²⁶ By 1998, manufactured goods had surpassed commodities in merchandise export share. Despite an increase in commodity exports in 2015, the share of manufactured goods has continued to increase, although at a more modest pace. The gap between merchandise and service exports has narrowed since 2000, with services nearly equalling merchandise exports by 2019 (figure 2). The pandemic briefly disrupted the upward trend in the share of services in 2020 and 2021 but the share showed signs of recovery in 2022 and 2023. The Costa Rica diversification strategy has been supported mainly by targeted policies to attract foreign direct investment in particular sectors.²⁷ Measures include the establishment of export processing zones, tax incentives and government subsidies, to promote export-oriented growth.²⁸ The establishment of the Investment Promotion Agency has been critical in marketing national strategic advantages to potential investors, particularly in high-technology manufacturing and services.²⁹ More recently, Costa Rica has leveraged natural capital to attract investment in ecotourism and services. Manufacturing remains the greatest recipient of foreign direct investment, at \$3,921 million as of 2023, yet investment in non-tourism services, real estate and tourism has shown significant growth, with annual increases of 145.3, 27.7 and 3.7 per cent, respectively, in 2023.³⁰

²⁶ See https://www.wto.org/english/tratop_e/tptr_e/tp007_e.htm.

²⁷ TD/B/C.I/MEM.2/37.

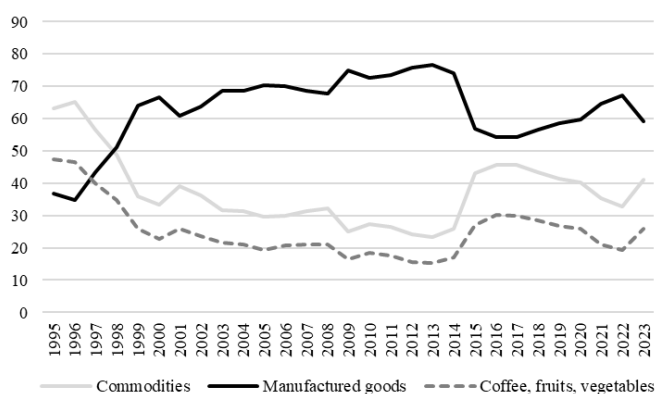
²⁸ See <https://openknowledge.worldbank.org/server/api/core/bitstreams/33b46a84-15cc-4cee-8277-49430bf5deb6/content>.

²⁹ UNCTAD, 2019, *Transnational Corporations: Investment and Development* (United Nations publication, Sales No. ETN261, Geneva).

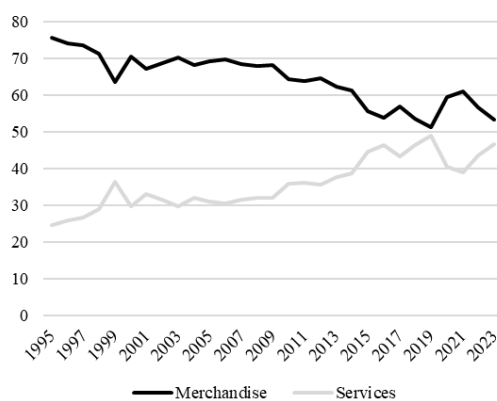
³⁰ UNCTAD secretariat calculations, based on data from Costa Rica, Ministry of Foreign Trade, 2024, available at <https://www.comex.go.cr/estad%C3%ADsticas-y-estudios/inversi%C3%B3n-extranjera-directa>.

Figure 2
Costa Rica: Trade and investment

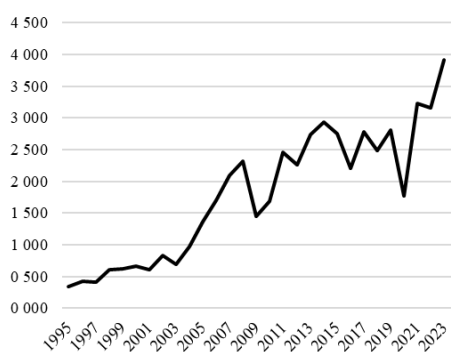
(a) **Merchandise export shares**
(Percentage)



(b) **Total export shares**
(Percentage)



(c) **Foreign direct investment inflows**
(Millions of dollars)



Source: UNCTAD secretariat calculations, based on data from the Comtrade database, the UNCTADstat database and the World Integrated Trade Solution.

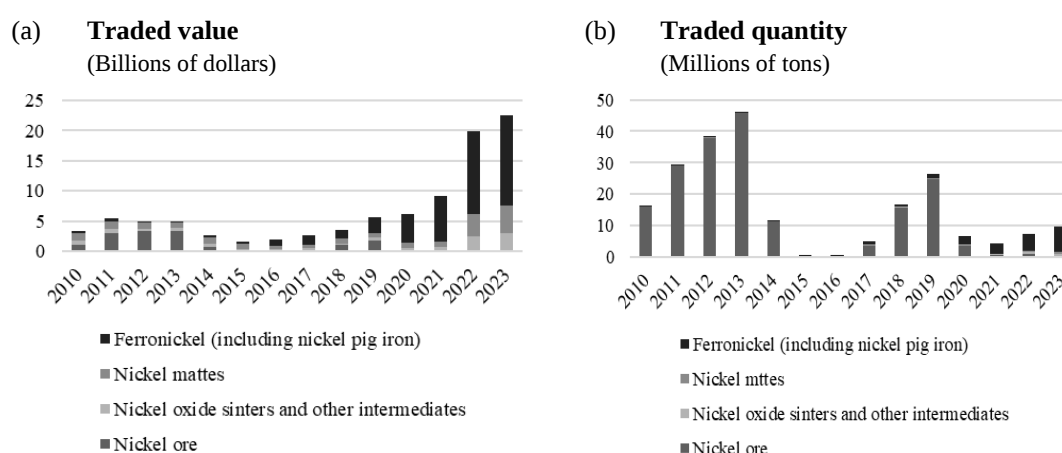
Note: Merchandise export shares are based on Standard International Trade Classification Revision 3 codes 0 + 1 + 2 + 3 + 4 + 667 + 68 + 971 for commodities; 5 + 6 + 7 + 8, excluding 667 and 68, for manufactured goods; 05 for vegetables and fruits; and 07 for coffee, tea, cocoa, spices and manufactures thereof.

B. Indonesia: Downstream policies for nickel

21. Indonesia, the world's largest nickel producer, at 50 per cent of global output in 2023,³¹ has prioritized downstream manufacturing and domestic value addition in its national mining policy. Since 2020, through a mix of trade, investment and fiscal measures, Indonesia has promoted foreign and domestic investment in domestic smelters and processing. This strategy has helped boost foreign direct investment, which amounted to \$25 billion in 2022 and \$21.7 billion in 2023, largely driven by investment by China in high-pressure acid-leaching technology for low-grade nickel ore (figure 3).³² Investments have facilitated the transfer of technologies needed to leverage low-grade nickel from limonite and higher-grade saprolite, making nickel from Indonesia highly competitive.³³ The measures have helped increase processed nickel exports, with value addition in the minerals sector rising from \$1.1 billion to \$20.8 billion in 2021 alone.³⁴ Indonesia shifted from exporting raw nickel ore to exporting higher-value semi-processed products such as ferronickel, nickel oxide and mattes, which, despite being exported in smaller quantities, generated significantly higher value addition. To support this transition, Indonesia enhanced cooperation with China, its largest investor since 2013, and established Morowali Industrial Park.³⁵ Indonesia also introduced university education programmes focused on the mining industry, to develop local human capital and increase worker participation in the nickel value chain.

Figure 3

Indonesia: Nickel product exports, by traded value and quantity



Source: UNCTAD secretariat calculations, based on data from the Comtrade database.

Note: Based on Harmonized Commodity Description and Coding System codes 260400, nickel ores and concentrates; 720260, ferronickel (including nickel pig iron); 750110, nickel mattes; and 750120, nickel oxide sinters and other intermediate products.

³¹ United States Geological Survey, 2024, Nickel statistics and information: January, available at <https://www.usgs.gov/centers/national-minerals-information-center/nickel-statistics-and-information>.

³² See <https://www.csis.org/analysis/indonesias-nickel-industrial-strategy>. UNCTAD secretariat calculations, based on data from the Comtrade and UNCTADstat databases for processed nickel exports based on Harmonized Commodity Description and Coding System codes 282540, 750110, 750120 and 750210.

³³ See <https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/indonesia-s-nickel-processing-boom-raises-questions-over-tailings-disposal-75180844>.

³⁴ See <https://asiatimes.com/2023/07/indonesias-mineral-export-bans-face-hot-global-fire/>.

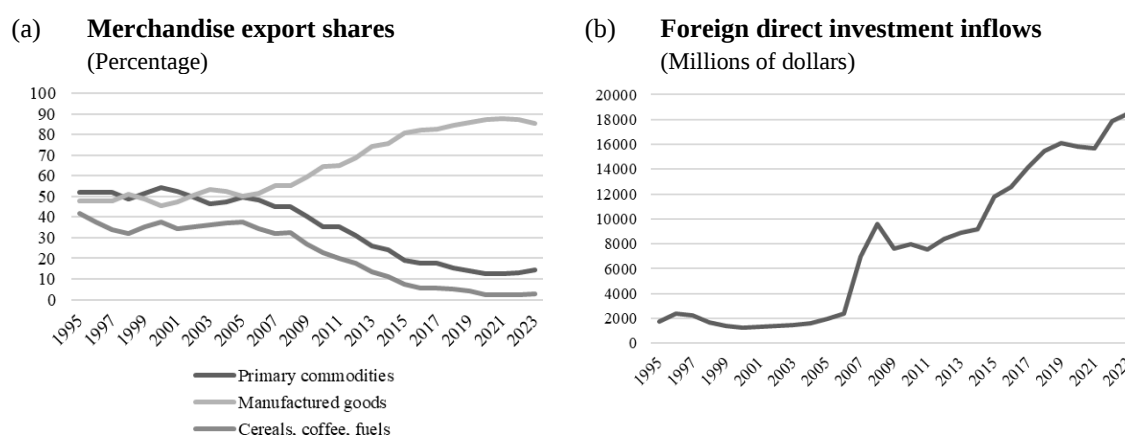
³⁵ A/80/120.

C. Viet Nam: Manufacturing-led diversification

22. Viet Nam provides an example of manufacturing-led horizontal diversification, shifting from exporting coffee, fuel and rice to becoming a major hub for electronics and textiles. By 2023, manufactured goods accounted for 85 per cent of merchandise exports. Electrical machinery and equipment alone accounted for 43 per cent, making Viet Nam the fourth-largest global exporter in this category (figure 4).³⁶ This transformation was driven by the Doi Moi reforms, launched in 1986, to transition from a command economy to a socialist-oriented market economy.³⁷ Key measures included improving the business environment, boosting human capital, attracting foreign direct investment, restructuring agriculture, liberalizing trade and investing in infrastructure, particularly in power generation and distribution.³⁸ Integration into the global economy, through membership in the Association of Southeast Asian Nations in 1995, accession to the World Trade Organization in 2007 and bilateral trade agreements, has helped to expand market access and reduce tariffs.³⁹ Recent reforms, such as the introduction of streamlined import and export procedures in 2015, have further enhanced foreign direct investment inflows and competitiveness.⁴⁰

Figure 4

Viet Nam: Merchandise exports and foreign direct investment



Source: UNCTAD secretariat calculations, based on data from the Comtrade database, the UNCTADstat database and the World Integrated Trade Solution.

Note: Merchandise export shares are based on Standard International Trade Classification Revision 3 codes 0 + 1 + 2 + 3 + 4 + 667 + 68 + 971 for commodities; 5 + 6 + 7 + 8, excluding 667 and 68, for manufactured goods; 04 + 071 + 32 + 33 + 34 for cereals, coffee and fuels.

³⁶ See <https://oec.world/en/profile/bilateral-product/electrical-machinery-and-electronics/reporter/vnm>.

³⁷ See <https://www.ifc.org/en/insights-reports/2021/cpsd-vietnam>.

³⁸ See <https://www.imf.org/en/Publications/WP/Issues/2020/02/14/Vietnam-s-Development-Success-Story-and-the-Unfinished-SDG-Agenda-48966>.

³⁹ Chaponnière J-R and Cling J-P, 2009 Viet Nam export-led growth model and competition with China, *Économie internationale*, 118:101–130.

⁴⁰ Leon G, 2022, Aid for trade: Partnering to support Viet Nam economic diversification, presented at World Trade Organization event on maximizing the economic diversification impact of aid for trade, 10 October, available at https://www.wto.org/english/tratop_e/devel_e/a4t_e/workshop_10oct22_e.htm.

IV. Policy considerations

A. Domestic

23. To advance on economic diversification, countries are encouraged to consider the following policy considerations:

(a) Adopt a multidimensional diversification framework that includes both horizontal and suitable vertical policies, tailored to national and subnational contexts, including with the objective of fostering diversification and value addition in environmentally sustainable and high-value activities;

(b) Leverage data, to inform the design of vertical policies in order to support diversification pathways that maximize future options by moving towards new production and export areas with strong spillover potential;

(c) Promote value addition within existing commodity sectors through suitable sectorial policies, including the provision of incentives for investment in processing facilities and incentives for local content and domestic supply chain integration, as part of a wider strategy of increasing the participation of domestic firms, particularly small and medium-sized enterprises, in higher value added segments of international value chains;

(d) Foster horizontal diversification into related and unrelated sectors that can leverage existing infrastructure, skills and technologies, thereby reducing dependence on a narrow set of products;

(e) Invest in skills development and workforce upgrading, aligning technical and vocational education and training with the requirements of target sectors to ensure that diversification creates more and better jobs;

(f) Integrate sustainability objectives into diversification strategies, prioritizing incentives and support for sectors and products that minimize environmental harm, reduce carbon intensity and contribute to the green transition;

(g) Strengthen innovation systems and technology adoption, including by supporting research and development, fostering university–industry collaboration and creating enabling conditions for technological upgrading in target sectors;

(h) Develop infrastructure and logistics networks that facilitate domestic value chains, reduce transaction costs and improve connectivity to regional and global markets;

(i) Ensure institutional coordination and policy coherence by aligning trade-related, industrial, environmental and skills development policies, to create an ecosystem that supports diversification into strategically identified products.

B. International

24. At the international level, to support economic diversification in commodity-dependent developing countries, the following policy considerations are proposed, focused on regional cooperation, technology transfer and infrastructure development:

(a) Promote regional value chain integration, to expand markets, pool resources and enable specializations not viable at the national scale, particularly in strategic and green industries;

(b) Facilitate technology transfer and knowledge-sharing through multilateral and South–South cooperation, licencing arrangements and partnerships between firms and research institutions;

(c) Mobilize international development finance to support investment in infrastructure, industrial facilities and skills upgrading;

(d) Ensure fair and development-oriented trade rules that provide commodity-dependent developing countries the policy space to implement both horizontal and vertical policies for diversification in line with sustainable development objectives;

(e) Support global initiatives on ensuring that the energy transition, digitalization and sustainable industrialization create opportunities for commodity-dependent developing countries to move into higher-value and environmentally sound sectors.
