Trends of Exports of High Technology Products from Global South

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Abstract: This article analyzes the emerging strength of the Global South in high-technology trade. The trends in high- and low-technology trade, and the analysis show that the Global South's share has increased significantly from 2000 to 2022. The exports of HLPs from the Global South increased more than sixfold from 2000 to 2022, and exports from the Global North increased less than two times between 2000 and 202.

Introduction

It is well known that development strategies directed towards exports positively impact economic growth (Marjit & Ray, 2017). Trade has emerged as a growth driver in the South. The unparalleled expansion of South-South trade is demonstrable; resulting in South-South intraregional exports growing faster than Southern trade with the rest of the world (Mohanty et al., 2019). UNCTAD (2015) found that developing countries accounted for 52 per cent of global exports of high-tech products. Technology-intensive trade with the South and the rest of the world was the main factor propelling the South's trade expansion (Mohanty et al., 2019). It is essential to mention that evidence suggests that production and exports of high-technology products (HTPs), mainly in areas like electronic goods and computers, have substantially shifted to the developing world (Chaturvedi et al., 2016). Lee (2011) also found that the nature of technology-intensive exports positively affected economic growth as a country graduated from 'traditional' to more profound 'technology' intensive trade. This write-up examines the trends in the trade of high-technology products from the Global South in the last two decades. Section I defines the Global South, whereas Section II examines the trends in exports of high-technology (HTP)[1] products from the Global South.

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Global South

The most important question is what is the Global South? Which countries do we include in the global South? UNCTAD (2022) defines the global south as countries of Africa, Latin America and the Caribbean, Asia (excluding Japan, South Korea and Israel) and Oceania (excluding New Zealand and Australia).[2] Ministry of External Affairs, Government of India (2023) defines Global South as a broad term that refers to countries that consider themselves part of the developing world, or/and as emerging markets economies, or/and as being postcolonial countries, or/and as being non-OECD countries.[3] To Dados and Connell (2012), the term global South refers broadly to Asia, Africa, Latin America and Oceania. In other words, regions outside Europe and North America are mainly (though not all) low-income and often politically or culturally marginalised.[4] Chaturvedi (2014) defines the term "global south" from the development cooperation perspective and refers to all developing countries, including the least developed countries (LDCs). In this analysis, the Global North has 32 member countries of the Development Assistance Committee[5] and other member countries of the European Union.[6] In other words, as classified by the UN, all developed countries comprise Global North and the rest of the countries are included in the Global South. In this regard also see the paper by Atul Kaushik in presnet issue of the DCR.

Trends of Exports of HTP from the Global South

This section analyses the trends of exports of HTP from the Global South and Global North. Technically, high-technology products (HTPs) are those goods that are outcomes of high levels of innovation and R&D (Chaturvedi et al. 2016). For the analysis and accounting, there have been several attempts at identifying and classifying high-technology products as Pavitt (1984) categorises industrial output as resource-based, labour-intensive, differentiated and science-based manufactures. OECD (1994) used the 3-digit SITC Revision 3 classification of foreign trade. Lall's (2000) classification is based on SITC at a 3-digit level (revision 2), which covered 18 product categories under high technology, mainly in electronics, electrical and others (Chaturvedi et al., 2016) and for the current analysis, the study used SITC at three-digit (Revision 3).

South as the Engine of the World Trade

The world trade has undergone tectonic shifts in the recent decade, much of that can be explained by the dynamism of the trade of the Southern economies. While the share of the North in global trade has declined, the share of the South marked a steady rise (Mohanty et al., 2016). The share of Global South in global exports was 28.6 per cent in 2000, which increased to 46 per cent in 2022. In value terms, it increased from USD 1. 70 trillion in 2000 to 10. 24

trillion in 2022. It increased more than 8 per cent per annum between 2000 to 2022 (average), and on the other side, the share of the global north in world trade (exports) has declined from 71 per cent in 2000 to 54 per cent in 2022. It increased by 4.4 per cent between 2000 to 2022 (Figure 1). It is important to mention that the surging of Global South's trade (exports) is because of production and trade in international value chains and the Global South is emerging as a key player in world GVC trade in the 21st century (Mohanty et al., 2016).

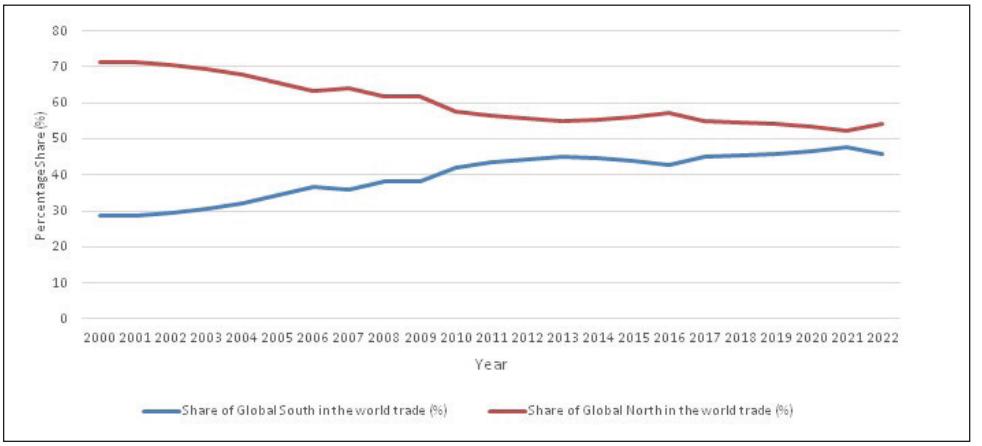
Global South and Global North Trade in HTPs

Figure 2 shows that the share of the global South in total high-tech products increased from 30 per cent in 2000 to around 61 per cent in 2022. On the other hand, the share of the global North declined from 70 per cent to 39 per cent in 2022. The total exports of HTPs from Global South was USD 387 billion in 2000 and increased almost sevenfold to USD 2603 billion in 2022. Srholec (2007) mentioned that trade in the technology-intensive sector is the fastest-growing segment in world trade and developing countries actively participate in it.

Figure 3 also shows that intra-global South exports of high-technology products increased from 35 per cent in 2000 to 57 per cent in 2022.

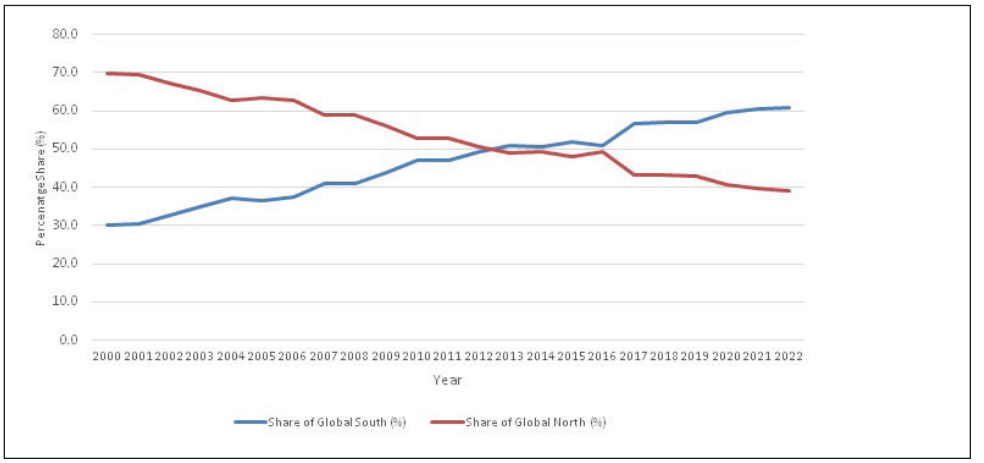
Literature review suggests that high technology products are goods that are outcomes of high levels of innovation and R&D . HTPs constitute products that are either final products in themselves or serve as intermediate inputs (Chaturvedi et al., 2016). In this context, this article analysed the share of Global South and Global North in world trade in high-technology products. As Chaturvedi et al. (2016) found, the production of high-technology goods in developing countries

Figure 1: Surging Trade Share of the Global South in World Trade (exports), 2000-2022



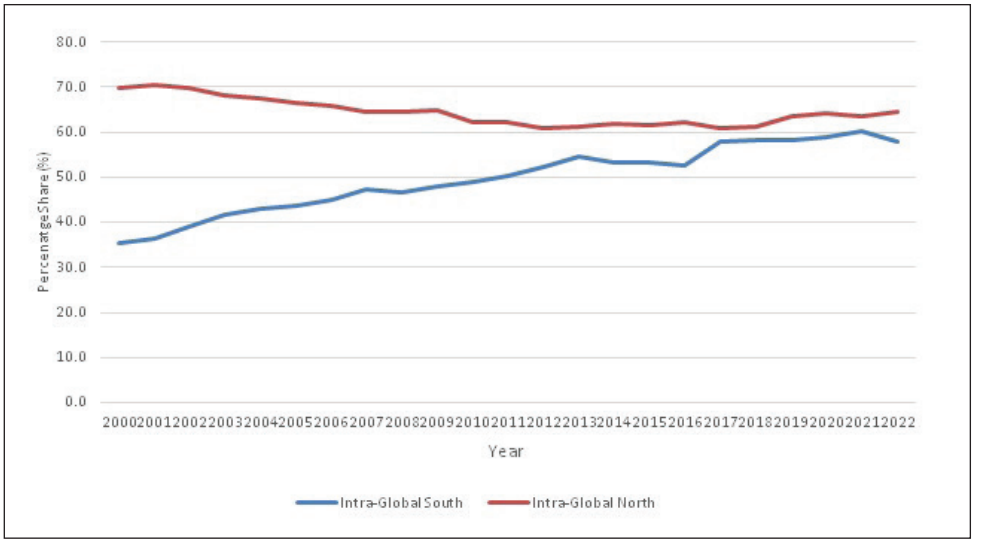
Source: Author's calculation data from WITS.

Figure 2: Share of Global South and Global North in Exports of High Technology Products (per cent)



Source: Author's calculation data from WITS.

Figure 3: Intra-Global South and Global North Export of High technology products (Share in exports of total high technology products per cent)



Source: Author's calculation data from WITS.

is often downstream. This helps advanced economies obtain substantial revenue generated from sales of high-technology goods. The analysis found that the share of the global South in world HTPs has increased significantly, accounting for

around 61 per cent of the world, and the global North accounted for 39 per cent. It is essential to mention that intra-global South high technology exports have also increased, accounting for 58 per cent in 2022, which was 35 per cent in 2000. It is essential to mention that the R&D expenditure and FDI inflows to Global South have increased significantly As WDI data shows that the Global South's share in global FDI inflows was around 18 per cent in 2000, which increased more than three times and reached around 57 per cent.

Endnotes

1 The research data was obtained from UN Comtrade database of international trade yearly indicators for the period 2000-2022. SITS Rev.3 classification used for low-tech Product (LTPs) and High Technology Product (HTPs)

2 See also Country classification by UNCTAD (https://unctadstat.unctad.org/EN/Classifications.html)

3 Lok Sabha Secretariat New Delhi, Twenty Seventh Report Committee on External Affairs (2023-24), Ministry of External Affairs India's Engagement with G20 Countries (2023)

4 See Dados, N., & Connell, R. (2012)

5 Australia, Austria, Belgium, Canada, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, South Korea, Lithuania, Luxembourg, Netherlands, New Zealand, Norway, Poland, Portugal, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, United Kingdom and the United States

6 Bulgaria, Croatia, Cyprus, Latvia, Malta and Romania

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