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Trade in Health Services

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16.1 Introduction

Good health is integral to individual happiness and well-being as well as overall economic and social progress. Healthy populations live longer and are more productive. Hence, any efforts to promote sustainable development, i.e., to improve the quality of life of all people within the given resource and capacity constraints of our world are necessarily linked directly and indirectly to health conditions and outcomes. This link runs in both directions. While health is a key goal of sustainable development, starting from the very first principle of the Rio Declaration, which states, "Human beings are at the centre of concerns for sustainable development. They are entitled to a healthy and productive life in harmony with nature," health in turn also contributes to sustainable development by providing human capital for growth, by stimulating savings and investment, and by enabling individuals and communities to benefit from and participate in the development process. Health plays an integrating role across the economic, social, and environmental dimensions of sustainable development and also within each of these elements.

While the two-way link between health and sustainable development is well accepted, the relationship between trade and sustainable development remains much debated. Empirical evidence across developing countries is mixed, with some benefiting from greater participation in world markets in terms of gaining new markets, obtaining lower product prices, better quality, increased scale and choice of products, and others experiencing displacement of jobs and production and greater divergence in outcomes across different sectors and players within their economies. It is thus well recognized that the relationship between trade and sustainable development is complex and multifaceted, shaped by country-specific characteristics and the prevailing regulatory and policy environment. The triad between health, trade, and sustainable development is thus complex, involving the impact of international agreements, trade liberalization,

and deregulation on health outcomes and access to health products and services and consequently development objectives, the intermediating role of health in linking trade with sustainable development goals, and the role of development conditions in shaping the impact of trade on health and vice versa. Further, the nature of the relationship varies depending on the specific segment under consideration in the health sector.

This chapter focuses on one part of the above triad, i.e., the intersection of trade in health services, which is a specific segment within the broader health sector, and sustainable development goals. As the pathways connecting trade, health, and development are many, the chapter specifically focuses on one aspect of this linkage—the impact of health services trade on the realization of the Sustainable Development Goals (SDGs) and the various modalities through which this impact may occur. The focus on health services is motivated by the fact that effective health services form the backbone of health interventions. Accessibility, quality, capacity, organization, availability of human and physical resources, and equity in the provision of health services are essential for a health-care system to deliver desired health and related sustainable development outcomes. The focus on the intersection of health services and trade is motivated by the growing globalization and tradability of services and the increasingly important role played by the services sector and services trade in the growth and development process of economies. Services exports have risen from $396 billion in 1980 to $4.7 trillion in 2013 and can help provide key intermediate inputs such as transport and communication, enhance economy-wide competitiveness and productivity, and improve access to basic services and thus in alleviating poverty.[1]

Within the services sector, health services have undergone significant globalization, with growing cross-border investment flows, mobility of health professionals and patients across borders; the use of information and communication technologies to deliver cross-border services; and the transfer of ideas, research, management skills, and know-how between countries. International trade in health services is thus increasingly creating possibilities for the health sector to contribute to economic and social development with implications for equity, efficiency, and quality, which are relevant in the context of the SDGs. There is thus a need to understand the implications of globalization of health services for realizing social and developmental objectives and the

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[1] UNCTADSTAT. http://unctadstat.unctad.org/wds/TableViewer/tableView.aspx?ReportId=17648 (accessed 15 March 2016).

potential trade-offs that may arise between these goals and commercial considerations. Such an understanding would enable governments to adopt policies that help balance competing concerns of efficiency and equity in the context of health services. It would also provide insights into how the international community can take advantage of the development benefits arising from trade in health services while addressing any adverse effects of such trade (Chanda 2001a, 2001b).

Keeping in view this context and motivation, this chapter is outlined as follows. Section 16.2 following this introduction highlights those SDGs that are directly or indirectly relevant to health. It also briefly reviews existing work that relates health targets and indicators to the SDGs and highlights the perspective of the World Health Organization (WHO) on this relationship. Section 16.3 discusses the different modes through which trade in health services takes place and their bearing on the realization of relevant SDGs. The discussion highlights the positive and negative implications of this trade and focuses on several segments and modes, such as medical value travel, telemedicine, hospital services, and mobility. Section 16.4 provides some country-specific examples to illustrate the channels through which trade in health services can affect sustainable development. Section 16.5 concludes by highlighting policies and steps that can be taken at the national, regional, and multilateral levels to leverage health services trade for meeting sustainable development objectives.

16.2 Relating SDGs and Health Services

The SDGs are a set of crosscutting, interlinked goals, some of which directly or indirectly relate to health.[2] This section provides an overview of the SDGs that are relevant in the context of health services to provide a context for the discussion that follows in later sections regarding the various pathways through which trade in health services affects development objectives and the nature of this impact.

Although there has been some criticism that compared with the Millennium Development Goals (MDGs) there is less focus on health under the SDGs, a closer examination indicates that health underpins many of the SDGs given the latter's broad and integrated nature. The one SDG that specifically pertains to health is SDG 3. Its aim is to

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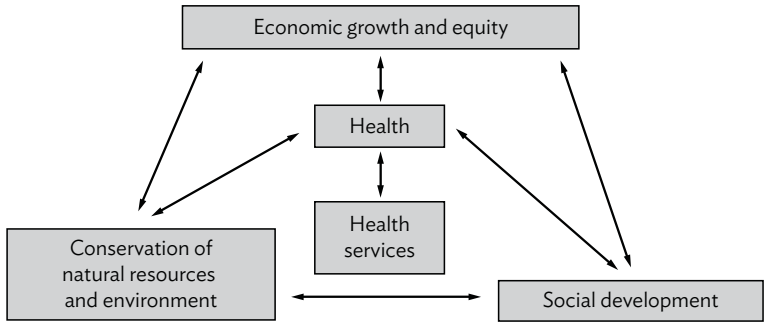
[2] See ICSU and ISSC (2015) and the United Nations' Sustainable Development Goals at http://www.un.org/sustainabledevelopment/sustainable-development-goals/ for the various SDGs (accessed 14 February 2017).

ensure healthy lives and promote well-being for all at all ages. The subgoals within SDG 3 include specific health-related indicators that highlight the importance of health both as an input and as an outcome in the development process. Two of these subgoal specific indicators that are of direct relevance to the discussion on health services trade are SDG 3.8 and SDG 3.9c. The former aims at achieving universal health coverage, including financial risk protection and access to quality essential health-care services. The latter aims at substantially increasing health financing and the recruitment, development, training, and retention of the health workforce in developing countries, in particular least developed countries and island states. Trade in health services can play a role, positive or negative, in the realization of these subgoals through its impact on the access, quality, affordability, and equity in health services, via channels such as foreign exchange earnings, through the intra-health sector distribution of resources between different segments and players for investments in human resources capacity and infrastructure, and through channels such as cross-border transfer of knowledge, technology, and manpower. Trade in health services can thus potentially both directly and indirectly through its many externalities influence the attainment of SDG 3 and specifically the two aforementioned subgoals.

Broadening the focus beyond SDG 3, there are also SDGs where health is itself a contributor to the attainment of the goal. For instance, SDG 8, which seeks to promote sustained, inclusive, and sustainable economic growth; full and productive employment; and decent work for all, is necessarily underpinned by existing health conditions and health systems and the availability of and access to health services. Again, trade in health can play an important direct and indirect role in shaping these conditions through its impact on the growth of the health sector and associated employment creation, by shaping the possibilities for technology transfer, knowledge spillovers, and resource mobilization, and through its impact on standards and quality, among other channels. There are also SDGs where health itself benefits from the progress toward those goals such as SDGs 1 and 2, which aim at ending poverty, promoting nutrition, and ensuring food security among other objectives. Here, trade in other sectors, not necessarily health services, such as trade in food and agricultural products, pharmaceuticals, and basic goods would influence the attainment of these development goals. At the broadest level, SDG 3 underpins the crosscutting role of health (and for that matter many other sectors such as education) given its focus on the reduction of inequality within and among countries. Access to health care is not only essential for realizing this SDG but is also likely to improve in

Figure 16.1 Triad of Health and Sustainable Development



Source: Department of Health, South African Development Community, World Health Organization (2002), p. 30.

the course of realizing this goal. Once again, trade in health services can influence equity outcomes within the health sector by shaping the access to quality and affordable health services.

Figure 16.1 illustrates the central role of health services in the nexus that connects health and sustainable development. It also implicitly captures the role that health services trade can play within this nexus.

The WHO perspective on the health and sustainable development goals nexus and the bearing that trade has on this link is evident from various WHO reports and statements. The latter indicate the WHO's view that there exist many synergies across the various SDGs that are relevant to health. These include synergies that are direct such as between health, education, nutrition, social protection, and conflict, and synergies that are indirect such as between sustainable consumption and health. In the WHO's view, the SDGs provide a basis for enhancing governance for health at the multilateral, regional, and national levels. These include policies in a wide range of areas, in particular, trade, migration, and intellectual property rights, which can impact positively or negatively on health. In this context, governance frameworks such as the General Agreement on Trade in Services (GATS), comprehensive regional and bilateral preferential agreements that include services and investment flows, and mobility arrangements between nations that cover various facets of health services trade provide a tangible basis for examining the implications of health services trade for the SDGs. Hence, although health is seen as a public good sector and trade is seen

as a commercial activity that can be inimical to the interests of equity and affordability that are expected to govern the functioning of such social services, the WHO perspective as well as academic literature in this domain suggests that the issue should be seen in a more nuanced and balanced manner.[3] Free trade in health services (and also health products) could potentially improve access to health care in developing countries, provided there are supporting regulatory and infrastructural conditions. Barriers to health services trade can thus impede the realization of the SDGs. The following section outlines what these potential benefits could be and associated risks that must be recognized and addressed through appropriate policies and regulations.

16.3 Modalities and Implications of Health Services Trade

Globalization of health services has taken many forms and has been driven by a variety of factors including advances in information and communication technologies, growing ease of travel and mobility across countries, increased private sector participation in health care, liberalization of foreign direct investment, growing cross-border collaborative arrangements in health sector training, research and technology transfer, and growing demand for health services due to rising incomes and demographic trends. The discussion that follows briefly outlines the various modes by which health services trade takes place and the resulting impact on development outcomes, including in particular the SDGs noted above.[4]

16.3.1 Mode-Wise Trade in Health Services

GATS under the World Trade Organization (WTO) provides the framework for understanding trade in health services. As per GATS, there are four modes by which services are traded—(i) cross-border delivery or mode 1, which refers to the physical delivery of a service across borders such as in transport or business process outsourcing services; (ii) consumption abroad or mode 2, which refers to the movement of consumers to other countries to avail of services; (iii) commercial

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[3] See, WHO (January 2015), WHO (October 2015), WHO (January 2002) and UN (May 2012) for discussion on the SDGs and health.

[4] Much of the discussion in this section on the various modes of health services trade draws upon Chanda (2001a and 2001b).

presence or mode 3, which refers to the establishment of a commercial entity in the form of a branch, subsidiary, franchise, affiliate, or joint venture and involves the movement of capital; and (iv) movement of natural persons or mode 4, which refers to the temporary cross-border mobility of service providers without the intent to become a citizen or permanent resident in the other country. All four modes of GATS are pertinent to health services trade.[5]

Cross-border delivery or mode 1 in health services involves the shipment of clinical and data services captured in diagnostic reports and samples channels through traditional mail channels and, increasingly, the electronic delivery of health services using interactive, audiovisual, and data communications for diagnostics, second opinions, lab testing, surveillance, consultations, transmission of and access to specialized data, records, and information, and continuing medical education and upgrading of skills. Within mode 1, telehealth, which is the "integration of telecom systems into the practice of protecting and promoting health" and telemedicine, which is the incorporation of these systems into curative medicine are growing in importance. According to a recent report, the global telehealth market was valued at $2.2 billion in 2015 and is expected to grow at a compound annual growth rate of 24% from 2015–2020 to reach a market size of $6.5 billion by 2020.[6] Countries are engaged in a variety of telehealth services such as telepathology, teleradiology, and telepsychiatry and many cross-border telemedicine initiatives have emerged. For instance, telediagnostic, surveillance, and consultation services are provided by United States (US) hospitals to hospitals in many Gulf countries and to some countries in Central America. Telepathology services are provided by India's doctors to hospitals in Nepal and Bangladesh, and telediagnostic services are provided by hospitals in the People's Republic of China's coastal provinces to patients in Taipei,China; Macau, China; and some Southeast Asian countries. There is also considerable scope for related services such as medical transcription, which are being increasingly outsourced to developing countries such as India to reduce costs. With further advances in telecommunications technologies and declining costs of electronic delivery, the scope for mode 1-based trade in health services is likely to grow, not only among developed countries but also increasingly from developed to developing and from more advanced developing to poorer neighboring countries.

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5 See WTO (January 2013) for an introduction to the GATS framework. See the full GATS text at https://www.wto.org/english/docs_e/legal_e/26-gats.pdf (accessed 14 February 2017).

6 PRNewswire. 2015. http://www.prnewswire.com/news-releases/global-telehealth-market-growing-at-24-cagr-to-2020-521726311.html (accessed 14 February 2017).

Consumption abroad or mode 2 in health services is the most prevalent and long- standing form of trade in health services. It involves the movement of consumers from one country to another for purposes of diagnostics, treatment, and rehabilitation and follow-up services. The estimates for the number of medical tourists globally per year vary tremendously depending on the source, from a lower bound of 5 million to an upper bound of over 40 million, with intermediate estimates putting the number at around 14 million per year. The financial value of mode 2 in health services trade is difficult to pin down but conservative estimates place this in the range of $60 billion to $100 billion annually. According to McKinsey, around 25% to 30% of these patients are expatriates, another 30%–35% are seeking emergency care, and the remainder are patients who go abroad to seek treatment (Horsfall and Lunt (2015: 29–31). There is much debate on these numbers and values, as highlighted in Helble (2011), but what is well accepted is the large number of patients who are seeking treatment in other countries and the growing importance of the medical tourism industry.[7]

Mode 2 in health services is driven by differences in cost, quality, and availability of treatment across countries; as well as factors such as natural endowments, existence of alternative medicines and treatment procedures, long waiting lists for treatment in the source country; and cultural, linguistic, and geographic proximity between sending and receiving countries. It occurs among developed, developing, and between developed and developing countries. It is common for affluent patients in developing countries to seek specialized high quality treatment overseas in developed country hospitals or in neighboring developing countries with superior health care standards. It is also common for persons in developed countries to seek quality treatment at a fraction of the cost in developing countries, or to seek alternative medicines and treatments and take advantage of natural endowments in developing countries. For instance, patients from developed countries such as the US and the United Kingdom can get bypass surgeries or transplants done at one-fourth or one-fifth of the cost in high quality corporate and super-specialty hospitals in developing countries such as India, indicating the tremendous scope for gains from trade due to cost differences. With escalating health-care costs and aging populations in developed countries and increased portability of health insurance

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[7] There is also trade in related services under mode 2, such as in medical education and training services, which involves movement of health professionals and students for receiving medical and paramedical education and training abroad. Some developing countries such as Thailand and India provide technical assistance in medical education services by reserving seats for students from other developing countries.

following opening up of the insurance sector in many countries, consumption abroad in health services is likely to grow in the future. Glinos et al. (2010) capture this diversity in cross-border movement of patients in terms of the motivation for treatment abroad and the financing of such treatment.

Health services can also be traded through *commercial presence or mode 3*, wherein hospitals, clinics, diagnostic and treatment centers, and nursing homes may be established across countries. There may be joint ventures, alliances, and management tie-ups between health-care organizations across countries and regional networks of health-care providers that may be engaged in delivering health care through modes 1 and 2 above. Such arrangements may involve acquisition of facilities, management contracts, and licensing arrangements with some degree of local participation to ensure access to certified and adequately trained local persons and to ensure local contacts and commitment. The growing trend toward commercial presence in health services is evident from the many regional health-care networks and chains that have been formed in recent years. For instance, the Singapore-based Parkway Group has acquired hospitals in Asia and Britain and has created an international chain of hospitals, Gleneagles International, through joint ventures with partners in Malaysia, Indonesia, Sri Lanka, India, and the United Kingdom. It has also set up a dental surgery chain through joint ventures in Southeast Asia. The Raffles Medical Group in Singapore has formed strategic alliances globally by developing triangular business associations with health-care organizations from developed countries, in partnership with host country investors. The aim of such companies is to develop an integrated network of health-care companies offering a range of high-quality and cost-effective health services. This trend has been facilitated by the opening up of foreign direct investment (FDI) in health care and with more and more governments encouraging private sector participation in the provision of health services. There has also been diversification of commercial presence in health services with the spread of managed care and resulting opportunities for commercial presence in management of health facilities and allied services. Some countries are entering into contract-based management and administration of foreign-owned or joint-venture hospitals. There are also emerging opportunities for firms with experience in accreditation, legislation, and medical standards. Another emerging area for commercial presence is in medical and paramedical education with many well-known medical schools of international repute, establishing joint ventures with local medical schools.

Health services can also be traded through the *temporary movement of health personnel or mode 4*, including doctors, specialists, nurses,

paramedics, midwives, technicians, consultants, trainers, health management personnel, and other skilled and trained professionals. Along with mode 2, this mode constitutes an important part of trade in health services today. Both developed and developing countries are engaged in health services trade via mode 4. There are mode 4 exports from developing to developed countries such as from India and the Philippines to countries in the Gulf region or from Cuba to countries in Africa and the Caribbean on short-term contracts. The Middle East is an important host market for a wide range of health professionals from developed and developing countries, including doctors, nurses, X-ray technicians, lab technicians, dental hygienists, physiotherapists, and medical rehabilitation workers.

It is to be noted, however, that much of cross-border mobility of health providers does not constitute mode 4 but rather is permanent migration in search of higher wages, better working conditions, greater exposure and professional development opportunities, and higher standards of living in the destination market. Mode 4 trade in health services is a subset of such movement, which is temporary in nature, usually under bilateral contracts between institutions and/or governments and aimed at addressing shortages such as of nurses or specialists in the receiving market (Kingma 2007). However, it is difficult to estimate the size of mode 4 trade in health services as such statistics, which clearly delineate temporary from permanent cross-border movement in the health sector and which are aligned with the guidelines laid down in the Manual on Services of International Trade in Services (MSITS) (United Nations 2010) are not readily available.[8]

Table 16.1 summarizes the four modes by which health services may be traded.

Across all 4 modes, the regulatory and policy environment as well as existing physical and human resources capacity are very important in determining the extent of health services trade. For instance, trade in mode 1 is affected by restrictions on transfer of personal data under data privacy and patient confidentiality regulations and by internet

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[8] Under MSITS (United Nations 2010), mode 4 covers the supply of services through the presence of foreign service suppliers either in their individual capacity or on a contractual basis or as intra-corporate transferees (i.e., either as direct employees of a foreign service supplier or on contract through their affiliated firms). Such movement must be temporary (though this period is not specified) and the purpose should not be to enter the permanent labor market or for citizenship to qualify under mode 4. However, immigration statistics as currently collected do not provide for a clear distinction between mode 4 and larger cross-border mobility in different services. Further, data on health services are scarce, making it even more difficult to estimate the value of mode 4 trade in this sector.

Table 16.1 Characterizing Trade in Health Services by GATS Modes of Supply

	Trade in Health Services	Trade in Ancillary Services	Trade in Goods Associated with Health Services
Mode 1: Cross-border supply	Telemedicine, including diagnostics, radiology	Distance medical education and training	Health-care equipment
		Medical transcription, back office	Drugs
		Medical research tools and databases	Medical waste
		Medical insurance	Prosthesis
Mode 2: Consumption abroad	"Medical tourism," i.e., voluntary trip to receive medical treatment abroad	All activities associated with health tourism (e.g., transport, hotel, restaurant, paramedical, local purchases, etc.)	
	Medically assisted residence for retirees	Local medical education and training of foreign nationals	
	Expatriates seeking care in country of residence		
	Emergency cases (e.g., accident when abroad)		
Mode 3: Commercial presence	Foreign participation or ownership of hospital/clinic or medical facilities (e.g., capital investments, technology tie-ups, collaborative ventures)	Foreign-sponsored education or training centers	
		Foreign-sponsored medical research facilities	
Mode 4: Presence of natural persons	Movement of doctors and health personnel for the purpose of commercial medical practice	Movement of doctors and health personnel for other purposes (e.g., education or training)	

GATS = General Agreement on Trade in Services.
Source: Author's construction.

connectivity, bandwidth, and costs. Mode 2-based trade in health services is affected by issues of insurance portability, cross-border liability, and visa and foreign exchange regulations. Mode 3-based trade in health services is mainly determined by FDI regulations and associated conditions on foreign investors as well as the availability of physical and other infrastructure and policies governing medical equipment and supplies. Mode 4-based trade is affected by immigration and labor market regulations in host countries as well as recognition and licensing requirements. It is the most restricted mode of supply in health services trade and for that matter for all services trade.[9] Thus, clearly, whether and how trade in health services trade affects the attainment of relevant SDGs is partly a function of these aforementioned regulatory and structural constraints and how they affect the availability, quality, cost and distribution of health services, and related outcomes.

16.3.2 Developmental Implications: Potential Positives

Trade in health services may have both positive and negative implications for the SDGs.[10] The nature of this impact depends on the specifics of the country and its national health-care system, the regulatory environment governing the health sector and related sectors, the policies adopted to facilitate or constrain this trade, and the associated externalities. The discussion that follows first outlines the potential positive development implications of health services exports and imports across the different modes of supply, both direct and indirect. It then highlights through country examples the nature and significance of this impact.

The standard way in which exports benefit a country is by augmenting their foreign exchange earnings, thereby providing them with macroeconomic stability through the balance of payments. This channel is relevant even in the case of health services, whether it is cross-border delivery of health services through telemedicine, or medical tourism-related foreign exchange earnings or employee compensation and remittances arising from cross-border mobility of medical personnel or

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9 It is to be noted that health services are one of the least opened services sectors under the WTO due to its public good and social service characteristic. Adlung and Roy (2010) highlight that only 39% of WTO member countries have made commitments in health services compared with 95% in tourism services, 81% in financial services, and 78% in business services. The only other sector with such limited scheduling by member countries is education services, for similar reasons.

10 The discussion in this section on the potential positive effects of trade in health services draws upon Chanda (2001a and 200b), Adams and Kinnon (1997), Bettcher et al. (2000), and UNCTAD/WHO (1997).

dividends and profits earned from investment overseas. Exports of health services contribute to development resources through the current account of the balance of payments. In all cases, the resources thus garnered can potentially be used toward increasing capacity in the health sector, for improving access to health care and other developmental needs. But far more important than this channel are the additional spillover benefits that trade can give rise to in the health sector and in the wider economy. These externalities may take the form of improved infrastructure, standards, technological upgradation, employment creation, and skilling with associated development implications for equity, access, costs, and quality. For instance, investments in physical infrastructure and human resources associated with telemedicine exports could be leveraged to deliver health services to remote and underserved areas and segments of the population within developing countries, to alleviate human resources constraints in these regions, to enable more cost-effective surveillance of diseases, and to provide affordable, timely, and better quality of diagnostic services in poor countries. Efficiency gains due to telemedicine exports may also help increase the general efficiency of the health-care sector by enabling the use of interactive methods and more rapid and up-to-date services at lower cost. Hence, health services exports through mode 1 and the associated financial and infrastructural resources to support such exports can enable developing countries to address gaps in their health-care system and pursue key sustainable development goals of providing equitable access to health care and improving health outcomes. In a similar manner, exports of health services under mode 2 may not only provide additional resources to improve the health-care system but can also incentivize health-care providers to seek international accreditation to attract foreign patients, to invest in new technologies, skills and specializations, and to raise the overall standards and quality of health care in the country. There could also be spinoff benefits in terms of return migration of expatriate health-care professionals and improved retention of domestic professionals, thereby augmenting the human resources capacity in the health care sector. In the case of mode 4 exports, beyond the foreign exchange earnings from overseas health-care personnel, additional benefits can accrue from the upgrading and exchange of skills and knowledge, development of specialized expertise, and associated improvements in standards and practices upon return to the exporting country.

Thus, across all these modes, health services exports can facilitate the realization of the SDGs through pecuniary and nonpecuniary channels. However, as is evident, these are "potential" and not automatically guaranteed benefits. Much depends on how the resources generated from exports are deployed in the economy, to whom they accrue, who capture

the benefits, and what developing country governments do to leverage and share these resources through appropriate policy instruments to meet development needs more widely. The key to realizing the outlined additional benefits beyond the gains from export earnings is to utilize the capacity, infrastructure, and quality gains resulting from health services exports for the wider benefit of the health-care system.

In a similar way, imports of health services can also aid the realization of the SDGs by alleviating capacity and quality constraints and by improving access to health care. For instance, imports via mode 3, i.e., inward FDI flows in hospitals and diagnostics, provide additional financial resources for investment in the health services sector through the capital account of the balance of payments. Additional benefits could take the form of upgraded quality, standards, and infrastructure; associated inflows of human resources, technology transfer, employment creation, development of skills, and specialization; and an overall improvement in the productivity and standards of associated health establishments, thus also potentially improving access to quality health care. The availability of private capital and development of private health-care establishments could also reduce the burden on government resources and help it to focus on public providers. Affiliations and partnerships with reputed health-care establishments in other countries made possible by mode 3 imports can lead to transfer of technology, management techniques, and best practices.

Likewise, countries that import health services through consumption abroad can also benefit from such trade as mode 2 can be a means to overcome shortages of physical and human resources in their health-care sector and to address their need for specialized and better quality services at affordable prices. According to one study, the US health-care system would save $1.4 billion per year if only 1 in 10 patients were to go abroad for a limited set of 15 highly tradable, low risk treatments (Mattoo and Rathindran 2005: Table 4, p. 20). Such imports can also ease the stress on their health insurance systems and reduce the waiting time for treatment. Telemedicine imports under mode 1 can similarly provide wider access to health services at an affordable price. The nature of development gains is similar across all modes, involving a mix of capacity and quality. Once again, whether there is a wider impact on development goals depends on how the aforementioned benefits are spread among other segments of the economy and how they are leveraged for others not directly associated with health services imports. Thus, much depends on how governments innovatively spread the benefits from health services imports to the wider economy such as through tax policies, regulations concerning access and pricing, and cross-subsidization requirements on the private sector.

16.3.3 Developmental Implications: Potential Negatives

As the impact of trade in health services depends on the policy environment and how resources are used and distributed across different segments of the health system, there can also be potential negative effects of such trade, particularly with regard to equity and affordability. Gains in capacity and quality need not necessarily translate into more equitable and affordable access to health services. In the case of each mode of health services trade, this trade-off is possible.[11]

Commercial presence imports of health services can generate resources for investment, create employment, and yield many of the benefits noted above. However, these gains may come at the cost of huge initial public investments that may be needed to attract FDI and also domestic private sector establishments into the sector. Typically, such establishments tend to be super-specialty providers and thus in developing countries the provision of public funds and subsidies in the form of cheaper land or tax concessions or reduced duties on imports of medical equipment and devices to attract foreign commercial presence could implicitly involve a loss of revenues or a diversion of resources from other essential segments such as primary health care or even other development objectives. This diversion would need to be weighed against the aforementioned gains, but there could be a negative effect on equity. Mode 3-based health services imports could result in a greater skew between the public health-care segment and a corporatized segment, which in turn could result in outflow of health personnel (often the best and brightest) from the public to exporting private sector segment, if there is wide divergence in pay, working conditions, standards, exposure, and career progression opportunities. Further, if mode 3 establishments are largely focused on high-end technologies and treatments that do not address the needs of the general population, or if they are too highly priced and thus cater to only the affluent section of the population who can pay out of pocket or to those who are adequately covered by insurance, then such imports would not necessarily address the equity objectives under the SDGs. The argument could be made similarly in the case of mode 3 exports as resources invested by domestic providers overseas can potentially reduce resources available for health-care investment domestically, though one would need to weigh this loss against the earnings from providing services in other markets and how they percolate to the wider domestic economy as opposed to being appropriated by the exporters.

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[11] See Chanda (2001a and 200b), Adams and Kinnon (1997), Bettcher et al. (2000), and UNCTAD/WHO (1997).

The possibilities for an adverse outcome are similarly present for the other modes. The basis for this potential negative impact is common. It stems from the fact that there is an opportunity cost to investing resources to enable such exports, which could be at the expense of equity, affordability, and other such development goals. For instance, while mode 1 exports in the context of telemedicine services can have many positive externalities in terms of enabling the telemedicine infrastructure to be leveraged for providing health care to remote and underserved areas domestically and not only for exports, there is always the question of whether the resources invested in telemedicine would have been better invested in basic health-care facilities, for immunization, or curative facilities where there could be a bigger and more direct impact on the poor. There is a possibility that the kinds of technologies invested in for telemedicine exports may be too specialized and thus would serve only a small segment of the population. The cost-effectiveness and affordability of telemedicine facilities for the domestic market would also shape the equity outcome and given the highly capital-intensive nature of this mode, requiring huge investments in telecommunications infrastructure and electricity, the opportunity cost in terms of resource diversion from more directly linked development outcomes can be high.

Exports based on mode 2 can likewise lead to a dual market structure, with a high- quality, expensive, more specialized segment catering to wealthy nationals and medical tourists and a lower-quality, resource-constrained segment catering to lower- and middle-income people at home. Differential pricing policies that may be adopted by exporters under mode 2 could lead to "cream skimming" and squeezing out of domestic patients to cater to higher-paying medical tourists, unless there are requirements to also serve the local population or initiatives to cross-subsidize between high- and low-paying segment (not only between foreign and domestic patients but also between rich and poor domestic patients). If subsidies are provided by the government to set up such facilities that cater to foreign patients, without necessarily ensuring that the resulting benefits highlighted above in terms of better standards and quality of care accrue to domestic patients, then there is again the opportunity cost of public funds being diverted or foregone from other development purposes. These potential negative effects on affordability and equity may arise if the gains are appropriated by the private players and a limited segment of the population. The latter in turn depends on the existing resource conditions, the regulatory frameworks governing such establishments, and the tax and subsidy policies as these factors shape the extent to which the benefits are spread more widely and can avert such inequitable outcomes.

Finally, mode 4 exports of health services can impose costs on developing economies. Even though outflows of health-care personnel in this context are to be distinguished from permanent movement (or brain drain), given shortage of quality human resources in the health sector and publicly funded and subsidized education received by health personnel in many developing countries, such exports can aggravate existing shortages of quality manpower for the home population and may involve a high opportunity cost where these subsidies could have been spent in attaining other development outcomes. Again, these negative equity consequences have to be weighed against the benefits that may arise from foreign exchange earnings, upgrading of standards and training, and various other positives highlighted above for this mode. Whether this balancing can be done or not is again dependent on the existing policies for developing human resources in health care, how returning health professionals are integrated into the domestic health system and their expertise utilized, how the earnings are invested back in the economy, and other such policies affecting resource creation, allocation, and utilization.

Overall, trade in health services is not unconditionally positive. There can be undesirable ramifications for equity and access especially in exporting countries. Whether these trade-offs in terms of increased dualism in resource distribution and access, internal brain drain, or overinvestment in certain segments of care arise or not is contingent on the existing conditions in the health-care sector. It depends on the availability of human and physical resources, the quality of infrastructure, the degree of insurance penetration, pricing and subsidy policies, and, in short, the overall structural and regulatory environment in the health as well as related sectors.

16.4 Developing Country Experiences

Trade in health services has both positive and negative implications for the SDGs. The channels for these effects are, however, difficult to trace or quantify as they are mostly indirect, contingent on existing conditions. But several country and regional cases illustrate how trade in health services can enable the realization of the SDGs and also how absent an appropriate policy environment and proactive steps to tap these gains for the wider benefit of the health system and of society at large, trade in health services may have adverse implications for the SDGs.

Several developing countries have proactively promoted exports of health services. Their objective has been not only to earn foreign exchange but to also increase the financial capacity of the overall health-

care system, to generate employment, and to upgrade national health-care infrastructure and standards. The following discussion outlines the experience of several developing countries with trade in health services.

16.4.1 Cuba

Cuba is a country that highlights how there can be developmental benefits from health services trade both to the exporting country and to recipient developing countries.[12] Since the late 1980s, Cuba has adopted an export strategy in health services focusing on all four modes. Exports of health services are the most important source of foreign exchange earnings for the country, rising from $20 million in 1994 to $30 million in 1998. The government had set a target of over $8 billion in health services exports, which was around 40% of total export earnings at the time.[13]

Under mode 2, Cuba attracts foreign patients from countries in Europe, the Russian Federation, and from Latin America and the Caribbean to specialized clinics in the country that provide high-quality care at competitive prices. The strategy has aimed at service differentiation, such as focusing on treatment of certain kinds of skin diseases that are incurable in other countries, and on the development of new procedures and drugs such as for pigmentation, retinopathy, and vitiligo. In 1995–1996, more than 25,000 foreign patients came to Cuba for treatment, generating an estimated $25 million in sales of health services to foreigners, up from $2 million in 1990. Most of the revenue thus generated was invested back in the domestic health system.[14]

To facilitate exports under this mode, the government has provided for easy payment facilities including payment with credit cards or any convertible currency. Free or subsidized care is provided to patients from some countries. There are also bilateral agreements between the Cuban government and social security institutions of other Latin and Central American countries to facilitate consumption abroad, with rates agreed upon by both parties.

Cuba has further differentiated itself from many other countries by combining health care with tourism. The government has created a

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12 Much of this discussion on Cuba draws upon Chanda (2001b).

13 Frank, M. 2014. Cuba Ups Healthcare Sector Pay, Says Medical Exports Earnings to Rise. Reuters. 21 March. http://www.reuters.com/article/cuba-reform-healthcare-idUSL2N0MI0C920140321 (accessed 14 February 2017); Wasserman and Cornejo (1999).

14 Feinsilver (2013: 120); UNCTAD (April 1997).

trading company called Servimed to sell combined tourism and health-care packages in target markets that do not have adequate facilities or countries with high costs of treatment. This is done with the help of tour operators and travel agencies.[15] At present, Servimed is providing services to 15 countries, including Algeria, the People's Republic of China, Portugal, Jamaica, Qatar, Surinam, and Ukraine. Services offered include treatment for retinitis pigmentosa, cosmetic surgery, and dentistry. Since 2010, Servimed has been pursuing medical exports for profit with renewed focus under the government's recent attempt to overhaul the country's health-care system and generate revenues from medical tourism and invest the profits in maintenance, repair, and purchase of equipment for public health institutions. The idea is to use medical tourism to generate revenues for development of the national health-care system.[16] Two smaller agencies have also been established in health tourism to provide rehabilitative and convalescent health services through resorts and spas.

The second area of focus has been movement of health personnel. Cuba has adopted a strategy of sending health personnel abroad on short-term remunerated contracts supervised by the Cuban Economic Office. According to the World Bank, in 2010, Cuba had 6.7 physicians per 1,000 inhabitants, the highest in the world. In some cases, exports of health personnel are based on solidarity agreements and contracts with foreign governments to provide manpower.[17] These included physicians, dentists, nurses, and middle-level health technicians. The target markets are typically developing countries with a shortage of health service providers. These include various African countries such as Ghana, South Africa, Mozambique, Zambia, Guinea-Bissau, Angola, poor Central American countries such as Nicaragua, and Middle Eastern countries such as Libya. The rates have been largely subsidized by the Cuban government. Hence, foreign exchange earnings from such mode 4 exports have not been very large given their development assistance nature. In some countries, the government receives oil in exchange for providing personnel. Cuba has become recognized as a global leader in providing health-care services for people in poor and rural areas and disaster zones. According to Cuban officials, professional services

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15 Even as far back as 1988, Servimed made a profit of $4 million serving over 2,000 foreign patients. Chanda (2001 b).

16 See International Medical Travel Journal. 2011. Cuba Relaunches Servimed Medical Tourism Service. 16 December. http://www.imtj.com/news/cuba-relaunches-servimed-medical-tourism-service/ (accessed 14 February 2017).

17 Even as far back as 1991, 624 Cuban health professionals and technicians went to 24 countries to provide health services overseas. See Chanda (2001b).

exports by Cuban medical personnel, who number around 37,000 in 77 countries generate foreign exchange of around $8 billion a year.

In recent years, Cuba has been sending more and more doctors overseas. It exported 11,400 doctors to Brazil. Health-care providers who are sent abroad earn several times more than those serving at home. Compared with a compensation of $30 per month in Cuba, those serving abroad earn between $200 to over $1,000 per month. Recently, the government has increased the salaries for those medical personnel working in programs that provide free eye care to poor residents in Caribbean and Latin American countries. The Cuban Ministry of Public Health has also diversified into activities such as advisory and consultancy services and provision of medical equipment maintenance and medical information services as part of its strategy of exporting professionals in health and allied areas. There have been complaints by local residents that exports of medical personnel are affecting the availability of manpower for the country's free public health-care system. Some doctors who are sent abroad do not return, but this number has not been reported by the government.[18]

Cuba has also focused on establishing itself as an important regional exporter of health services. It has a program for health service exports directed at the countries of Latin America and the Caribbean. It exports consulting services in biotechnology, pharmacy, and provides medical information to countries such as the Dominican Republic and Uruguay in the region and has joint ventures in health services with firms in Argentina, Brazil, Mexico, and Colombia. Cuba also provides telemedicine to countries in the region given its modern technology and infrastructure investments in this area.

Through these different forms of health services exports, Cuba has been successful in realizing several development objectives. These include the goals of providing employment to qualified health service providers, making use of excess capacity in the sector to make medical and pharmaceutical products, generating resources for investment in health-care infrastructure, and finding additional sources to finance the public health system. To support this strategy, the government has adopted a conscious policy of investing in necessary services such as clinics, labs, biotechnology, technology for telemedicine, and in other

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[18] Cuba is also engaged in exports of medical education services. It provides training and education to foreign students at specialized clinics in the country. According to Wasserman and Cornejo (1999), the foreign exchange earnings from exports of medical education services have been substantial. Scholarships are also provided to study at Cuban medical schools against a commitment to return to practice in underserved communities.

information services, including directing part of the foreign investment in the country toward the health sector. The telecommunications sector has received most of the foreign investment in the country and this has facilitated the establishment of telemedicine links between all hospitals and the provision of advanced services such as diagnostics, surgery, second opinions, and epidemiology, to the remote areas of the country. Cuba is one of the most advanced countries in the use of modern technology within the region.

Cuba's export strategy has also exploited the linkages between health and other sectors such as education and tourism and used exports of health services to promote value added in related areas. Thus, the Cuban case shows that health services exports can provide the basis for improving overall capacity in the health-care system and the utilization of its resources. The key is to have policies that go beyond pecuniary gains and that leverage health services exports for wider spin-off development benefits in health and in other areas. The Cuban case also shows that a successful export promotion strategy in health services is compatible with active state involvement and the preservation of a predominantly public health sector. It requires an integrated perspective that coordinates measures across several sectors and ministries.

16.4.2 Maghreb Region

The experience of two health services exporting nations—Tunisia and Morocco in the Maghreb region—similarly provide evidence on the potential gains that can accrue from such trade for developing countries. Tunisia's health tourism sector attracts around 150,000 international tourists per year and has emerged as the second most popular destination in Africa for medical value travelers. It is known for specializations such as thalassotherapy treatment, cosmetic surgery, prosthetics, dental treatment, and skin treatment procedures that use mineral elements in its Mediterranean shores for therapeutic purposes. The Tunisian government has been trying to leverage its geographic proximity to Europe and North Africa and become a regional medical hub. It has a technical cooperation agency to promote health services trade and has entered into bilateral technical cooperation arrangements with other countries regarding the transfer of foreign patients to Tunisia.

The export promotion strategy mainly consists of investment-related fiscal incentives in the form of tax exoneration on medical equipment and devices, exemption of value-added tax on medical treatment for all foreign patients, a 50% tax break on all investments

related to medical institutions and infrastructure, strategic partnerships with overseas hospitals and steps to attract private investment by setting up medical cities and special investment zones for companies that have medical expertise. As a result, Tunisia has received foreign investment worth $40 million from Japan's Tokusukai Medical Corporation to set up its first private hospital, which will employ some 1,200 Tunisian medical personnel. A $50 billion Tunisia Economic City megaproject is under construction, which will provide space to hospitals, clinics, research institutions, and other health and wellness facilities. [19] This export promotion strategy is helping to increase Tunisia's capacity in health-care delivery to not only foreign but also domestic patients. It is also ensuring that more resources are mobilized by the health sector through foreign investments, with spin-off benefits in other areas such as tourism, employment creation, and research and development.

Similarly, a case study of Morocco finds that mode 2 exports have actually increased the supply of health services for both foreigners and locals. The opening of residences for retirees (that provide medical services) has helped change the local attitude toward elders. There is greater urgency to conform to international standards to export with local demonstration effects. Further, doctors, nurses, and other health-care personnel have been offered greater opportunities at home, thus reducing their need to migrate to other countries. As with Tunisia, an important source of gains in Morocco has been investment in health-care facilities and related improvements in capacity and associated employment and revenue gains. For example, Tasweek Real Estate Development and Marketing has begun construction of a $40 million, 21,000-square-meter health-care complex in Marrakech Healthcare City. This facility targets foreign retirees and medical tourists and has the capacity to serve 5,000 patients a year, performing 85 procedures a day, offering a variety of specialized medical procedures including surgery, cardiology, and radiology.[20] The Portuguese group Malo Clinic is expected to open a €24.1 million clinic and surgery near Casablanca, mainly targeting older retired Europeans, employing

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[19] Investment Climate Update: Medical Tourism. 2014. Africa's Medical Tourism Industry. https://www.uschamber.com/sites/default/files/021508_AfricaNewsletter_MedicalTourism_FIN.pdf (accessed 14 February 2017).

[20] Investment Climate Update: Medical Tourism. 2014. Africa's Medical Tourism Industry. https://www.uschamber.com/sites/default/files/021508_AfricaNewsletter_MedicalTourism_FIN.pdf and Oxford Business Group. Just what the doctor ordered: Medical tourism is providing a fillip for sector expansion. http://www.oxfordbusinessgroup.com/analysis/just-what-doctor-ordered-medical-tourism-providing-fillip-sector-expansion (accessed 29 September 2015).

around 40 specialists, along with hotel and spa facilities. The clinic would specialize in laser eye, dental, and cosmetic surgery.[21]

However, in both these countries, there are concerns regarding the potential adverse effects of promoting mode 2 exports, in terms of aggravating the existing shortage of qualified doctors and nurses in the country, diverting investment toward the needs of foreign patients and rich domestic patients and away from development of basic health-care infrastructure, and increasing the costs of medical care for domestic patients. Concern has also been voiced regarding the extent to which these facilities will be accessible to the local population and whether and to what extent spillovers will arise for domestic patients. Clearly, both these examples indicate the need for a proactive government policy to ensure that such concerns are addressed and that health services exports benefit the local population and the wider health-care system more equitably.

16.4.3 Thailand

Thailand has earned a reputation as one of the leading exporters of medical tourism services, including a large wellness tourism segment. Millions of people come to Bangkok for medical care and undergo procedures such as face-lifts and heart bypass surgeries. Thailand's hospitals provide excellent medical care and superior hospitality. Service quality is promoted by an accreditation system promoted by a government agency named the Institute of Hospital Quality Improvement and Accreditation. Studies indicate mixed consequences of health services exports with regard to objectives of universal access, quality, and equity.

The gains highlighted by studies on Thailand's experience with health services exports include revenues from such exports and from the value added generated by activities of patients and companions traveling with them before and after the treatment. In 2008, it is estimated that medical tourism generated around B46 billion to B52 billion in revenues from the provision of medical services and another B12 billion–B13 billion from related tourism activities, amounting to a total contribution of 0.4% of GDP. Based on various scenarios and assumptions, these studies estimate a value added of B59 million to B110 billion from medical

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[21] International Medical Travel Journal. 2011. Opportunities for Moroccan Medical Tourism. http://www.imtj.com/news/opportunities-moroccan-medical-tourism/ (accessed 29 September 2015).

tourism (NaRanong and NaRanong 2011).[22] (It is worth noting, however, that if one accounts for the costs of imported inputs such as drugs and equipment to provide such services, the net value added is likely to be much smaller). Another study finds improvements in management practices, increased focus on service delivery and quality, standards, information systems, maintenance of records, emergency preparedness, and support services as a result of medical tourism exports.

One study points to numerous likely adverse effects of medical tourism in Thailand, although it is difficult to make a direct link to medical tourism. One of these effects is the increased demand for health-care personnel, especially specialists by foreign tourists and thus the availability of services for the local population. It is estimated that the health-care system has to provide services to some 420,000 to 500,000 medical tourists annually with the existing health-care staff, thereby aggravating existing human resources shortages and leading to crowding out of domestic patients. The study notes that doctors in Thailand have become too busy with foreigners thus neglecting Thai patients. Evidence from two hospitals found that the time spent by a physician on medical tourists exceeded that for domestic patients. A full-time physician would be able to see only 14 to 16 foreign patients per day on average compared with 40 to 48 (an average of 10 to 12 minutes per patient) domestic patients. These studies also note that foreign medical tourists tend to receive more intensive and costly treatments and thus cause a skew in resources invested by health-care providers (NaRanong and NaRanong 2011).

Another adverse effect found in some studies relates to costs. Private hospitals operating in Bangkok were found to be maximizing their profits, focusing on the well-paying foreign segment and ignoring the lower- to middle-income domestic segment. There has been an increase in the fees for self-paying Thais and the fees charged by private hospitals catering to foreign patients tend to be higher than those catering to local patients. According to 2003–2008 data on total charges per patient, for five representative medical procedures, there was a substantial increase of 10%–25% per year in the charges by most hospitals, accompanied by complaints from middle- income Thais regarding rising health-care costs in high-end hospitals, making them more dependent on the universal health-care coverage scheme (NaRanong and NaRanong 2011).

Media sources also report that Thailand's policy of promoting itself as a destination for international patients is having harmful effects on its public health-care system. Hospitals for medical tourists have lured

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[22] See also Janjaroen and Supakankunti (2000) for an earlier study on Thailand's medical tourism.

many highly skilled physicians and specialists out of public and teaching hospitals as Thai doctors can greatly increase their salaries by taking positions in private hospitals catering to international patients. Some media sources also note that medical tourism has aggravated the rural–urban gap by pulling physicians and nurses from rural hospitals and clinics and concentrating them in Thailand's cities. According to one study, an additional 100,000 foreign patients seeking medical treatment in the country could lead to an internal brain drain of 240–700 doctors, and most Thais are likely to receive health-care services of lesser quality (reduced access and shorter visiting times) (Arunanondchai and Fink 2007: 20).

In response to such findings, several steps have been recommended to mitigate the aforementioned adverse effects. While one extreme view has been to stop promoting Thailand as a destination for medical tourism and to focus instead on promoting better access to health care for its local people, a more balanced view has been to focus on increasing the capacity of the health sector, especially the availability of physicians, dentists, and nurses. Measures proposed include allowing certified foreign physicians to provide medical services at least to foreign patients without having to take a medical certification exam in the Thai language, increasing medical staff training in public universities to full capacity, and collaborating with private hospitals in training more specialists. There are also proposals to spread the benefits of medical tourism to Thai citizens, such as by levying a tax on medical tourists and using the revenue to support medical training.

Some policies have already been adopted to mitigate the redistributive effects of mode 2, such as introducing 3 years of compulsory public service for medical graduates, providing financial incentives for rural doctors, longer-term human resources planning to increase the supply of medical graduates, and steps to maintain the quality of services provided by public schemes by increasing the salary of physicians, nurses, and dentists in all community hospitals.[23] The budget for public health services, especially to cover compensation, has increased by more than what would have been the case in the absence of medical tourism. Overall, Thailand's experience with medical tourism exports confirms that the impact of health services trade is contingent on the local conditions, in particular the existing human resources conditions, the overall capacity of the health-care system, and the presence of measures that proactively distribute the gains from health services trade.

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[23] In 2008, the Ministry of Public Health changed its compensation scheme.

16.4.4 Indonesia

Indonesia presents the case of a developing country that is primarily an importer of health-care services under modes 2, 3, and 4.[24] Under mode 2, affluent Indonesians go abroad to Singapore, Australia, Japan, Germany, and the US for treatment. In mode 3, Indonesia has been a recipient of FDI in hospitals and clinics since the 1990s, subject to recommendation by the Ministry of Health and meeting certain conditions. Foreigners can build whole new hospitals or jointly operate existing local hospitals with local investors. The ministry issues licenses upon authorization to the hospital, which is to be operated in accordance with Indonesian standards. There is a requirement to accommodate more than 200 beds. The main investors in Indonesia's hospital services sector are Australia and Singapore. Foreign investment in health services is mainly limited to cities such as Jakarta, Surabaya, and Bali. There are foreign owned or managed hospitals in Jakarta. To ensure that foreign commercial presence yields benefits to the poorer sections, the government has a policy of reserving 10% of hospital beds for the poor for in-patient services, regardless of ownership status, although utilization rates for these reserved beds have been low in most commercial hospitals (Widiatmoko and Ganni 1999). Under mode 4, as Indonesia has a shortage of high-quality doctors, nursing specialists, and resources for management and administration of hospitals, foreign providers are recruited to meet such needs. These include foreign hospital managers who are hired to administer operations and medical and allied health specialists whose role is limited to that of consultants as they are not permitted to provide any direct medical services.

There are no studies to evaluate the costs and benefits of Indonesia's imports of health services. But there are likely to be beneficial effects on capacity and quality of services. There are of course distributional effects, as the FDI hospitals cater to the urban population, mode 2 imports are available only to the affluent and the increased capacity from mode 4 imports is likely to accrue only to urban hospitals catering to the higher-paying segments. However, a point to note is that such gaps in health-care provision and dualism are present even in the absence of health services imports. Further, one would need to weigh these distributional effects against the counterfactual in terms of the quality and availability of health services that would prevail in the absence of health services imports. Hence, the key to benefiting from health services imports is the presence of proactive measures to ensure the gains are distributed

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[24] Much of the discussion on Indonesia is based on Chanda (2001b).

to more segments of the population, such as by providing beds for the poor in foreign investor hospitals and ensuring that these provisions are implemented by the private sector and utilized by the local people. Similarly, increased capacity from recruitment of foreign health personnel may skew human resources more toward the richer segments, but policies that aim to strengthen overall human resources capacity in the health-care system, which create opportunities for pooling of resources and sharing of knowledge and expertise between private and public establishments can help mitigate this skew by ensuring other positive externalities. Thus, how governments choose to condition health services trade with requirements on providers and investment in capacity plays an important role in determining the implications of health services trade for the SDGs.

16.4.5 India

India is one of the most prominent developing countries engaged in exporting health services. It exports health services primarily through movement of health service providers to both developed and developing countries (Chanda 2001b). India's doctors, nurses, and technicians go to the Middle East, the US, Canada, the United Kingdom, and Australia on short-term contracts for training, and as economic migrants. India has bilateral agreements with six Middle Eastern countries and some others for providing private and government doctors on short-term assignments. Such short-term exchange is aimed at alleviating the shortage of health professionals in these countries while also providing opportunities for greater exposure and skill upgrading for India's medical professionals and foreign exchange earnings for the country. India also exports health services through consumption abroad given the low costs and high quality of treatment provided at specialty corporate hospitals that are of international standards. Patients come for treatment from developed countries such as the United Kingdom and the US as well as developing countries such as Bangladesh, Nepal, Sri Lanka, and countries in the Middle East for surgery and for specialized services in areas as wide ranging as neurology, cardiology, endocrinology, nephrology, and urology. India's main advantage in this mode lies in the availability of highly qualified doctors, nurses, paramedics, and hospital professionals and its ability to provide high-quality but affordable treatment relative to that available in developed countries. India is also known for exporting traditional and alternative therapeutic services. India also exports telemedicine services in diagnostics, radiology, and pathology to patients in neighboring countries and to establishments in Central Asia. Under mode 3, India

is engaged in both imports and exports of health services. FDI is open up to 100% in hospitals and there are cases of foreign companies that have set up state of the art hospitals in leading cities. Nonresident Indians have set up high-tech hospitals with 100% ownership (Chanda 2007). There are also several super-specialty corporate hospitals built in collaboration between Indian and foreign companies. Some Indian hospitals have also expanded their presence overseas through investment and collaboration with foreign partners.

There has been some qualitative analysis of the costs and benefits associated with India's trade flows in health services (Chanda 2001a, 2001b, 2007, 2010, 2013; Martinez et al. 2011. For instance, it has been cited by some researchers that the emergence of modern corporate and investor-owned hospitals in the country under mode 3 imports is helping to attract India's health-care professionals working abroad, thus stemming brain drain in this sector. Indian doctors working overseas are taking pay cuts to work in India. These professionals are being lured back by the emergence of world-class facilities due to increased capital flowing into health care, the chance to be part of a new delivery system, and the opportunity to give back to their country. In addition to facilitating consumption abroad and improvements in the country's health infrastructure, commercial presence in health services has also created other avenues for exports of health services. Some corporate hospitals have diversified their activities to areas such as medical studies, clinical trials, and research and generate additional resources through fees for such services. Inward commercial presence is also enabling investment in telemedicine facilities with potential benefits to the local population.

At the same time, there have been concerns about the equity implications of India's trade in health services. Most of its mode 4 exports are not really short term in nature and constitute brain drain to other countries, thus worsening the existing shortage of doctors, nurses, and paramedics in the country.[25] Moreover, as many of the emigrating personnel have received training that is subsidized by India's government at public sector medical and nursing colleges, this brain drain constitutes a loss of public investment in human capital. In the context of mode 2 exports, there is a perception that the benefits have been limited to foreign patients and to affluent urban patients, thus aggravating the existing dual market structure between the private and public health-care system in India, possibly further encouraging

[25] Although there are an estimated 500,000 nurses in the country, there is still a shortage of nurses due to the large numbers who emigrate to the Middle East and other countries.

internal brain drain of the most qualified professionals from the public health-care system to the private corporate hospitals, given the better remuneration and working conditions in the latter. In a country where only 10% of all doctors are in the government sector and the private sector accounts for more than 60% of all hospitals and dispensaries, such internal brain drain from the public sector has major negative implications for equity and access to quality health services by the poor (WHO 1999). There has also been criticism that the government has often provided land at subsidized rates for corporate hospitals that are leading exporters under mode 2 in prime locations of various cities but that their facilities have not been available to the middle- and lower-income segments given their high costs. Even though the government has imposed conditions in some cases to reserve a certain number of beds for poor and low-income patients and to provide treatment to these groups at subsidized rates, evidence indicates that often such beds lie vacant or are used by upper- and middle-income people on the basis of connections (Chanda 2001b).

In general, there has been criticism of India's government for extending incentives and support for the promotion of medical tourism by subsidizing the rich coming from developed countries, for not ensuring that the benefits are spread to the lower-income segments of the local population and that the requirement to serve poor patients has not been enforced properly. There has also been criticism regarding ethical violations, as in the case of surrogacy tourism by couples from foreign countries who cannot afford expensive infertility treatment at home or transplant tourism and environmental implications due to disposal of medical waste resulting from such exports. Some researchers have also noted that there is no evidence that the earnings generated from health services exports have been invested in a manner that meets larger developmental and equity objectives or for improving the public health-care system or that the upgraded infrastructure and facilities have helped in promoting research and development and cutting edge procedures that serve national interests. Thus, as in the case of other countries, trade in health services can be beneficial for realizing sustainable development objectives but not unconditionally. Much hinges on how the government prioritizes objectives of equity, quality, and linkages with the wider health system.

16.5 Policy Takeaways

The main insight that emerges from the preceding discussion is that trade in health services can help countries in meeting certain SDGs

such as improved access to health care and improved health outcomes. However, the state of the health-care system, the regulatory environment, what kinds of strategies are adopted by the government, and the extent to which there are positive externalities determines whether these gains are realized or not. The important point to note, however, is that some of the negative equity consequences and concerns highlighted above often exist even in the absence of health services trade. This is because many of these potential negative effects are a result of internal factors and not trade per se. Where the existing health-care system is already dualistic in nature due to insufficient funding of public health care, inefficiencies, and poor human resources management systems and inadequacies in the regulatory framework, such imbalances are likely to exist in the availability and quality of health services even without health services trade.[26]

The question then is to what extent such trade may aggravate these negative effects and to what extent governments proactively ensure that the SDGs are achieved through their policies on pricing, subsidies, insurance coverage, training of health sector resources, accreditation, investment in health infrastructure, utilization of foreign exchange earnings, regional and bilateral cooperation strategies, public–private partnerships, and other arrangements, among others. The experience of countries highlighted here indicate that if safeguards are in place to ensure access for low-income segments, then trade can augment resources for investment and can alleviate the pressure on the health sector by expanding facilities for all.

There are two broad directions for policy action at the national level, if trade in health services is to facilitate the realization of the SDGs and mitigate the negative effects on development. The first is to address structural issues in the health-care system, the key structural issues being standards, infrastructure, human resources, and technology. For instance, investment in human resources and human resources management systems can help address the issue of brain drain, which is a potential negative consequence of mode 4 trade in health services. Similarly, increasing expenditures on health services and allocating these expenditures more efficiently and in line with local needs, demand conditions, and priorities can help address adverse consequences such as cream skimming, dualism, and crowding out of local patients that may arise from trade. This may involve expanding the supply of public hospitals, clinics, beds, and improving efficiency in the public sector or incentivizing the private sector for the same, which may in turn require

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[26] See Chanda (2001a, 2001b, 2002) for a discussion of these issues.

measures to subsidize the cost of establishments, financial incentives, and channeling of taxes from such providers for investment in the public health system.

The second area for policy action is to ensure synergies between health services trade and the rest of the health-care system. To ensure synergies, governments can facilitate tie-ups between trading and non-trading health-care establishments, public–private partnerships through the pooling and exchange of skills and technologies and cooperation in training, cross-subsidization of poor patients in hospitals engaged in health services trade, and the adoption of more inclusive business models in trading establishments. The country experiences show that public sector involvement can be important in promoting health services exports and in shaping the benefits. Countries also need to integrate trade in health services with other sectors of the economy such as services including travel and tourism, insurance, education, and telecommunication services.

In addition to national policies, there is also a role for multilateral and regional cooperation to promote sustainable development in the context of health services trade. GATS covers health services under two sectors—professional services, where health personnel such as doctors, nurses, and caregivers are covered; and the Health and Social Services sector, where facilities such as hospitals, clinics, and diagnostic establishments are covered. Although health services have hardly received commitments from WTO member countries under both these categories and GATS excludes services "provided in the exercise of governmental authority"—a carve-out clause that is pertinent to health services—GATS can have a bearing on quality and access to health services across countries.[27] More liberal commitments in the various modes can facilitate such trade and help low-income countries to improve their health systems through increased commercial presence, telemedicine, medical tourism imports, and personnel inflows. At the same time, the GATS commitment structure also allows countries to inscribe conditions pertaining to appropriateness of technology, quality certification, reservation of public subsidies for domestic providers, etc., i.e., measures that ensure standards of care, protection of consumers, and equitable outcomes. Discussions on Domestic Regulation and Recognition under the aegis of GATS can also facilitate the adoption of international standards and best practices, promote cooperation on mobility of health personnel, and improve access and quality of health services among member countries.

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[27] See WTO (1994) for GATS provisions.

Multilateral cooperation can be particularly important in addressing the issue of brain drain. Countries could negotiate short-term bilateral arrangements to facilitate cross-border movement of health workers in line with host and home country supply and demand conditions. This would yield benefits associated with increased exposure and upgrading of skills for health professionals and foreign exchange earnings while overcoming the problem of permanent outflows. This cooperation could also involve compensation of sending countries by host countries through assistance agreements or ensuring that the latter's health professionals return after serving a fixed period. Cooperation on immigration and labor market policies, such as under special visa schemes and recruitment programs for overseas health professionals can also be pursued to regulate the movement of health professionals. Bilateral cooperation is also required to promote links between emigrating professionals and skilled nationals to reduce the negative effects of brain drain in the sending countries and to promote associated knowledge and skill transfer. Bilateral and regional integration agreements that cover labor mobility or sector-specific labor agreements can ensure such benefits accrue from mode 4-based trade in health services without the attendant problem of brain drain. Agreements among countries regarding ethical recruitment practices can also help in mitigating the adverse effects of mode 4 in health services (WHO 2004; Buchan and Delanyo 2004; Stilwell et al. 2003, 2004; Commonwealth Secretariat 2003).

As regional markets are important for trade in health services, regional cooperation across all modes can also facilitate the realization of the SDGs while addressing adverse effects. Regional and subregional efforts concerning portability of insurance; tie-ups between health providers across countries in a region through joint investments, cross-referrals, and sharing of expertise; development of cross-border payment systems; mobility of personnel; and harmonization of standards can help augment capacity in the poorer countries and remote areas within a region. Regional cooperation among neighboring countries to serve patients in border areas that are subject to resource and quality constraints can also be mutually beneficial.

In sum, trade in health services can be strategically used to address several SDGs, although it may pose potential challenges for equity and sustainability. As the preceding discussion highlights, countries need to adopt a proactive approach to provide a supportive regulatory and infrastructural environment so that the many potential gains associated with health services trade can be facilitated and enhanced while the associated negative effects can be minimized or prevented.

Such steps must be taken at the national, regional, and multilateral levels and must involve a wide range of stakeholders, such as national governments, international organizations, professional bodies, and the health industry. Trade should therefore not be viewed in a narrow way as a form of commercialization of health services, but rather as a means to make health services more accessible, affordable, and of better quality.

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