



ADB Working Paper Series

**TRADE AND SUSTAINABLE
DEVELOPMENT GOALS (SDGS):
HOW CAN TRADE IN EDUCATION
SERVICES CONTRIBUTE
TO THE SDGS?**

Aik Hoe Lim, Pamela Apaza,
and Alin Horj

No. 697
March 2017

Asian Development Bank Institute

Aik Hoe Lim is director of the Trade and Environment Division, World Trade Organization (WTO). Pamela Apaza is legal affairs officer in the Trade in Services and Investment Division, WTO. Alin Horj is consultant at the Investment Division, Directorate for Financial and Enterprise Affairs, Organisation for Economic Co-operation and Development (OECD).

The views expressed in this paper are the views of the author and do not necessarily reflect the views or policies of ADBI, ADB, its Board of Directors, or the governments they represent. ADBI does not guarantee the accuracy of the data included in this paper and accepts no responsibility for any consequences of their use. Terminology used may not necessarily be consistent with ADB official terms.

Working papers are subject to formal revision and correction before they are finalized and considered published.

The Working Paper series is a continuation of the formerly named Discussion Paper series; the numbering of the papers continued without interruption or change. ADBI's working papers reflect initial ideas on a topic and are posted online for discussion. ADBI encourages readers to post their comments on the main page for each working paper (given in the citation below). Some working papers may develop into other forms of publication.

The views expressed in this paper are those of the authors and do not represent the views of the WTO, its Members, or its Secretariat; nor of the OECD or of the governments of its member countries.

Suggested citation:

Lim, A. H., P. Apaza, and A. Horj. 2017. Trade and Sustainable Development Goals (SDGs): How Can Trade in Education Services Contribute to the SDGs? ADBI Working Paper 697. Tokyo: Asian Development Bank Institute. Available: <https://www.adb.org/publications/trade-and-sustainable-development-goals>

Please contact the authors for information about this paper.

Email: pamela.apaza@wto.org, alin.horj@oecd.org, hoe.lim@wto.org

Asian Development Bank Institute
Kasumigaseki Building, 8th Floor
3-2-5 Kasumigaseki, Chiyoda-ku
Tokyo 100-6008, Japan

Tel: +81-3-3593-5500
Fax: +81-3-3593-5571
URL: www.adbi.org
E-mail: info@adbi.org

© 2017 Asian Development Bank Institute

Abstract

While trade can greatly contribute to providing more education opportunities in the development world, its potential has not been fully exploited so far. This paper examines how international trade can help increase supply of and investment in higher education, thereby enhancing access and quality in support of the Sustainable Development Goals (SDGs). First, the paper examines the changing dynamics in the higher education sector and how these have spurred reforms in education systems and novel ways of delivering educational services. These factors, which include demand-side factors, reforms in government funding, technological developments, and the rise of global value chains (GVCs), have prompted mixed policies which increasingly regard foreign providers as prospective partners. Whereas these trends point toward the internationalization of education services, the role of trade agreements and their potential contribution to the SDGs have barely been explored. Therefore, the second part of the paper examines how trade agreements can help facilitate trade in education services and the flexibility they provide for attaining social policy objectives. International trade agreements can help attract foreign providers and foreign direct investment (FDI) in education by reducing barriers to entry, levelling the playing field among providers, and providing a predictable and transparent regulatory environment. At the same time, the General Agreement on Trade in Services (GATS) can support and complement the development of appropriate policy and regulatory frameworks to accompany market opening and promote the SDG goals of ensuring inclusive and quality education. Overall, a balance will need to be struck between opening trade in education and addressing regulatory challenges with a view to fostering coherence among policy objectives in support of the SDGs.

JEL Classification:F02, F15

Contents

1.	INTRODUCTION	1
2.	MAIN DRIVERS AND TRENDS IN EDUCATION SERVICES	2
2.1	Demographic Changes and other Factors Shaping the Demand for Higher Education Services	2
2.2	Reforms in Government Funding and Growth of Private Education Provision.....	4
2.3	Changes in Foreign Direct Investment Flows.....	6
2.4	New Information Communication Technologies	7
2.5	Rise of Global Value Chains and the Global Knowledge Economy	8
3.	TRADE IN EDUCATION SERVICES AND INTERNATIONAL TRADE AGREEMENTS.....	10
3.1	Education Services and the General Agreement on Trade in Services	11
3.2	The Modes of Supply of Education Services from the Perspective of Sustainable Development Goals	14
3.3	New Developments in Preferential Trade Agreements Relevant to Trade in Education Services	20
4.	MAIN REGULATORY CHALLENGES CONCERNING TRADE IN EDUCATION SERVICES AND THE SUSTAINABLE DEVELOPMENT GOALS.....	22
4.1	Ensuring the Quality of Education	23
4.2	Issues of Universal Access and Service.....	25
5.	CONCLUSION	26
	REFERENCES	28

1. INTRODUCTION

Trade in education services can play a key role toward achieving the Sustainable Development Goals (SDGs) of ensuring inclusive and quality education and promoting lifelong learning, which in turn is linked to other goals on reducing poverty and promoting economic growth and decent work. The SDGs put in focus the importance of balancing, on the one hand, universal access to and quality in education and, on the other, the need for open markets to ensure more investment and education opportunities. Education is also an overarching goal, which is included in the SDGs on health, growth and employment, sustainable consumption and production, and climate change. While the Millennium Development Goals mentioned primary education only, the SDGs refer also to technical, vocational, and tertiary education, including university (referred to as “higher education” in this paper). Although trade has the potential to provide more education opportunities at all levels, this paper focuses on higher education. This is an area where international trade can contribute the most, given the important structural changes that have taken place globally.

The first part of the paper focuses on the main trends in the sector and how these have spurred reforms in education systems, especially the provision of higher education services. These factors include demand-side factors (e.g., demographic changes), supply-side factors (e.g., reforms in government funding and changes in investment flows), as well as other factors such as technological developments and new global patterns of production. Many developing countries are experiencing a youth explosion and facing the challenge of integrating their young into the labor market. There is also an increasing need for governments to ensure local skilled labor become more competitive in today’s knowledge economy and better integrated into global value chains (GVCs). In addressing these challenges, education is often cited as a key factor but many governments also face significant budgetary constraints. As a result, governments are using a mix of policies allowing private education services to operate alongside publicly provided services. Together with these policies, foreign providers are increasingly viewed as prospective partners.

The second part of the paper examines the opportunities and challenges provided by trade agreements in spurring reforms aimed at liberalizing trade in higher education, while safeguarding domestic policy objectives. It focuses on the World Trade Organization (WTO) General Agreement on Trade in Services (GATS), but also includes recent trends in preferential trade agreements (PTAs) to provide an overview of the international framework governing trade in educational services. New disciplines on e-commerce relevant to online education found in the latest PTAs, which may encourage similar initiatives in the WTO, are also examined. International trade agreements can help countries attract foreign providers of education services by reducing barriers to entry, ensuring a level playing field among providers, and guaranteeing a transparent and predictable regulatory environment. The GATS can also support and complement initiatives aimed at addressing national and global regulatory challenges such as safeguarding quality and equity in education, thereby fostering coherence among different policy objectives and contributing toward the SDGs.

The paper concludes with some observations on addressing the challenges and opportunities posed by opening trade in education services in contributing to the SDGs and the potential role of the GATS.

2. MAIN DRIVERS AND TRENDS IN EDUCATION SERVICES

While providing education remains to a large extent the responsibility of governments, recent developments have paved the way for important reforms in the higher education sector. At the basic level (primary and secondary education), the role of governments as both providers and regulators continues to be more prominent, with limited role for international trade. The growing importance of international trade in higher education services is characterized by demand-side factors (e.g., demographic changes), supply-side factors (e.g., reforms in government funding and changes in foreign direct investment [FDI] flows). Other factors include technological developments and the rise of GVCs. As a country's comparative advantage is also determined by the availability of skilled human capital,¹ international trade in education can provide a useful tool for developing countries to expand their educated workforce and better integrate this workforce into GVCs. All these factors have required governments to use a mix of policies to attain education goals. These policies have introduced more space for private education services, including foreign ones, to operate alongside publicly provided education services.

2.1 Demographic Changes and other Factors Shaping the Demand for Higher Education Services

The demand for higher education has expanded rapidly for several reasons. On the one hand, many developing countries have experienced a youth explosion over recent years and face the challenge of integrating large youth populations into labor markets.² Having a pool of qualified individuals that can contribute to the overall competitiveness of the economy is crucial for many economies, particularly in the developing world. For instance, 11 million young Africans under the age of 25 are expected to join the labor market every year for the next 10 years (footnote no.2). On the other hand, some developed economies are faced with a rapidly aging population due to longevity and lower fertility rates.³ Other factors explaining the increase of global demand for higher education services include a rapidly growing middle class especially in some developing and emerging economies, and progress at the secondary level, which have resulted in an increased number of candidates for higher education.

The large and ever increasing youth population in many developing countries has put pressure on governments to meet the demand for education. For example, the number of university-age students across Africa is predicted to double from 200 million to 400 million by 2045.⁴ A predominantly young population could be a boon for economic growth, but only if it has the knowledge and skills that would allow it to be integrated into the labor market. Countries experiencing a rapidly aging population face the

¹ See Bougheas, S., R. Kneller, and R. Riezman. 2011. Optimal education policies and comparative advantage. *Pacific Economic Review* 16(5): 538–552.

² KPMG. International. 2013. Future State 2030: The Global Megatrends Shaping Governments. Mowat Centre for Policy Innovation, University of Toronto. <https://www.worldgovernmentsummit.org/api/publications/document?id=b5d469c4-e97c-6578-b2f8-ff0000a7ddb6>

³ OECD. 2008. Higher Education to 2030, Volume 1, Demography. Paris: OECD Publishing. <http://www.oecd.org/education/skills-beyond-school/highereducationto2030vol1demography.htm>

⁴ University of Oxford. 2015. International Trends in Higher Education 2015. International Strategy Office. p.15. <https://www.ox.ac.uk/sites/files/oxford/International%20Trends%20in%20Higher%20Education%202015.pdf>

contrary situation of labor shortages in certain areas coupled with overcapacity in higher education services. To deal with excess supply issues, some higher education institutions have sought to attract foreign students. For instance, demographic changes have prompted numerous countries in the Organisation for Economic Co-operation and Development (OECD) area to reform their higher education systems to allow institutions to attract more foreign students (footnote no. 4). An example is Japan, which is aging faster than any other economy. Its Global 30 Project aims to increase the number of foreign students in Japan to 300,000 by 2020.⁵ The possibility of students going abroad to obtain high quality education is directly linked to the issue of “brain drain,” as there is often a risk that students may remain abroad to work and stay past the duration of their courses. This issue, which has been given attention in policy circles, will be addressed when examining the implications of the different forms of delivery of trade in education services from the perspective of SDGs.

There is also a market incentive for secondary graduates to pursue higher education studies. According to an OECD study, adults who attain tertiary education are more likely to be employed and earn more than adults without tertiary education.⁶ Progress at the secondary level has also resulted in an increased number of candidates for higher education. According to the United Nations Educational, Scientific and Cultural Organization (UNESCO), secondary school enrollment grew at a faster rate than the school-age population between 1970 and 2009.⁷ While enrollment worldwide increased by an average annual rate of 2.6%, the targeted school-age population grew by 1.4% only.⁸ Globally, the secondary gross enrollment ratio⁹ rose from 43% to 68% between 1970 and 2009, although the situation varies across regions.¹⁰

Another demand-side factor is the growth of the middle class, especially in Asia, the largest regional source of international students. This growth has given rise not only to a higher demand for more quantity, but also for good quality higher education. The periods of economic growth in East and Southeast Asia generated a rapidly expanding middle class at a time when globalization, communications, and business were augmenting the value of foreign degrees.¹¹ Significant unmet demand among middle class families has been a major driver of foreign education in countries such as the People’s Republic of China, Thailand, and Malaysia.¹² This has resulted not only in the movement of Asian students to OECD countries but also in the expansion of educational programs and campuses into Asia.

⁵ Burgess, Ch., et al. 2010. The ‘Global 30’ Project and Japanese Higher Education Reform: An Example of a ‘closing in’ or an ‘opening Up’? *Globalisation, Societies and Education* 8.4: 461–75. <http://www.uni.international.mext.go.jp/global30/>

⁶ OECD. 2015. *Education at a Glance 2015*, OECD Indicators. Paris: OECD Publishing. http://www.oecd-ilibrary.org/education/education-at-a-glance_199914877

⁷ UNESCO. 2011 *Global Education Digest 2011, Comparing Education Statistics Across the World*, Institute for Statistics. http://www.uis.unesco.org/Library/Documents/global_education_digest_2011_en.pdf. p.309.

⁸ Footnote no. 7, pp. 15–16.

⁹ The gross enrollment ratio is the ratio of total enrollment, irrespective of age, to the targeted population. It provides a measure of the capacity of education systems.

¹⁰ While in South and West Asia, total enrollment at the secondary level increased from 26 million to 136 million, in Africa, it increased from 53 million to 62 million only (footnote no. 7, pp. 16–18)

¹¹ OECD. 2004. *Key Developments and Policy Rationales in Cross-border Post-Secondary Education*. In *Internationalisation and Trade in Higher Education Opportunities and Challenges*. Paris: OECD Publishing. pp.138–139.

¹² Footnote no 11, pp. 157.

2.2 Reforms in Government Funding and Growth of Private Education Provision

Traditionally, in many countries, the market had no major influence on higher education as universities were mainly created and subsidized by the state.¹³ However, in recent decades, the role of private sources of funding has become increasingly prominent. Today, 30% of funding for tertiary institutions arises from private sources, while the average share of public funding for tertiary institutions in OECD countries decreased from 69% in 2000 to 64% in 2012.¹⁴ Tertiary education spending accounts for around 1.5% of gross domestic product (GDP) on average across OECD countries, although some countries including Canada, Chile, the Republic of Korea, and the United States (US) spend between 2.3% and 2.8% of their GDP on tertiary education. But elsewhere, the picture is mixed. In Liberia, tertiary education expenditure was only 0.10% of GDP in 2012, while in Ghana it exceeded 1.10% of GDP. Other countries with large young populations such as Indonesia and Pakistan also have relatively low public funding for higher education of around 0.5% of GDP.¹⁵ The gap between limited public supply and unmet demand has created market opportunities for private education institutions.

Globally, one in three higher education students is in the private sector, while in Europe the figure is one in seven.¹⁶ In some countries like Finland, Austria, and Iceland, the private sector represents no more than 10% of total tertiary enrollments, but for others such as Indonesia, the Netherlands, Mexico, and Italy, it is about 30%. In Asia-Pacific economies such as the Republic of Korea and Japan, as well as in Chile, US, Colombia, and Australia, the share of private education expense exceeds 55% of the total expense for education (Figure 1). Private spending on higher education has also increased significantly in countries that have traditionally relied on public education, such as Hungary (+114%) and Turkey (+97%), as well as in countries where private education has traditionally played an important role in the education system, such as the United Kingdom (UK) (+53.7%) and the US (+13.3%). Conversely, share of private spending in education decreased in Austria (−44%), Slovenia (−40%), Poland (−25.9%), and Chile (−22%).

Private education has also been expanding strongly in Africa, where the demand for higher education has been increasing in the last years. For example, in sub-Saharan Africa, the growth of public universities has been outpaced by the rate of growth in the private sector in recent decades. Between 1990 and 2007, the number of private universities and colleges, including for-profit and not-for-profit institutions, increased from 24 to more than 468. More than 53% are found in Francophone countries such as Senegal (41 institutions) and the Democratic Republic of Congo (39), while 34% are in Anglophone countries, particularly in South Africa where there are 79 private

¹³ Kwiek, M. 2002. The Social Functions of the University in the Context of the Changing State/Market Relations. The Global, European Union and Accession Countries' Perspectives. Issue Paper for the European Commission, Research Directorates General, High Level Expert Group, STRATA Project Developing foresight for higher education/research relations developing in the perspective the European Research Area (ERA). http://www.policy.hu/kwiek/Commission_paper.pdf

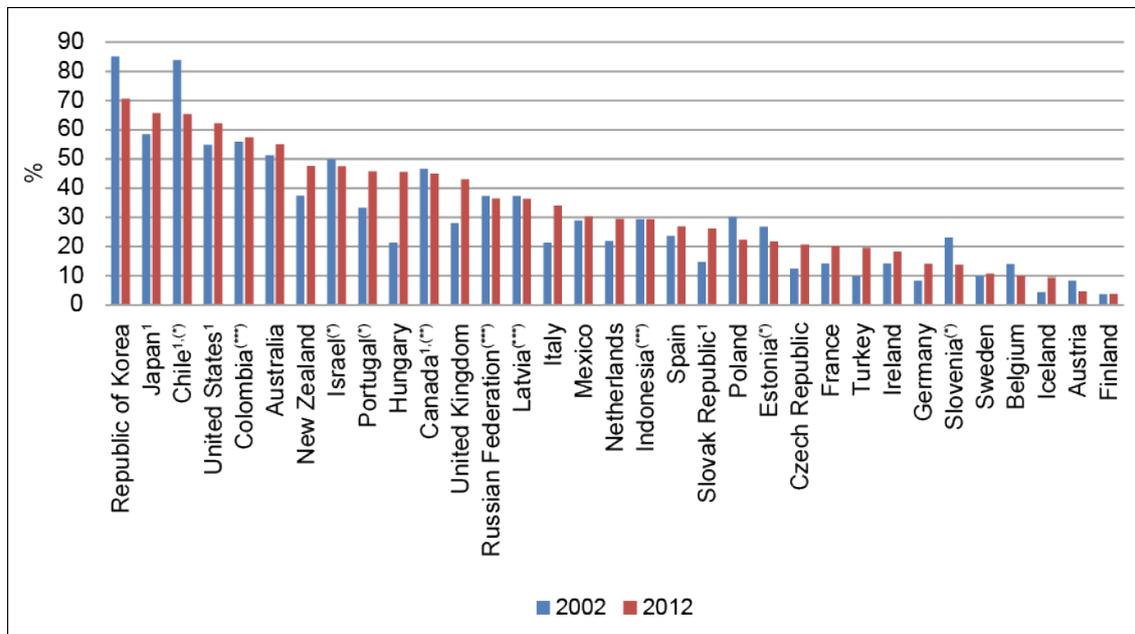
¹⁴ Footnote no. 6, pp. 358-359.

¹⁵ UNESCO Institute for Statistics. Expenditure on education as % of GDP (from government sources). <http://data.uis.unesco.org/?queryid=181>.

¹⁶ The Economist. 2015. The World is Going to University. 28 March. <http://www.economist.com/news/leaders/21647285-more-and-more-money-being-spent-higher-education-too-little-known-about-whether-it>

universities.¹⁷ Data on private education is however not systematically collected for many African countries.

Figure 1: Share of Private Expenditure on Tertiary Educational Institutions in Selected Economies (2002 and 2012)



1 = Post-secondary non-tertiary included in both upper secondary and tertiary education,

(*) = Year of reference 2006 and 2012,

(**) = Year of reference 2005 and 2012,

(***) = Year of reference 2011 and 2012.

Source: Organisation for Economic Co-operation and Development Education at Glance Indicators, 2002, 2005, 2006, 2011, 2012.

The growth of private education in Africa has to be kept in context. The majority of private institutions tend to be small and have fewer than 1,000 students. They cannot be easily compared to public universities, which still remain the main provider of higher education. Tuition fee levels in public universities are very low, while those in private sector institutions can amount to several multiples of average incomes. In Tanzania, for example, they can reach \$8,000 per annum as compared to its GDP per capita of only \$998.

One of the main reasons for growth of private education in Africa is that courses offered by the private sector are tailored to the demands of industries in areas such as business management, accounting, computer sciences, and economics (footnote no. 17). Many private universities have introduced curriculum innovations aimed at the local market, such as entrepreneurship training. At the same time, the quality of many private universities has been a source of concern as they tend to offer courses that require limited infrastructure investment and are cheaper to deliver. According to the World Bank, this trend of rising private universities has to be accompanied with higher

¹⁷ Havergal, C. 2015. Africa’s ‘teaching shops’: the rise of private universities. *Times Higher Education*. 22 October. <https://www.timeshighereducation.com/features/africas-teaching-shops-the-rise-of-private-universities>.

quality education to provide the knowledge and skills needed to boost competitiveness and growth of African nations.¹⁸

A related trend has been the increasing involvement of public universities in other revenue-generating activities. Besides tuition fees, universities also generate income from research funds, as well as consulting and research fees.¹⁹ This has given rise to a new generation of government-dependent institutions with commercial linkages,²⁰ but also greater competition for higher fee-paying international students, as they do not receive tuition subsidies. Such policies have been adopted by Australia, New Zealand, the US, and the UK. In this respect, some exporting countries of higher education services have adopted non-subsidized tuition fees for international students. High tuition fees do not necessarily discourage prospective international students, as there is a strong perception that it correlates with higher quality and that potential returns will make the investment worthwhile. This has led several countries to initiate policies to attract more international students on a revenue-generating basis and to make international education an explicit part of their socioeconomic strategy (footnote no. 6).

2.3 Changes in Foreign Direct Investment Flows

The rising demand for higher education in countries with limited educational opportunities, especially in emerging markets, has led to more foreign direct investment (FDI) from American, Australian, and British universities. There are a wide variety of models with some countries investing in higher education in the form of wholly owned international branch campuses (IBCs) or in joint ventures with local education institutions, either for profit or for nonprofit. There is however very little data on FDI in education, as this is not a category for which statistics are systematically kept. Nevertheless, FDI can have an important impact on both the supply of and demand for education. In terms of supply, while it is not possible to disaggregate education services from FDI flows, there are two factors which are important to consider. Firstly, about two-thirds of investment is in the services sector. Secondly, the global FDI stock is very large and has jumped from \$636 billion in 1980 to \$27 trillion in 2014.²¹ Taking into account both of these factors, even if FDI in education services might be a small percentage of total flows, its impact could still be very significant.

FDI may not only bring in capital, technology, and technical and managerial skills, but may also contribute to capital accumulation by increasing the demand for skilled labor. There is also evidence pointing toward the availability of skilled labor in the host country as a factor in FDI flows. The availability of local skills has become an important pull factor of FDI in the process of globalization since the 1990s.²² For instance, there is a strong correlation between where American universities are located and where American FDI is headed. But depending on the type of FDI, the impact on economic

¹⁸ Experton, W. and C. Fevre. 2010. Financing Higher Education in Africa. Africa Regional Educational Publications. Directions in Development. Human Development. Washington, DC: World Bank. <http://documents.worldbank.org/curated/en/497251467990390368/Financing-higher-education-in-Africa>

¹⁹ Lim, A. H., and R. Saner. 2011. Rethinking Trade in Education Services: A Wake-Up Call for Trade Negotiators. *Journal of World Trade* 45(5): 993–1034.

²⁰ The OECD (2009a) defines a government-dependent private institution as one where more than 50% of funding comes from government sources. A fully independent private institution receives less than 50%.

²¹ UNCTAD. 2015. World Investment Report 2015: Reforming International Investment Governance. UN, 2015. p. 146. http://unctad.org/en/PublicationsLibrary/wir2015_en.pdf

²² Mughal, M., and N. Vechiu. Does FDI Promote Higher Education? Evidence from Developing Countries. 10th Nordic Conference in Development Economics (NCDE). 2009. p. 1. <http://www.umb.no/statistik/ncde-2009/mughalvechiu.pdf>

growth and human capital accumulation is different.²³ Horizontal, rather than vertical, FDI seeks to enter and gain market shares in a new market in the host country and competes directly with one another and local firms. It also contributes to the host country's technological upgrading and human capital accumulation. Horizontal FDI currently accounts for a larger share of research and development (R&D) activities, which are human capital intensive and have positive spillovers to the local economy.²⁴ A strong and positive relationship was found between FDI and human capital proxied by the level of schooling in 38 developing countries during 1975–2000.²⁵ In general, R&D projects in developing countries have boosted skilled labor demand and increased participation in higher education.²⁶

2.4 New Information Communication Technologies

The advent of new information and communication technologies (ICT) has significantly influenced the way providers deliver education services and students learn around the world. Innovations in ICT have made possible the emergence of new business models in education, such as distance learning or blended courses which combine traditional and online instruction. They have the potential to considerably reduce the delivery cost of education services regardless of location of students. By aggregating the demand globally, online courses attract student numbers that even the largest universities cannot service in traditional settings.²⁷ They can also be used to upskill workers in specific areas including new technologies.²⁸ In addition, ICT can provide researchers with new tools to facilitate data collection, analysis, and dissemination.²⁹

A main challenge, however, is ensuring that less-developed countries have the broadband infrastructure required to benefit from the use of new ICT in education. Internet access has grown substantially, and in 2015, 3.2 billion people were online.³⁰ However, only one of ten in least developed countries had Internet access. Another challenge is making sure that education institutions and students can make use of ICT in education. A number of priority areas for governments include connecting universities to the Internet and mobile broadband, as well as training professors on how to integrate ICT tools into teaching.³¹

²³ Beugelsdijk, S., R. Smeets, and R. Zwinkels. 2008. The impact of horizontal and vertical FDI on host's country economic growth. *International Business Review* 17(4): 452–472.

²⁴ UNCTAD Secretariat. 2004. The impact of FDI on development: globalization of R&D by transnational corporations and implications for developing countries.

²⁵ Nunnenkamp, P. 2002. Determinants of FDI in Developing Countries: Has Globalization Changed the Rules of the Game?" Kiel Working Paper No. 1122. Kiel: Kiel Institute for World Economics. p. 120.

²⁶ Footnote no. 22, p. 3.

²⁷ Becker-Lindenthal, H. 2015. Students' Impression Management in MOOCs: An Opportunity for Existential Learning? *MERLOT Journal of Online Learning and Teaching* 11(2): 320–330.

²⁸ The Earth Institute, Columbia University; and Ericsson. 2016. *ICT & SDGs Final Report: How Information and Communications Technology can Accelerate Action on the Sustainable Development Goals*. <https://www.ericsson.com/res/docs/2016/ict-sdg.pdf>

²⁹ Footnote no. 4, p. 17.

³⁰ Footnote no. 4, p. 23.

³¹ Footnote no. 4, p. 49.

2.5 Rise of Global Value Chains and the Global Knowledge Economy

Many developing countries are rapidly moving toward high value-added manufacturing and knowledge intensive industries that are structured around global value chains (GVCs), which require more technical and vocational education. With GVCs, production is split into different phases with various intermediate goods sourced both domestically and from third countries. Currently, about 60% of global trade accounting for more than \$20 trillion consists of trade in intermediate goods and services that are incorporated at various stages into the production process before final consumption.³² The rise of GVCs has produced a new “trade-investment-services-know-how nexus,” a movement of capital and ideas, and greater demand for services to coordinate the dispersed production and distribution of goods and services.³³ For instance, much of the value of the product does not only come from the manufacturing, but also from the associated services such as software, design, marketing, etc.

Trade in education services can allow countries to further participate in GVCs and develop the skills needed to provide various services, including business services, accountancy, design, and R&D. There is a directly proportional relationship between the growth rate of knowledge and the growth rate of the economy. Hence, proper education policies can be an important factor in developing such supply-side capacity. It is important and timely to do a thorough analysis of factors and policy areas where additional policy attention could be directed to secure entry and to expand and upgrade participation within GVCs. Figure 2 shows the recommendations related to higher education grouped under three objectives. The recommendations are not exhaustive and would have to fit country-specific circumstances.

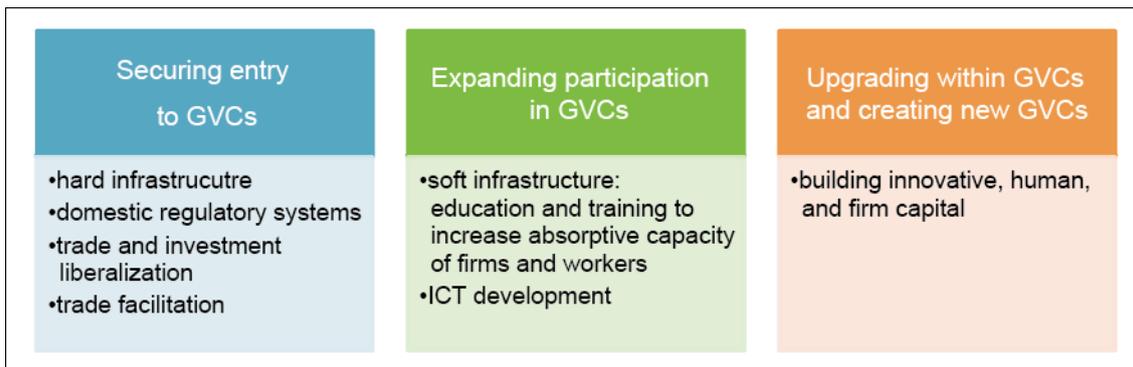
For small and low-income countries to secure entry to GVCs, they need to upgrade their physical infrastructure, undertake domestic regulatory reforms, and establish a supportive and coherent trade and investment framework. But countries also need education and training to increase the absorptive capacity of firms and workers, as well as improved education and ICT. For both domestic and foreign value chains, local producers are often small and medium-sized enterprises that account for the majority of industrial employment. They are reportedly constrained in their ability to enter GVCs both in developed and developing countries due to the lack of adequate skills in the workforce.³⁴ This is often delayed and inadequately supplied by public training institutions (footnote no. 34). For low income and developing countries to join GVCs and expand participation, developing (or importing) the right education and training for their workforce would increase the capacity of firms to deliver services and intermediate goods.

³² UNCTAD, 2013. World Investment Report 2013: Global Value Chains: Investment and Trade for Development. UN, 2013. http://unctad.org/en/PublicationsLibrary/wir2013overview_en.pdf

³³ OECD. 2014. *Global Value Chains: Challenges, Opportunities, and Implications for Policy*. https://www.oecd.org/tad/gvc_report_g20_july_2014.pdf

³⁴ UNCTAD, 2010. Integrating Developing Countries' SMEs into Global Value Chains. UN, 2010. http://unctad.org/en/Docs/diaeed20095_en.pdf

Figure 2: Key Education Policy Priority Areas for Supporting Participation in Global Value Chains



GVCs = global value chains, ICT = information and communication technology.

Source: United Nations Economic and Social Commission for Asia and the Pacific. 2015. *Asia-Pacific Trade and Investment Report 2015: Supporting Participation in Value Chains*. Bangkok.

In particular, to facilitate participation in GVCs, governments may need to focus more on technical and vocational education, which can improve the performance of specific tasks. In a survey carried out by the United Nations Conference on Trade and Development (UNCTAD) regarding SMEs’ participation in GVCs, the majority of case studies revealed a delayed and inadequate response of public training institutions to new skills development and in some cases even to basic skills needs.³⁵ A technically skilled labor force is often central to ensuring standards compliance, including the tracing of foodstuffs, or ensuring each product run in the factory meets quality requirements. Without adequate human capital, developing countries often face bottlenecks in filling key technical positions to meet the process of upgrading requirements of GVCs (footnote no. 33).

As more countries secure entry to GVCs, expanding and upgrading participation has become one of the key, if not the most important, factors determining future economic growth and prospects for sustainable development. The role of tertiary education in this area is significant. For instance, in addition to technical competences, policies could include the provision of education and training in higher level skills, such as languages, and professional qualification.³⁶ Participation in GVCs is a dynamic process, and to stay competitive continual investment in developing human and firm capital is needed. It is not sufficient to acquire new machines, for example, for technology transfer to be effective and sustainable; both workers and local engineers need to have the capacity to absorb new techniques and adapt them to domestic conditions (footnote no. 36). Finally, as a new sector emerges, it is important to create advanced and specialized skills that would not distort the market and damage the internal dynamism of the private sector.³⁷

Once participation in GVCs is expanded, governments also need to manage the interdependencies that come with greater economic integration. In particular, the social aspects will require special attention. Enabling GVC development will increasingly

³⁵ Footnote no. 34, p. 18.

³⁶ United Nations, Economic and Social Commission for Asia and the Pacific (2014). *Asia-Pacific Trade and Investment Report 2014: Trends and Developments*. Sales No. E.15.II.F.2. Available from www.unescap.org/resources/asia-pacific-tradeand-investment-report-2014-recent-trends-anddevelopments.

³⁷ Footnote no. 34, pp. 19–20.

require more international cooperation and coordination in education among governments. As cross-border education (CBE) can benefit both sending and receiving countries, aligning educational systems with international standards is seen widely as a key means of improving the economy's overall competitiveness.

3. TRADE IN EDUCATION SERVICES AND INTERNATIONAL TRADE AGREEMENTS

A wide variety of national policy frameworks exist for the provision of trade in education services. Host country's policies toward the internationalization of higher education play a key role in determining the scope, form, and depth of transnational education.³⁸ The level and form that market opening may take will rely on a variety of policy considerations. While all countries will benefit from more open trade in education services, countries may have different needs or priorities. In general, the provision of education is considered the responsibility of governments. This is particularly the case for primary and secondary schooling (also called "compulsory education"). While in most countries public and private providers of basic education services coexist, the role of international trade has been limited. This is also reflected in trade agreements, where governments have been less prone to bind commitments directed to open primary and/or secondary education to outside competition, as compared with higher education.³⁹ Nonetheless, trade liberalization of higher education services could have positive spillovers on basic education. One of the SDGs goals on education is the substantial increase of qualified teachers by 2030. Increasing education opportunities in the field of teaching through the different modes of delivery of higher education services could help to cope with the shortage of qualified teachers that exists at the basic level, particularly in less developed countries. Given the importance of basic education for sustainable development, the spin-offs of opening trade in higher education for improving domestic capacity at the basic level should be considered. As explained below, the General Agreement on Trade in Services (GATS) provides enough flexibility for governments to open markets according to their own situation.

While the trends discussed in the first section point toward the internationalization of education, the role of international trade agreements and their potential contribution toward the SDGs has barely been examined. Trade agreements can contribute in several ways. First, they can facilitate reforms aimed at opening the sector to help meet the increasing demand for higher education by reducing barriers to entry and competition. Second, they can help attract FDI and new providers of education services by ensuring a level playing field among providers as well as transparency and predictability of education regulations. Third, trade agreements can spur the accompanying regulations to help reap the benefits of opening trade in education while safeguarding national and global policy objectives such as quality and equity in education.

³⁸ Zimny, Zbigniew, *Foreign Direct Investment in Education* (December 18, 2011). Available at SSRN: <https://ssrn.com/abstract=2433876> or <http://dx.doi.org/10.2139/ssrn.2433876>

³⁹ Similarly, within the context of the General Agreement on Trade in Services (GATS), the collective proposal presented in the WTO Doha negotiations on trade in education services focused on higher education.

3.1 Education Services and the General Agreement on Trade in Services

The GATS is the only international agreement dealing with global rules for services trade including trade in education services. It aims at progressively liberalizing trade in services as a means of promoting economic growth and development.⁴⁰ The agreement seeks to ensure that services trade is conducted in a predictable and transparent environment, and without discrimination among services and service suppliers from different Members. This is also known as the most favorite nation (MFN) principle.⁴¹ There is no obligation to open markets under the GATS. The agreement recognizes WTO Members' right to regulate the supply of services within their territories to meet national policy objectives. The combination of GATS commitments and properly designed regulations can be used to pursue SDG-related objectives of increasing access to, quality, and equity in education services.

The GATS Modes of Supply and the Different Forms of Provision of Education Services

The GATS defines "trade in services" as the supply of a service through four modes of supply, which cover virtually all internationally services transactions. The internationalization of trade in educational services has resulted in a rich array of providers and ways of delivering educational services across the globe. Furthermore, advances in ICT are increasingly allowing the delivery of education services through the combination of two or more modes of supply at the same time.

Mode 1 (cross-border supply) refers to education services supplied across the border. It covers international online education, as well as other forms of delivery that usually involve foreign and domestic providers such as franchising and twinning arrangements. These forms of delivery do not require the "presence" of the foreign supplier and are becoming increasingly popular in the education sector. Mode 2 (consumption abroad) refers to the situation where the consumer (e.g., student) moves to a foreign country to study. Majority of trade in education services falls under mode 2. Mode 3 (establishment or investment) takes place when a foreign education provider establishes a commercial presence (e.g., a campus) in another territory to supply higher education services. Mode 4 (temporary presence of natural persons) describes the situation where a natural person (e.g., teacher or academic) supplies a service in a foreign territory, for instance, as a self-employed supplier or as an employee of a foreign university established in a country. Depending on their policy objectives, governments may decide to prioritize certain modes of delivery of higher education services taking into consideration the complementarity that exists among the different modes. The next section will look at each of these modes of delivery of education services from the perspective of SDGs.

⁴⁰ See GATS Preamble, second paragraph.

⁴¹ The MFN obligation applies to any measure affecting trade in services in any sector falling under the GATS, irrespective of whether specific commitments have been undertaken or not. For instance, a Member may have chosen not to open the sector to foreign services and services suppliers. In such a case, according to the MFN obligation, it cannot subsequently decide to open the market to providers of some Members but not to others. Members could seek exceptions to the MFN obligations at the time of entry into force of the WTO Agreement (or date of accession). MFN exceptions specific to education have been listed only in three occasions.

Higher Education Services under the GATS

As mentioned earlier, the SDG goals in education refer to technical, vocational, and tertiary education including university, which are comprised under the term “higher education” in this paper. In the WTO Services Sectoral Classification List,⁴² the subsector of higher education includes educational services leading to a university degree or equivalent as well as post-secondary technical and vocational education (not leading to a university degree).⁴³ Members may depart from such classification when undertaking commitments in trade in education services according to their own circumstances. This flexibility is relevant since new providers and new learning activities do not always easily fit under existing categories.⁴⁴ In those cases, they are recommended to be sufficiently clear in their descriptions.

The GATS scope of application is broad as it applies to all government measures “affecting trade in services” in practically all sectors, with two exclusions. The most relevant to education services relates to services supplied in the exercise of “governmental authority,” meaning any service provided “neither on a commercial basis nor in competition” with one or more services suppliers.⁴⁵ The GATS does not however define “competition” or “commercial basis.” There is also no unified model of governmental provision of education services since national traditions and education systems differ. For some countries, the public sector is the main provider of education. In others, private education plays a very important role and both the public and private sector coexist in the delivery of education services. A similar situation exists for other service sectors that feature an important public service aspect, such as health services.⁴⁶

Although the public sector is an important education service provider, this does not necessarily mean that education is a public good. Public goods in economic analysis are defined by two characteristics: (i) non-excludability and (ii) non-rivalry in consumption. In other words, individuals cannot be effectively excluded from consuming the good and consumption by one individual does not reduce availability to others. Education does not meet these conditions as it can be made excludable and

⁴² The list is used by most WTO Members for preparing their schedules of commitments in trade in services, including education services. It is based on the UN Provisional Central Product Classification List (CPC), which divides education services into five subsectors: (i) primary education; (ii) secondary education; (iii) higher education, which comprises post-secondary technical and vocational education (not leading to a university degree), as well as higher education services leading to a university degree or equivalent; (iv) adult education (outside the regular education system); and (v) other education services (not elsewhere classified).

⁴³ Later reviews to the CPC include two separate categories: (i) “post-secondary not tertiary education” leading to a labor-market relevant qualification, and (ii) “tertiary education” leading to a university degree or equivalent.

⁴⁴ The CPC has been later revised more than once to reflect changes in the sector and the realities of the market such as the entrance of new providers. The main differences are the distinction made between tertiary and non-tertiary education (degree and non-degree “higher education”), overlap between adult education and “other education,” as well as the classification of training and non-instructional activities. See also WTO. 2010. Education Services, Background Note by the Secretariat, Council for Trade in Services, document S/C/W/313, 1 April.

⁴⁵ See Article 1.3, sub-paragraphs (b) and (c). The GATS also excludes air transport services from its scope of application. The agreement does not define the terms “commercial basis” or “competition.” Some factors that could be taken into consideration when analyzing whether educational services are provided on a commercial basis or competition may include (i) the profit or nonprofit nature of the service provided, (ii) who owns the facilities or infrastructure, and (iii) to what extent education providers receive government assistance or not.

⁴⁶ For a discussion of public services, see Adlung, R. 2005. Public Services and the GATS. WTO Working Paper ERSD 2005-03. Geneva: Economic Research and Statistics Division.

there is rivalry in consumption. On the other hand, education has strong positive externalities and benefits accrue not only to the individual but to society at large. There are both private and public benefits from having people consume more education. This is why the sector does receive significant public investment, but at the same time the individual is often also expected to share in the costs. The exact proportion between public and private expenditure can only be determined on a case-by-case basis, and it may vary among countries and over time (footnote no. 60). Under the GATS, there is full flexibility to cater to all situations, from having no sector commitments (in which case there would not be any market access or national treatment obligations) to scheduling specific commitments with limitations inscribed. As discussed below, there are many ways by which specific commitments can be conditioned to suit national policy objectives.

GATS Flexibilities and SDGs

One of the issues which might arise in a discussion of SDGs is whether there is sufficient flexibility to safeguard non-trade policy objectives in education. Under the GATS, much flexibility has been built into the agreement. Members determine the sectors and subsectors in which they want to grant foreign providers market access and national treatment (nondiscrimination between national and foreign services and services suppliers). These obligations are undertaken *per* mode of supply. This allows governments to tailor bindings according to their own situation and policy objectives.⁴⁷

First, Members may circumscribe the scope of their commitments based on a description of the part of the sector they want to commit. For instance, some Members have limited their commitments based on the source of funding by stating that these apply to “privately funded education services,”⁴⁸ while others have limited commitments to “private education” only.⁴⁹ Such distinctions have been used because many national systems involve a mix of public and private providers, and the Member wishes to clearly demarcate the activities for which market access obligations have been undertaken.⁵⁰ Second, even when the sector has been committed, the obligations on market access⁵¹ and national treatment⁵² can still be made subject to limitations. For instance, some countries have opened their market to foreign providers of higher education services under mode 3 (commercial presence) but require IBCs to partner with local institutions through joint ventures. Another example would be scholarships or study loans made available only to citizens or residents, which shall be listed as national treatment limitations. Besides, domestic regulations such as approval procedures or requirements (e.g., minimum capital requirements or accreditation

⁴⁷ The level of market opening granted is bound in each Member's schedule of specific commitments for trade in services under the GATS (Article XX of GATS). Members may modify their commitments but only after negotiating with affected Members and subject to compensation (Article XXI of GATS).

⁴⁸ GATS Schedule of the European Union (Germany).

⁴⁹ GATS Schedule of Mexico.

⁵⁰ While public institutions increasingly need to seek private funding and charge tuition fees, private institutions are sometimes eligible for public funds. Knight, J. 2006. Higher Education Crossing Borders: A Guide to the Implications of the General Agreement on Trade in Services (GATS) for Cross-border Education. Report prepared for the Commonwealth of Learning and UNESCO. p. 22.

⁵¹ All measures falling under any of the categories listed under Article XVI: 2 of GATS must be listed in the market access column, no matter whether such measures are discriminatory according to the national treatment obligation.

⁵² The national treatment obligation under Article XVII of GATS requires Members to grant to services and service suppliers of other Members treatment no less favorable than that accorded to its own like services and service suppliers. Unlike Article XVI (market access), Article XVII of GATS does not include a list of the types of measures which would constitute limitations on national treatment.

status) applied as conditions to obtain a license do not need to be listed if they do not fall under the market access and national treatment obligations.⁵³ Those requirements are not currently subject to disciplines on necessity or trade restrictiveness.

Notwithstanding the flexibilities referred to above, education is one of the sectors that has attracted the lowest level of commitments. In total, 58 Members out of 162 (counting the European Union [EU] as one) have undertaken commitments in education.⁵⁴ Of these 58 Members, 50 have committed in “higher education,” the subsector with the highest number of commitments. Primary education shows the lowest level of commitments (after “other education services,” which constitutes a residual category). Except for acceding Members,⁵⁵ in general, developing countries have a lower level of commitments in education services compared with their developed counterparts. Within the context of the Doha negotiations, there was a collective request for commitments in the education sector with a focus on private higher education. However, since the negotiations did not conclude, no new commitments resulted.

That being said, many developing countries have introduced important reforms in their education systems in recent years, allowing the entrance of foreign providers of educational services. In reality, market access conditions for higher education may be much more liberal than what are reflected in trade agreements. Thus, there may be considerable scope to bind some, if not all, of the reforms through trade commitments, and to use that as a means to attract investment to achieve SDGs in education.

3.2 The Modes of Supply of Education Services from the Perspective of Sustainable Development Goals

The demand for international education is expected to increase from 1.8 million international students to 7.2 million in 2025.⁵⁶ While student mobility (mode 2) represented until recently the main form of supply of international trade in education, recent trends referred to in section 2 have paved the way to new providers and forms of delivering education services. While all modes of delivery can contribute toward the SDGs, each mode raises different implications. For instance, mode 3 (commercial establishment) offers greater opportunities to enhance locally quality and capacity in the sector, as well as to reduce shortages of skilled human resources; while mode 1 (CBE including distance education) could potentially promote accessibility at a larger scale in the future, provided minimum levels of quality are met. Similarly, there are potential drawbacks or challenges uniquely associated with each mode of supply. From a policy perspective, the complementary relationship between the different modes of supply should be kept in mind when designing national education policies and undertaking commitments for trade in education.

⁵³ Article VI of GATS on domestic regulation.

⁵⁴ WTO Integrated Trade Intelligence Portal (I-TIP). <http://i-tip.wto.org/services/default.aspx> (accessed 2 October 2016).

⁵⁵ Commitments made by recently acceded Members (those that acceded to the WTO after its establishment in 1995) are particularly high. As a result of accessions, the sectoral coverage of developing countries and economies in transition is wider than that of developed Members.

⁵⁶ Böhm, Davis, Meares, and Pearce. 2002. *Global Student Mobility 2025: Forecasts of the Global Demand for International Higher Education*. IDP Education Australia.

Table 1: Main Forms of Delivery of Higher Education Services

GATS Mode	Main Feature	Main Advantages from SDGs Perspective	Main Issues and Potential Drawbacks
Cross-border supply—CBE (mode 1)	Program mobility Examples: – Franchising and twinning arrangements – Online education	<ul style="list-style-type: none"> – Enhance access and study offer at a large/global scale – Promote universal access (to the extent it remains affordable) – Increase flexibility and availability of study programs 	<ul style="list-style-type: none"> – Internet infrastructure (broadband) not always available – Local presence requirements, restrictions on cross-border information – Regulatory challenge of ensuring minimum standards of quality more prominent given its cross-border nature
Consumption abroad (mode 2)	Student mobility: studying abroad	<ul style="list-style-type: none"> – Increase education opportunities abroad – Access to high quality education – Gain international experience – Promote cultural understanding 	<ul style="list-style-type: none"> – High costs – Often subject to availability of funds/scholarships – Risk of brain drain – Migratory restrictions
Commercial presence (mode 3)	Provider/institution mobility: Establishment of foreign educational institutions including international branch campuses and joint ventures with local institutions	<ul style="list-style-type: none"> – Attract FDI toward education – Improve access and offer locally – Improve quality and capacity domestically – Develop skilled human resources – Reduce brain drain 	<ul style="list-style-type: none"> – Requires regulatory framework to attract FDI – Capacity to attract foreign providers varies among countries (e.g., depending on market size) – Restrictions on foreign suppliers, equity participation
Presence of natural persons (mode 4)	Academic mobility: Teachers, lecturers, researches providing education services abroad	<ul style="list-style-type: none"> – Increase availability of qualified teachers – Increase research opportunities – More opportunities for academic exchange 	<ul style="list-style-type: none"> – Migratory restrictions

CBE = cross-border education, FDI = foreign direct investment, GATS = General Agreement on Trade in Services, SDGs = Sustainable Development Goals.

Source: Authors' chart based on taxonomy developed by the Organisation for Economic Co-operation and Development and the World Trade Organization Background Note on Education Services.

Increasing Education Opportunities Abroad through Student Mobility (mode 2)

Studying abroad offers advantages such as an international quality education with worldwide recognition and better career prospects. The number of students pursuing studies abroad grew from 2 million students in 2000 to 4.1 million in 2013.⁵⁷ This increase of mobile students suggests that the growing demand for higher education often exceeds local capacity. The largest numbers of international students in absolute terms are from the People's Republic of China, India, and the Republic of Korea, with Asian students accounting for 52% of all students abroad.⁵⁸ The second region with

⁵⁷ See more at UNESCO. Higher Education. <http://www.uis.unesco.org/Education/Pages/international-student-flow-viz.aspx#sthash.bgEZoTdY.dpuf>

⁵⁸ This group grew from 67,300 in 2003 to 165,542 in 2013, with the outbound mobility ratio more than doubling from 3.5% to 7.6%. OECD. 2011. *Education at a Glance 2011: Highlights*. Paris: OECD Publishing. http://dx.doi.org/10.1787/eag_highlights-2011-en.

most mobile students is sub-Saharan Africa, where the number of students abroad increased from 204,900 in 2003 to 264,774 in 2013.⁵⁹ This region also faces the greatest challenge in the provision of higher education. While in the case of Asia, most students went to OECD countries, particularly the US (19%), the UK (10%), Australia (6%), and France (6%), most students from Africa decided to study within their region, with South Africa as the main country of destination.⁶⁰

While the number of mobile students has increased steadily during the last decade, some may argue that its contribution to improving access may be limited, particularly compared to other forms of delivery of education services. Participation in student mobility is largely self-financed. Studies have shown a correlation between the level of development of a country and the number of students studying abroad. Although student mobility also benefits from the availability of scholarships from different sources,⁶¹ this form of funding is unlikely to be able to keep pace with growing developing country demand for higher education. To lower costs, one option could be for students to study in neighboring countries (as it is the case in Africa) provided that educational services remain affordable in those countries. However, this makes the unlikely assumption that countries in the region, which are at the same levels of development and already struggling to meet their own domestic demand, will have the capacity to meet the expectations of foreign students.

Studying abroad allows students to gain international exposure and experience, which may further strengthen their contribution to the workforce of their home country upon their return. However, capturing the benefits will also depend on attracting back skilled graduates and providing opportunities for them to use their new competencies.⁶² While the risk of brain drain exists for all countries, developing countries seem to be more exposed. According to some estimates, up to a third of R&D professionals from the developing world are believed to reside in OECD countries (footnote no. 79). For instance, survey evidence shows that 1990–1991 PhD graduates from India (79%) and the People's Republic of China (88%) were still working in the US in 1995 (footnote no.79). In practice, only a few governments restrict students from studying abroad. Indeed, student mobility has the highest percentage of full commitments in market access under the GATS—75% for higher education. Given the benefits of having citizens educated abroad, the best course of action may be for developing countries to find other ways to address the risk of brain drain rather than to curb mobility through trade restrictions. There are both push and pull factors, including political instability in the home country or better education and job prospects in the host country, which may lead to brain drain. Some countries have adopted special policies to mitigate the risks of brain drain, such as providing incentive mechanisms to encourage regular returns home and more research opportunities. In some cases, they have also developed means of capturing the benefits and know-how of having highly skilled people overseas, for example, by connecting them to domestic researchers through scientific networks (footnote no. 79). Indeed, science and R&D policies are deemed crucial in fostering the return of skilled migrants. In general, the best prospects may be provided

⁵⁹ UNESCO. 2012. *New Patterns in Study Mobility in the Southern African Development Community*. UNESCO Institute for Statistics. <http://www.uis.unesco.org/FactSheets/Documents/ib7-student-mobility-2012-en.pdf>

⁶⁰ UNESCO. *New Patterns in Study Mobility in the Southern African Development Community*, p.9.

⁶¹ Scholarships provided by governments and nongovernment organizations, and public and private institutions.

⁶² See Cervantes, M., and D. Guellec. 2002. *The brain drain: Old myths, new realities*. *OECD Observer* 230. http://oecdobserver.org/news/printpage.php/aid/673/The_brain_drain:_Old_myths,_new_realities.html

by the overall country's situation and better career opportunities. In this regard, long-term policies aimed at building the domestic innovation infrastructure and enhancing the business environment are key.⁶³

Attracting FDI to Increase Access Domestically and Develop Skilled Human Resources, while Enhancing Local Capacity in Education (mode 3)

The number of IBCs⁶⁴ has grown steadily over the past years, from 82 branch campuses in 2006 to 200 in 2011.⁶⁵ The Observatory on Borderless Higher Education (OBHE) expects the number to reach 280 by 2020.⁶⁶ From the perspective of SDGs, the establishment of IBCs offers unique advantages and spillovers to the host country, which range from increasing local access and skilled human resources to enhancing quality and capacity building domestically. In terms of access, IBCs might reduce the risks of brain drain as the domestic supply of education is improved. IBCs can also contribute to developing an educated workforce, which would help countries to be more competitive in the global market. The main advantage of IBCs compared to other forms of supply may be the opportunity they offer for building capacity locally and strengthening the domestic education system (in both public and private institutions). Spillovers include encouraging the use of new technologies and curricula, more academic mobility, and further research opportunities.

Many developing countries have adopted policies aimed at attracting foreign providers of education services in the past years.⁶⁷ Those policies may include incentives provided by governments in the form of capital and infrastructure, which are made conditional to certain requirements such as ensuring the quality and relevance of the education services rendered (e.g., ensuring programs in areas where human resources or training are needed). As IBCs are mainly revenue-driven and require heavy investment, the existence of a clear regulatory framework in the host country is crucial to mitigating risks and attracting providers of high quality education services. The highest numbers of IBCs are in Asia (People's Republic of China 33, Malaysia 14, and Singapore 14)⁶⁸ and the Middle East (United Arab Emirates 48, Qatar 11). The People's Republic of China, Malaysia, and Viet Nam stand out among those countries trying to build capacity in the domestic private sector or improve quality in the public sector.⁶⁹

⁶³ See also Z. Zimny . Foreign Direct Investment in Education, p. 41 (see footnote 52).

⁶⁴ The Observatory on Borderless Higher Education (OBHE) defines IBCs as an initiative operated by the institution or through a joint venture in which the institution is a partner in the name of the foreign institution and where upon successful completion of the course program, which is fully taken at the unit abroad, students are awarded a degree from the foreign institution.

⁶⁵ Lawton, W., and A. Katsomitros. 2012. *International branch campuses: data and developments*. OBHE.

⁶⁶ Lawton, W., M. Ahmed, T. Angulo, A. Axel-Berg, A. Burrows, and A. Katsomitros. 2013. *Horizon Scanning: What will higher education look like in 2020?* OBHE, p. 20.

⁶⁷ See also McBurnie, G., and C. Ziguas. 2007. *Transnational Education: Issues and Trends in Offshore Higher Education*. https://www.researchgate.net/publication/225084092_Transnational_Education_Issues_and_Trends_in_Offshore_Higher_Education

⁶⁸ Cross-Border Education Research Team. Branch Campus Listing. Data originally collected by K. Kinser and J. Lane. <http://globalhighered.org/branchcampuses.php> (accessed 3 August 2016).

⁶⁹ Bashir, S. 2007. Trends in International Trade in Higher Education: Implications and Options for Developing Countries. World Bank Education Working Paper Series 6. Washington, DC: World Bank.

While developed countries (notably the US, the UK, and Australia) continue to account for the largest share of all existing IBCs, attracting around 77% of students worldwide, providers from developing countries are also starting to establish branch campuses in other countries. These developing countries are now not only “importers” of higher education services but also “exporters.” A number of Asian institutions, notably in India, the People’s Republic of China, and Malaysia are establishing IBCs in Asia and Africa.(see footnote 93) They appear willing to invest in other countries, including low-income countries, which would normally not attract developed country investors or providers. Some other developing countries (such as Singapore, Malaysia, Mauritius, Qatar, and United Arab Emirates) are also attracting foreign universities to create “regional hubs” for international students within their region.⁷⁰ Both strategies constitute a new trend in international trade of education services (footnote no. 87). From the perspective of SDGs, these regional hubs provide students in less-developed countries with education opportunities with worldwide recognition at a much-lowered cost.

For the 50 Members, which have undertaken commitments in higher education, the level of full commitments for mode 3 is relatively low (47%). Members have listed limitations such as quotas to restrict the number of suppliers, nonuse of subsidies for studying in foreign institutions established locally, as well as foreign equity capital limits and discriminatory fiscal measures. GATS commitments do not however reflect the actual situation in a number of developing countries where the sector has been opened and many of the restrictions mentioned above eliminated. As those traditional barriers are reduced, regulatory issues are becoming more prominent. The last section will focus on regulatory challenges affecting trade in education and the possible role of trade agreements in helping to overcome them.

Increasing the Supply of Qualified Teachers and Promoting Academic Mobility (mode 4)

The SDG targets include substantially increasing the supply of qualified teachers by 2030. Trade liberalization of higher education services could have positive spillovers. Easing restrictions for education professionals can contribute to improving the shortage of qualified teachers, a problem that exists in many developing countries. Mode 4 education commitments under trade agreements would apply mainly to teachers and academics travelling to provide education services on a nonpermanent basis, as well as to managers or staff travelling abroad to set up institutions or franchise and twinning arrangements(footnote no. 58). Further, liberalization of mode 4 might also support other forms of education services delivery, such as by IBCs through commercial presence. Some recent preferential trade agreements (PTAs) have included specific commitments to facilitate the mobility of education professionals specifically for those purposes.⁷¹ The mobility of people under mode 4, however, raises sensitive immigration-related issues. Although intended to be nonpermanent and entitlement is gained through mode 4, there are often concerns that the persons may stay on and not return to their home country. Not surprisingly, despite its potential contribution, mode 4 has attracted the lowest level of commitments under the GATS.

⁷⁰ See for instance Knight, J. 2010. Regional Education Hubs—Rhetoric or Reality. *International Higher Education* 59: 19–20.

⁷¹ See for instance the Trans-Pacific Partnership (TPP) – Annexes on Temporary Entry for Business Persons of Japan, Malaysia, and Viet Nam.

Taking Advantage of ICT to Increase Education Opportunities through CBE including Distance Education (mode 1)

One of the main aspects of the internationalization of higher education is the significant growth of CBE due to ICT innovations. Education models such as franchising and twinning arrangements between foreign education providers and local institutions, as well as pure distance learning, have expanded in scope and depth. From the perspective of SDGs, CBE can greatly contribute to increase access to higher education and provide more education opportunities at a lower cost, thereby also promoting inclusiveness.

Franchising and twinning arrangements⁷² do not involve the establishment of the foreign provider, and thus they require less capital investment. At the same time, they are not subject to the same administrative requirements which normally apply to IBCs. They allow students to enroll in a foreign institution and receive a foreign qualification at a reduced fee, while staying partially or fully in their home country throughout the duration of the course. Besides increasing accessibility, CBE also increases the range of programs available in the receiving countries. In addition, it provides capacity building opportunities to local institutions, which can learn from the experience of foreign providers. But the highest potential for contribution toward the SDGs arguably comes from massive open online courses (MOOCs), which can provide a cost-effective means of increasing access to higher education especially in developing countries.

A recent study from 212 countries found that online learners from lower socioeconomic backgrounds are significantly more likely to report benefits from online learning.⁷³ The emergence of MOOCs,⁷⁴ which offer courses for free, has generated considerable attention in the last years and may well deserve further analysis in light of the SDGs objectives on education. As mentioned earlier, a precondition for enjoying the benefits of distance education is having the necessary internet infrastructure including broadband. Thus, for any strategy for using MOOCs to fulfil education SDGs must assess the adequateness of the ICT infrastructure supporting the Internet.⁷⁵ Unfortunately, there is no available data on the number of students benefitting from online courses, nor on their origin or regional distribution. According to a survey carried out in the UK, the number of students studying wholly overseas for a higher education qualification increased from around 95,000 in 2011 to 503,795 in 2012. Of those students, 113,060 were enrolled abroad via distance education.⁷⁶ The top five receiving countries were Malaysia; Singapore; Hong Kong, China; Pakistan; and Nigeria (footnote no.103).

⁷² Under franchising arrangements, which may take different forms, the local institution is authorized to offer whole or part of the foreign provider's education program. Twinning allows students to enroll in a foreign institution, but students undertake part of their course in a local institution—a mix of program and student mobility (modes 1 and 2).

⁷³ Survey carried out by academics at the University of Pennsylvania and the University of Washington. Wylie, I. 2016. Free Moocs act as try-before-you-buy model for online courses. *Financial Times*. 7 March. <http://www.ft.com/intl/cms/s/2/16214054-cb3b-11e5-a8ef-ea66e967dd44.html#axzz42xzf1FMf>(accessed 3 June 2016).

⁷⁴ Provided through platforms like Coursera, edX, Udacity, and NovoEd.

⁷⁵ The number of Internet users in the last decade surged from 1 billion in 2005 to more than 3 billion in 2015.

⁷⁶ Based on information available at Britain's Higher Education Statistics Agency. See Clark, N. 2012. Understanding Transnational Education, Its Growth and Implications. *World Education News and Reviews*. 1 August. <http://wenr.wes.org/2012/08/wenr-august-2012-understanding-transnational-education-its-growth-and-implications/>

While the model of MOOCs is based on free access,⁷⁷ new ways of generating revenue are being developed as distance learning gains more recognition. Nevertheless, fees paid for online courses will likely remain lower as compared with face-to-face education services. Another advantage of distance education is the possibility it offers to overcome language barriers and thus to reach a broader audience. The language used in international higher education is largely English. While the same applies currently to distance learning, it may be possible to translate online courses to different languages at a faster rate than to train education professionals to teach in different mediums.

After mode 2, CBE has the highest percentage of full commitments in market access for higher education under the GATS (69%). Main limitations include restrictions on the electronic transmission of course material, restrictions on the content of programs, limitations on the number of suppliers, and measures requiring the use of local partner or physical presence of the foreign institution. As explained below, some of these restrictions have been addressed through PTAs. In addition, commitments undertaken under other services sectors (notably telecommunications) could contribute to build the infrastructure and introduce the new technologies needed to take advantage of CBE. Besides, initiatives aimed at increasing interconnectivity in developing countries can also help to make available the Internet infrastructure required in low-income countries.⁷⁸

In addition to infrastructure, quality assurance and consumer protection are key challenges to the promotion of online education. The use of MOOCs, for instance, to reduce the educational gap in developing countries and to contribute to lifelong learning in line with the SDGs will have to be supported by a robust regulatory framework.

3.3 New Developments in Preferential Trade Agreements Relevant to Trade in Education Services

While the GATS sets out the multilateral framework for trade in education services, PTAs provide an additional avenue for WTO Members to make further commitments in higher education.⁷⁹ Up to December 2015, a total of 131 PTAs covering trade in services were notified to the WTO. Building on the GATS, a number of PTAs include improvements in education services across most subsectors.⁸⁰ The impetus of the SDGs may provide momentum for Members to multilateralize those commitments as a way of facilitating trade in education services and supporting the achievement of common sustainable objectives.

⁷⁷ A compilation of MOOCs from courses around the world (for free and most offering certificate) can be found at Financial Times. <http://www.ft.com/intl/cms/s/2/039fb95a-161c-11e3-a57d-00144feabdc0.html#axzz42xzf1FMf>(accessed 3 October 2016).

⁷⁸ It is noteworthy that SDG 9 targets include to “significantly increase access to ICTs and strive to provide universal and affordable access to the Internet in [least developed countries] LDCs by 2020.”

⁷⁹ Those agreements are allowed subject to certain conditions, including notification to the WTO. For agreements liberalizing trade in services, refer to in the GATS as “Economic integration agreements.” Article V of the GATS lays down the applicable conditions.

⁸⁰ See also Martin, R., J. Marchetti, and H. Lim. 2006. Services Liberalization in the New Generation of Preferential Trade Agreement (PTAs): How Much Further than the GATS? WTO Staff Working Paper ERSD-2006-07. Geneva: Economic Research and Statistics Division, WTO. p. 43.

In general, there has been significant activity on private higher education in PTAs with some 168 commitments in total.⁸¹ While a number of PTAs also include commitments in basic education, mainly those following a “positive-list approach,”⁸² these have to be read together with the “public education” reservation usually found in those agreements.⁸³ It is also noteworthy that these commitments have mainly been taken at the level of the applied regime. As compared to GATS schedules, market access commitments in PTAs are of greater scope and depth. Recent PTAs also include some additional commitments and disciplines which can facilitate trade in education services. These include disciplines linked to ecommerce that preclude countries from imposing local presence requirements and rules on the digital economy, which could otherwise curb CBE services (mode1). In addition, latest PTAs include obligations directed at easing the mobility of people for the supply of education services (mode 4).

Prohibiting local presence requirements⁸⁴ such as requiring a representative office and any form of enterprise or residency as a condition to supply a service in a country⁸⁵ would remove an important constraint on foreign online education providers.⁸⁶ The provision on localization requirements is relevant to CBE as it would prohibit requirements on the use of local computing facilities, such as servers, as a condition for providing online education services in a country.⁸⁷

The WTO adopted in 1998 the Work Programme on Electronic Commerce and since then Members have been discussing different aspects related to this area, though no agreement has so far been reached.⁸⁸ A number of PTAs on the other hand already include e-commerce-related provisions.⁸⁹ Some recent PTAs provide not only rules on nondiscrimination and cooperation on the prevention of deceptive practices to protect consumers, but also on cross-border data flows and data localization requirements.⁹⁰ While restrictions on cross-border data flows often relate to the movement of personal data, localization requirements apply to local storage and processing. The motivations behind these policies generally fall under concerns for

⁸¹ Information extracted from a sample of 77 PTAs notified to the WTO. For more information on Members' commitments in PTAs notified under Article V of the GATS, see WTO I-TIP (footnote no. 70)

⁸² Under the “positive-list approach,” all sectors/subsectors are liberalized unless otherwise specified in each country's list of reservations.

⁸³ This reservation generally covers social services including public education services to the extent they are social services maintained or established for a public purpose.

⁸⁴ This provision is commonly found in PTAs concluded by the US, including the Trans-Pacific Partnership Agreement (TPP).

⁸⁵ See for instance US–Korea (KORUS) and the TPP—a plurilateral PTA concluded by 12 WTO Members in 2015 (ratification in most TPP parties is pending). This obligation should be looked at in conjunction with the reservations made by the parties in the annexes.

⁸⁶ Measures requiring the physical presence of the foreign institution have been identified as one of the main barriers affecting CBE. WTO Background Note by the Secretariat on Education Services, p. 23. The WTO Work Programme on Electronic Commerce states, “Exclusively for the purposes of the work programme, and without prejudice to its outcome, the term 'electronic commerce' is understood to mean the production, distribution, marketing, sale or delivery of goods and services by electronic means.”

⁸⁷ See Article 14.3 of TPP. A covered person includes a service supplier of a party.

⁸⁸ Some GATS provisions already apply to digital trade (e.g., some transparency obligations). Subject to each Member's commitments, the GATS obligations on national treatment and market access may also apply to certain Internet-related services.

⁸⁹ The type and depth of e-commerce provisions vary greatly across PTAs. Examples of PTAs including e-commerce-related provisions are Singapore–Australia (SAFTA), Korea–Singapore, KORUS, and Association of Southeast Asian Nations (ASEAN)–Australia–New Zealand.

⁹⁰ Those obligations are subject to exceptions aimed at protecting legitimate policy objectives. See Articles 14.11.3 and 14.13.3 of TPP.

privacy and security.⁹¹ However, the line between those legitimate concerns and protectionist purposes is often hard to establish.⁹² When overly restrictive, they may affect a wide variety of sectors including education. As mentioned earlier, limitations on the electronic transmissions of course material and course content have been identified as one of the main barriers affecting CBE (footnote no. 58).

Other developments in PTAs that could be of interest is the easing of restrictions of mode 4 service suppliers, which would cover independent education professionals such as teachers, academics, and other staff of education institutions.⁹³ Commitments in mode 4, even in PTAs, however remain modest. That being said, facilitating the movement of education professionals could be an important way by which trade in education services could support SDGs. This is particularly so given the shortage of education professionals in developing and least developed countries.

4. MAIN REGULATORY CHALLENGES CONCERNING TRADE IN EDUCATION SERVICES AND THE SUSTAINABLE DEVELOPMENT GOALS

While trade liberalization can contribute to improving access to and quality in education, it also requires putting in place a complementary regulatory framework to ensure that social objectives are achieved. As governments move away from being the only providers of higher education toward allowing private providers, their regulatory and oversight function becomes more important (footnote no. 52). This poses particular challenges to least developed countries which may not always have the institutional capacity required to develop and enforce the accompanying regulations. Host countries' policies on education are of utmost importance when it comes to deciding where to invest or provide education services (footnote no. 52). The market size of a country, political stability, and other factors (e.g., geographical situation) are also important. Regulatory frameworks should aim at striking a balance between minimizing risks for providers and ensuring that trade opening promotes public objectives in education.

Among the main regulatory issues are ensuring that education services meet minimum standards of quality and that there is equity of access to education. These issues are in turn directly linked to SDGs, namely, ensuring inclusive and quality education. While quality assurance is closely related to the accreditation of institutions and recognition of degrees or qualifications,⁹⁴ equity touches upon the issue of universal access to education. Policy-makers may not think specifically of trade when designing and implementing regulations aimed at safeguarding quality and inclusiveness in education. However, trade agreements can help to address those regulatory issues in a manner that does not hinder the benefits of opening trade in education services, thereby fostering coherence among policy objectives. This section focuses on the potential

⁹¹ OECD. 2015. Emerging Policy Issues: Localisation Barriers to Trade. Working Party of the Trade Committee. TAD/TC/WP(2014)17/FINAL. May.

⁹² Stone, S., J. Messent and D. Flaig (2015), "Emerging Policy Issues: Localisation Barriers to Trade", *OECD Trade Policy Papers*, No. 180, OECD Publishing, Paris, p.9.<http://dx.doi.org/10.1787/5js1m6v5qd5j-en>

⁹³ Immigration requirements would still apply. See, for example, the TPP – Annexes on Temporary Entry for Business Persons of Japan, Malaysia, and Viet Nam, <https://www.mfat.govt.nz/en/about-us/who-we-are/treaties/trans-pacific-partnership-agreement-tpp/text-of-the-trans-pacific-partnership7>

⁹⁴ A distinction must be made between recognition of foreign qualifications for employment purposes and recognition of foreign qualifications for education purposes.

role of trade agreements in helping to overcome the main regulatory challenges in education, with a view of providing some policy options at the end.

4.1 Ensuring the Quality of Education

When it comes to trade, quality assurance and recognition of foreign degrees or qualifications are key factors affecting market access. In principle, there is no reason to apply different quality regimes to foreign providers, although some ways of delivering education services may pose unique regulatory challenges. An international framework on quality assurance and accreditation would certainly help, and some attempts have been made to agree on international rules on quality assurance and accreditation, but so far no international standards exist.⁹⁵

Quality assurance is thus of utmost importance not only for governments in both receiving and home countries, but to all stakeholders involved. On the one hand, students require quality education and protection from fraudulent or substandard providers caused by information asymmetries. On the other hand, education services providers require a transparent and predictable framework on accreditation and recognition, which is based on objective criteria. Last but not least, quality assurance also has implications on the labor market as employers need to have confidence in the value of the degrees and qualifications earned. Some of these challenges are addressed by regional initiatives on the recognition of academic and professional qualifications, including the six UNESCO regional conventions.⁹⁶

However, the expansion of CBE has both amplified and raised new issues. Many institutions which provide cross-border programs typically operate outside the territory in which their services are being delivered, which makes them in many ways “stateless.”⁹⁷ Apart from the question of jurisdiction, for many developing countries that already struggle with quality assurance of local providers, taking on the task of handling low quality or rogue providers and accreditation mills from abroad can be overwhelming.⁹⁸ One way might be to rely on the quality assurance mechanisms of the sending country or those developed by recognized international associations,⁹⁹ .Moreover, countries may need to align their quality assurance mechanisms to their own development objectives, and this may not be taken into account by the sending country. Another problem that may arise is the risk of creating a two-tier system. As private providers will normally target self-financed students, not all sectors of society may benefit equally from more open trade in education. An example might be a brain drain of teachers and academics from public to private institutions due to higher salaries, leading to a decrease of quality in public higher education.

⁹⁵ OECD. 2002. Larsen, K., J. Martin, and R. Morris. 2002. Trade in Educational Services: Trends and Emerging Issues. OECD Working Paper. p. 15.

⁹⁶ Regional Conventions on Recognition of Studies, Diplomas, and Degrees concerning Higher Education, which are binding among the parties to those conventions.<http://www.unesco.org/new/en/education/themes/strengthening-education-systems/higher-education/conventions-and-recommendations/>

⁹⁷ Knight, J. Higher Education Crossing Borders.

⁹⁸ Hopper, R. 2007. Building Capacity in Quality Assurance: The Challenge of Context. In Cross-border Tertiary Education: A Way towards Capacity Development. Paris: OECD Publishing/World Bank. pp. 109–157.

⁹⁹ See, for instance, the International Network for Quality Assurance Agencies in Higher Education. <http://www.inqaah.org/>. But even in those cases, identifying those entities that can provide a reliable quality assurance assessment of CBE providers may be key in view of local capacities and constraints. Hopper, R. Building Capacity in Quality Assurance: The Challenge of Context. pp. 127–128.

How could such challenges be addressed while undertaking trade commitments to open the education sector? In the case of the GATS, governments have the space to adopt any regulations and procedures deemed necessary, including for quality concerns. The main disciplines of the agreement are on transparency and avoiding discrimination, but these do not prevent governments from setting their required education standards and procedures. The GATS only provides a basic stand-still framework to ensure that countries' regulations do not constitute unnecessary barriers to trade. There is a mandate for negotiating further disciplines on domestic regulation, but very limited progress has been achieved so far.¹⁰⁰ Even then, much of the emphasis on the domestic regulation negotiations has been on improving transparency and reducing the administrative burden of obtaining licenses and qualifications. Indeed, such disciplines could help improve the efficacy of the measure. By the same token, international trade negotiations could stimulate policy dialogue among the different agencies and stakeholders involved in the development of quality assurance systems to enhance the effectiveness of those policies and coherence among different objectives.

While the development of quality assurance mechanisms is not within the purview of the GATS, regulatory coherence between rules or guidelines on quality assurance could help trade opening strategies in education. Building on international and regional initiatives, it may be possible to foster regulatory cooperation for the development of a set of basic multilateral principles or nonbinding guidelines which could be used as a basis by national accreditation and quality agencies. A number of initiatives have been taken by different international and regional organizations (e.g., UNCTAD, OECD, Asia-Pacific Economic Cooperation [APEC]) aimed at developing international guidelines for quality provision in higher education. They adopt the form of recommendations based on good practices ("soft law"). The best example is the UNESCO and OECD "Guidelines for Quality Provisions in Cross-Border Higher Education."¹⁰¹

Countries having assumed commitments in higher education under the GATS may decide to undertake additional commitments based on those principles or guidelines as a means of promoting the transparency and predictability of their quality assurance mechanisms. Disciplines on domestic regulation could complement those initiatives by enhancing transparency of education regulations and by easing or speeding up quality accreditation procedures (e.g., reducing timeframes, documentation requirements, and fees).¹⁰² Besides, agreements on the recognition of academic and professional qualifications concluded within the purview of GATS Article VII could also help.¹⁰³ This provision also states that, wherever appropriate, recognition should be based on multilateral criteria and developed in cooperation with governmental and

¹⁰⁰ See GATS Article VI:4 (domestic regulation).

¹⁰¹ They include recommendations for a range of stakeholders and encourage governments to establish mechanisms for accreditation and quality assurance in their territory. See <http://www.oecd.org/general/unescooecdguidelinesforqualityprovisionincross-borderhighereducation.htm>

¹⁰² Leaving aside regulatory substantive criteria (related to the "necessity test") where countries still have very divergent views.

¹⁰³ Article VII provides flexibility for Members to achieve recognition on the education or experience obtained, requirements met or licenses or certifications granted in another country. Those agreements have to be notified to the WTO, and adequate opportunity shall be afforded to other interested Members to accede to such agreements or to negotiate comparable ones. Countries have concluded this type of agreements for certain specific professions and in many cases as part of broader process of integration between two or more countries (e.g., within the EU, APEC). See, for instance, APEC: http://www.apecarchitects.org/index.php?option=com_content&view=article&id=61&Itemid=75

nongovernment organizations.¹⁰⁴ All or some of the elements mentioned above could form part of a WTO sectoral initiative aimed at boosting trade in higher education while addressing pressing regulatory issues with the aim of contributing toward the SDGs. The adoption of the SDGs could also foster a dialogue on promoting sustainable investment in education.

4.2 Issues of Universal Access and Service

Trade in higher education can contribute to increasing supply, which in turn could help to enhance inclusiveness in education. However, universal access and service policies may still be necessary to ensure that certain segments of society are not left unattended. This is particularly the case for developing countries where the basic education needs of the population may not have been fully met. Thus, for international trade agreements to support SDGs in education, they have to contribute to not only increasing supply but to also reducing disparities in access. One way would be to promote the liberalization of new forms of delivery, which are less costly and have potential for scaling up, such as MOOCs and other new methods for the delivery of CBE. To do so, quality assurance mechanisms that are suited to such programs would have to be put in place. The advantage of distance learning with no or limited student mobility is that it is particularly cost-effective.¹⁰⁵

One approach might be to combine market opening with funding mechanisms such as student scholarships and loan schemes.¹⁰⁶ Under such an approach, rather than making funding available only to those students enrolled in domestic institutions, universal access objectives would be better served by making them available to domestic students enrolled in both national and foreign institutions.¹⁰⁷ Given the considerable costs involved, such an option is however unlikely to be pursued. While other funding mechanisms exist (e.g., those made available by international institutions or nonprofit providers), these may not be able to cope with the demand for higher education.

Another option, which would not be constrained by financing, could be to apply “universal services obligations” (USOs) to domestic and foreign providers of education services with the aim of favoring disadvantaged groups.¹⁰⁸ The GATS would not hinder a government’s right to adopt policies and regulations aimed at promoting universal

¹⁰⁴ Article VII paragraph 5. See also WTO Guidelines for Mutual Recognition Agreements in the Accountancy Sector. These are nonbinding guidelines and are intended to be used by governments to make it easier to negotiate agreements on the mutual recognition of professional qualifications. Besides, some PTAs include rules or guidelines aimed at facilitating the mutual recognition of qualifications for certain professions. Such bilateral or plurilateral initiatives could lead to further cooperation in the education sector in the future.

¹⁰⁵ OECD. 2004. Implications of Recent Developments for Access and Equity, Cost and Funding, Quality and Capacity Building. In *Internationalisation and Trade in Higher Education: Opportunities and Challenges*. Paris: OECD Publishing. p. 288.

¹⁰⁶ In the first case, the source is mainly public; while in the second case, it may come from public, nongovernment, or private institutions.

¹⁰⁷ Examples of countries adopting such approach are Malaysia and Thailand. See OECD. 2004. Key Developments and Policy Rationales in Cross-border Post-secondary Education. In *Internationalisation and Trade in Higher Education Opportunities and Challenges*. Paris: OECD Publishing. p. 229.

¹⁰⁸ An example of USO not scheduled includes measures in the health sector requiring all commercially established hospitals to provide 20% of their services to the poor; another example from the financial sector would be measures requiring all banks established in the capital to operate subsidiaries in all other major cities throughout the country. See UNCTAD. 2006. Report of the Expert Meeting on Universal Access to Services held at Palais des Nations, Geneva. TD/B/COM.1/EM.30/3. November. p. 16.

access in education provided that those policies are applied in a nondiscriminatory manner. That being said, not many governments apply USOs on education services providers. There may be several reasons for that. In most cases, USOs are more common in infrastructure or network services, for example, telecommunications. Such measures are typically imposed when the sector is akin to a natural monopoly, and unless the incumbent provides the service, no other player will be able to do so. In the case of education, the sector does not have the characteristics of a natural monopoly, and often multiple suppliers exist, in many cases with public and private education providers operating side by side.

Furthermore, the policy aim might be to make the regulatory environment as conducive as possible for attracting foreign providers of high quality education services, and imposing universal service requirements might be a disincentive. Countries with a small domestic market might also be wary of imposing too many conditions. Ultimately, a balance would need to be struck between opening the market to attract foreign providers and ensuring that public policy objectives such as ensuring universal access to education are met.

The WTO Reference Paper in basic telecommunications is an example of how to strike this balance with explicit recognition of USOs and the right of Members to define their scope, provided that they comply with certain basic principles such as nondiscrimination and transparency.¹⁰⁹ The experience in the telecom sector could arguably be used as a model in other sectors with significant public sector involvement such as education. Indeed, confirming Members' right to use universal services policies consistent with the GATS was discussed as part of the WTO negotiations on domestic regulation.¹¹⁰ The GATS could help by using the reference paper model to make explicit the right to impose USOs, which would support SDGs, while providing some principles under which those obligations can be applied to avoid discrimination. Where minimum requirements are needed, these should be carefully crafted to ensure they do not hinder other policy objectives.

5. CONCLUSION

This paper has discussed how trade has the potential to help increase supply and investment in the education sector, thereby enhance quality and access opportunities in support of SDGs. The reality today is that with or without explicit policies to leverage the role of the private sector, private sources of funding, including FDI, in higher education has become increasingly prominent. Sometimes this is a response to an underfunded public sector, in others it is due to personal career development choices, or it might simply be a response to the lack of sufficient places in public institutions of higher education. Whichever the root cause, private education institutions are competing globally to provide higher education services, and developing and emerging countries are important new markets.

¹⁰⁹ Some have raised concerns about the implications of Article VI:4 on domestic regulation and the "necessity test" on USOs as this provision refers to measures necessary to ensure the "quality of the services providers." Article IV:4 has been under review and some Members have suggested changing the language to include also other legitimate policy objectives, which would include ensuring equity in access.

¹¹⁰ See Second Revision, Draft Disciplines on Domestic Regulation Pursuant to GATS Article VI.4, Informal Note by the Chairman, Room Document, 20 March 2009, para. 12.

Thus, it becomes important for any strategy to achieve SDGs in education to understand the changing dynamics and demands in the sector and to find effective ways to maximize the impact of the private sector. The internationalization of trade in higher education has gone hand in hand with the emergence of new business models and ways of delivering educational services from foreign education institutions bringing “bricks and mortar” investment to online providers offering MOOCs. These developments offer more education opportunities and can enhance inclusiveness. Another dimension to trade and education services and SDGs is how some developing and emerging economies, apart from being importers of education services, have also established regional hubs providing higher education services to other developing countries.

At the same time, the gains from trade and the involvement of the private sector in skills development will not address all education objectives. There is thus a need for an appropriate policy and regulatory framework to ensure quality and inclusiveness. Such a framework need not be at odds with market openings, rather trade in education services needs regulations which help improve predictability, transparency, and confidence in the quality of services provided. Take for instance, cross-border education including online education. This mode of supply may significantly increase access and would benefit from an international framework for quality assurance. This calls for strengthened cooperation between agencies in different countries which would in turn support international trade.

On finding the balance between trade and regulation, and on using regulatory frameworks to support and complement market opening, the GATS provides ample flexibility to meet virtually all policy objectives. The agreement neither sets standards nor prescribes policies or their level of attainment. Rather, that is the prerogative of governments and their agencies. What is required is that the implementation of these policies should be done in a nondiscriminatory manner and not serve as a disguised trade restriction. The framework of international trade agreements and the flexibility provided should be used to support SDGs by reducing barriers to entry and competition in the education sector, by enhancing the transparency and predictability of education regulations which would help attract FDI and new providers of education services, and by spurring the internationalization of education.

REFERENCES

- Adlung, R. 2005. Public Services and the GATS. WTO Working Paper ERSD 2005-03. Geneva: Economic Research and Statistics Division.
- Bashir, S. 2007. Trends in International Trade in Higher Education: Implications and Options for Developing Countries. World Bank Education Working Paper Series 6. Washington, DC: World Bank.
- Becker-Lindenthal, H. 2015. Students' Impression Management in MOOCs: An Opportunity for Existential Learning? *MERLOT Journal of Online Learning and Teaching* 11(2): 320–330.
- Beugelsdijk, S., R. Smeets, and R. Zwinkels. 2008. The Impact of Horizontal and Vertical FDI on Host's Country Economic Growth. *International Business Review* 17.4
- Böhm, A., D. Davis, D. Meares, and D. Pearce. 2002. *Global Student Mobility 2025: Forecasts of the Global Demand for International Higher Education*. IDP Education Australia.
- Bougheas, S., R. Kneller, and R. Riezman. 2011. Optimal Education Policies and Comparative Advantage." *Pacific economic review* 16.5: 538–52.
- Burgess, Ch., et al. 2010. The 'Global 30' Project and Japanese Higher Education Reform: An Example of a 'closing in' or an 'opening up'? *Globalisation, Societies and Education* 8.4: 461-75.
- Cervantes, M., and D. Guellec. 2002. The Brain Drain: Old Myths, New Realities. *OECD Observer* 230. http://oecdobserver.org/news/printpage.php/aid/673/The_brain_drain:_Old_myths,_new_realities.html
- Clark, N. 2012. Understanding Transnational Education, Its Growth and Implications. *World Education News and Reviews*. 1 August. <http://wenr.wes.org/2012/08/wenr-august-2012-understanding-transnational-education-its-growth-and-implications/>
- Experton, W. and C. Fevre. 2010. Financing Higher Education in Africa. Africa Regional Educational Publications. Directions in Development. Human Development. Washington, DC: World Bank. <http://documents.worldbank.org/curated/en/497251467990390368/Financing-higher-education-in-Africa>
- Havergal, C. 2015. Africa's 'Teaching Shops': the Rise of private universities. *Times Higher Education*. 22 October. <https://www.timeshighereducation.com/features/africas-teaching-shops-the-rise-of-private-universities>.
- Hopper, R. 2007. Building Capacity in Quality Assurance: The Challenge of Context. In *Cross-border Tertiary Education: A Way towards Capacity Development*. Paris: OECD Publishing/World Bank.
- Knight, J. 2006. Higher Education Crossing Borders: A Guide to the Implications of the General Agreement on Trade in Services (GATS) for Cross-border Education. Report prepared for the Commonwealth of Learning and UNESCO.
- . 2010. Regional Education Hubs-Rhetoric or Reality. *International Higher Education* 59.
- KPMG International. 2013. *Future State 2030: The Global Megatrends Shaping Governments*. Mowat Centre for Policy Innovation, University of Toronto.

- Kwiek, M. 2002. The Social Functions of the University in the Context of the Changing State/Market Relations. The Global, European Union and Accession Countries' Perspectives. *Issue Paper for the European Commission, Research Directorates General, High Level Expert Group, STRATA Project Developing foresight for higher education/research relations developing in the perspective the European Research Area (ERA)*.
- Larsen, K., J. Martin, and R. Morris. 2002. Trade in Educational Services: Trends and Emerging Issues. OECD Working Paper.
- Lawton, W., and A. Katsomitros. 2012. *International Branch Campuses: Data and Developments*. OBHE.
- Lawton, W., M. Ahmed, T. Angulo, A. Axel-Berg, A. Burrows, and A. Katsomitros. *Horizon Scanning: What will higher education look like in 2020?* OBHE, 2013.
- Lim, H., and R. Saner. 2011. Rethinking Trade in Education Services: A Wake-Up Call for Trade Negotiators. *Journal of World Trade* 45(5): 993–1034.
- Martin, R., J. Marchetti, and H. Lim. 2006. Services Liberalization in the New Generation of Preferential Trade Agreement (PTAs): How Much Further than the GATS? WTO Staff Working Paper ERSD-2006-07. Geneva: Economic Research and Statistics Division, WTO.
- McBurnie, G., and C. Ziguas. 2007. Transnational Education: Issues and Trends in Offshore Higher Education. January. https://www.researchgate.net/publication/225084092_Transnational_Education_Issues_and_Trends_in_Offshore_Higher_Education
- Mughal, M., and N. Vechiu. Does FDI Promote Higher Education? Evidence from Developing Countries. *10th Nordic Conference in Development Economics (NCDE)*. 2009.
- Nunnenkamp, P. 2002. Determinants of FDI in Developing Countries: Has Globalization Changed the Rules of the Game?" Kiel Working Paper No. 1122. Kiel: Kiel Institute for World Economics. p. 120.
- OECD. 2004. Implications of Recent Developments for Access and Equity, Cost and Funding, Quality and Capacity Building. In *Internationalisation and Trade in Higher Education: Opportunities and Challenges*. Paris: OECD Publishing.
- . 2004. Key Developments and Policy Rationales in Cross-border Post-Secondary Education. In *Internationalisation and Trade in Higher Education Opportunities and Challenges*. Paris: OECD Publishing.
- . 2008. *Higher Education to 2030, Volume 1, Demography*. Paris: OECD Publishing.
- . 2011. *Education at a Glance 2011: Highlights*. Paris: OECD Publishing. http://dx.doi.org/10.1787/eag_highlights-2011-en.
- . 2014. *Global Value Chains: Challenges, Opportunities, and Implications for Policy*. https://www.oecd.org/tad/gvc_report_g20_july_2014.pdf
- . 2015. *Education at a Glance 2015, OECD Indicators*. Paris: OECD Publishing. http://www.oecd-ilibrary.org/education/education-at-a-glance_19991487
- Stone, S., J. Messent and D. Flaig. 2015. Emerging Policy Issues: Localisation Barriers to Trade, *OECD Trade Policy Papers*, No. 180, OECD Publishing, Paris. <http://dx.doi.org/10.1787/5js1m6v5qd5j-en>

- The Earth Institute, Columbia University; and Ericsson. 2016. ICT & SDGs Final Report: How Information and Communications Technology can Accelerate Action on the Sustainable Development Goals. <https://www.ericsson.com/res/docs/2016/ict-sdg.pdf>
- The Economist. 2015. The World is Going to University. 28 March. <http://www.economist.com/news/leaders/21647285-more-and-more-money-being-spent-higher-education-too-little-known-about-whether-it>
- UNCTAD Secretariat. 2004. The impact of FDI on development: globalization of R&D by transnational corporations and implications for developing countries.
- UNCTAD, 2010. Integrating Developing Countries' SMEs into Global Value Chains. UN, 2010.
- . 2013. *World Investment Report 2013: Global Value Chains: Investment and Trade for Development*. UN, 2013.
- . 2006. Report of the Expert Meeting on Universal Access to Services held at Palais des Nations, Geneva. TD/B/COM.1/EM.30/3. November.
- . 2015. *World Investment Report 2015: Reforming International Investment Governance*. UN, 2015.
- UNESCO. 2011 Global Education Digest 2011, *Comparing Education Statistics Across the World, Institute for Statistics*. http://www.uis.unesco.org/Library/Documents/global_education_digest_2011_en.pdf
- . 2012. New Patterns in Study Mobility in the Southern African Development Community. UNESCO Institute for Statistics. <http://www.uis.unesco.org/FactSheets/Documents/ib7-student-mobility-2012-en.pdf>
- United Nations, Economic and Social Commission for Asia and the Pacific (2014). Asia-Pacific Trade and Investment Report 2014: Trends and Developments. Sales No. E.15.II.F.2. Available from www.unescap.org/resources/asia-pacific-tradeand-investment-report-2014-recent-trends-anddevelopments.
- University of Oxford. 2015. International Trends in Higher Education 2015. International Strategy Office. <https://www.ox.ac.uk/sites/files/oxford/International%20Trends%20in%20Higher%20Education%202015.pdf>
- WTO, Draft Disciplines on Domestic Regulation Pursuant to GATS Article VI.4, Informal Note by the Chairman, Room Document, 20 March 2009.
- WTO. 2010. Education Services, Background Note by the Secretariat, Council for Trade in Services, document S/C/W/313, 1 April.
- Wylie, I. 2016. Free Moocs act as try-before-you-buy model for online courses. *Financial Times*. 7 March. <http://www.ft.com/intl/cms/s/2/16214054-cb3b-11e5-a8ef-ea66e967dd44.html#axzz42xzf1FMf> (accessed 3 June 2016).
- Zimny, Zbigniew, Foreign Direct Investment in Education (December 18, 2011). Available at SSRN: <https://ssrn.com/abstract=2433876> or <http://dx.doi.org/10.2139/ssrn.2433876>