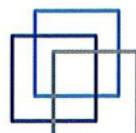


Assessing and addressing the Effects of Trade on Employment (ETE)



Trade negotiations – bilateral, regional or multilateral-routinely lead to debates on the implications for employment. There are promises of new and better jobs as well as concerns over job losses and pressure on wages and labour rights. Factual assessments of the employment and distributional impact of trade agreements are, however, rare. The EU-funded ILO project 'Assessing and addressing the Effects of Trade on Employment' tries to address this.

TRADE AND EMPLOYMENT IN INFORMATION TECHNOLOGY (IT) SERVICES IN BANGLADESH

By Dr. Selim Raihan

The service sector, being a large part of the economy, plays an increasingly vital role for growth, poverty reduction and employment generation of a developing country like Bangladesh. The IT sub-sector in Bangladesh has the potential to become an attractive ICT outsourcing destination which would lead to a rise in export earnings as well as creation of employment.

Key propositions

This study explores the impact and potential of the rise of IT exports in Bangladesh, its linkages with employment and policies and actions required for realizing that potential. It uses both qualitative and quantitative techniques. The qualitative techniques include an analysis of a database created from a survey of 300 IT firms in Bangladesh and responses from several interviews of stakeholders. The quantitative techniques use national accounts, labour force and export and import data in simulation exercises. The study analyses the following key propositions:

- The service sector plays an increasingly important role in the Bangladesh economy in terms of contribution to GDP as well as to the annual growth rate of GDP
- The rapid growth of the service sector is accompanied by an increased employment share in this sector
- The IT sector is an important input for other tradable sectors
- The IT sector can play an important role by improving the skill base of the country and by establishing an education-industry linkage
- Increased productivity and competitiveness of the IT sector can be promoted through policy and regulatory support

POLICY RECOMMENDATIONS

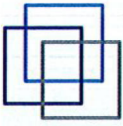
First, formulation of a universal access policy and broadband policy to ensure equity in ICT-based growth and development. Details of the relevant rules such as the Patent Law, Secrecy Act, Consumer Protection Act, Trade Mark Act, Foreign Exchange Regulation Act and Income Tax Act should be taken into consideration while implementing the policy to avoid any infringement of rights or violation of existing rules.

Second, there is a critical need for skill training (including training in the English language) for the existing and potential workforce of this sector. Training courses should be upgraded to reflect advanced technology. This can have positive effects on employment as well as profiting IT businesses.

Third, fiscal and financial incentives for attracting local investment and FDI in ICT through the (Public Private Partnership) PPP initiative.

Fourth, export promotion of software should be seen as a major focus. The ICT firms should focus more on marketing activities such as commercial representation, networking and advertising.





KEY QUESTIONS

- What is the importance of the IT sub-sector of the service sector in the Bangladesh economy?
- What are the characteristics of employment and trade in the IT sector in Bangladesh? How will export promotion in the IT sector lead to employment generation in Bangladesh?
- How are regulatory issues in the IT sector linked to trade and employment in this sector? What regulations would be needed to be consistent with trade policy?
- Which IT sector reforms would be needed to maximize the benefits for Bangladesh and its labour force?

SERVICE SECTOR IN BANGLADESH

One of the striking features of Bangladesh's growth performance during the last decade has been the strength of the services sector. During this period, the Bangladesh economy has been experiencing a significant structural change: the role of agriculture has been declining and those of industry and services have been growing. Between 1980-81 and 2009-10, agriculture's contribution to GDP declined from 33 percent to 20.3 percent, while that of industry increased from 17.3 percent to 29.9 percent. During this period, the services sector contributed around 50 percent of Bangladesh's GDP (Table 1). Table 1 also indicates that since 2000-01, the overall GDP of the economy has been increasing at a rate of around 5.5 percent, which has been facilitated by high growth in the industry and services sectors. During 2000-01 and 2009-10, the services sector in Bangladesh grew, on average, at a higher rate than the growth in overall GDP.

Table 1: Share of Service Sectors to GDP and Its Dynamics (at 1995-96 constant prices)

Sectors	1980-81	1990-91	2000-01	2009-10
Agriculture	33.07	29.23	25.03	20.29
Industry	17.31	21.04	26.20	29.93
Service	49.62	49.73	48.77	49.78
Total	100.00	100.00	100.00	100.00
Annual average Growth Rate (%)				
Agriculture	3.31	2.23	3.14	5.24
Industry	5.13	4.57	7.45	6.49
Service	3.55	3.28	5.53	6.47
GDP Growth	3.74	3.24	5.41	6.07

Source: Bangladesh Economic Review (2011)

The rates of growth in some services sub-sectors have been higher than the growth in overall GDP. Table 2 presents the shares of different sub-sectors in GDP as well as their respective growth rates in 2006-07. It appears that in terms of the share in GDP the major sub-sectors in services are 'wholesale and retail trade', 'transport, storage and communication', 'real estate, renting and business activity'

and 'community, social and personal works', and their respective contributions to GDP in 2006-07 are 14.17 percent, 10.21 percent, 7.65 percent and 7.08 percent. Among these services sub-sectors, 'wholesale and retail trade', and 'transport, storage and communications' grew at rates faster than that of the overall services sector, as in 2006-07, these two sub-sectors grew by 7.03 and 7.04 percent respectively while the services sector as a whole grew by 6.74 percent.

Table 2: Sectoral contribution of the services sector to GDP in 2006-07

Services Sub-Sectors	Sectoral Share of GDP	Sectoral Growth Rate of GDP
Construction	9.16	6.95
Electricity, Gas and Water Supply	1.63	5.37
Wholesale and Retail Trade	14.17	7.03
Hotel and Restaurants	0.7	7.15
Transport, Storage and Communication	10.21	7.04
Financial Intermediations	1.73	7.52
Real Estate, Renting and Business Activities	7.65	3.62
Public Administration and Defence	2.75	8.51
Education	2.54	8.81
Health and Social Services	2.29	7.56
Community, Social and Personal Services	7.08	4.41
Sub-total for Services Sectors	59.91	6.74
GDP at Constant Market Price	100	6.51

Data Source: BBS (2010)

The 'transport, storage and communication' sub-sector comprises transportation and storage services (i.e., roads, railways, air transport, port and shipping services) and communication services (i.e., telecommunication, IT and postal services). The services in this sub-sector are strongly linked to production and foreign trade. However, the high growth in this sub-sector has been mainly driven by the growth in communications services.

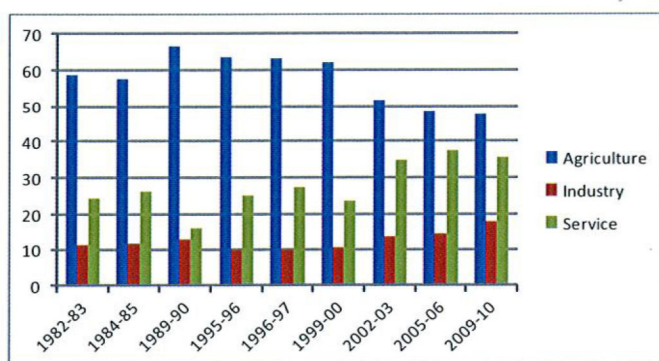
The robust growth in communications as well as in financial services has been triggered by liberalisation and reforms in the services sectors. For example, deregulation policy for the telecommunications sector and market driven reforms have created a huge demand for new products which have been instrumental in attracting new foreign investment into these sub-sectors.

Finally, despite a relatively low contribution to GDP, 'education' and 'community, social and personal services' are also having high growth rates.

EMPLOYMENT IN SERVICES

Service sector employment has also shown a rising tendency but its contribution to total employment is much lower than its contribution to the country's GDP. Figure 1 shows the sectoral composition of employment over three decades. Since the 90s the Bangladesh economy has been witnessing a declining trend in the employment share of agriculture which signifies the rise of non-farm activities during that period. On the other hand, the share of the manufacturing sector in total employment has increased. The employment share of the service sector has been somewhat unstable during the last three decades. It declined from 24.2 percent in 1982-83 to 16.2 percent in 1989-90. During the late 1990s and early 2000s, when liberalisation of some service activities, like telecommunications and financial intermediation, was one of the major policy reforms, the employment share of the services sector grew substantially. It reached 35.4 percent by 2009-10.

Figure 1: Sectoral Composition of Employment (% employed workforce)



Source: Labour Force Surveys of BBS

Table 3: Distribution of employment in different service activities

Sectors	Number		% Share in Total Employment	
	Unskilled	Skilled	Unskilled	Skilled
Construction	1453000	71000	3.30	2.13
Electricity and Water Generation	48510	11490	0.11	0.35
Gas Extraction and Distribution	4770	3230	0.01	0.10
Mining and Quarrying	2700	500	0.01	0.02
Wholesale and retail trade	7035780	72220	15.99	2.17
Transport	3316660	29540	7.54	0.89
Health Service	61920	272080	0.14	8.17
Education Service	247020	1058980	0.56	31.80
Public Administration and Defense	784890	96110	1.78	2.89
Bank Insurance and Real estate	291529	216471	0.66	6.50
Hotel and Restaurant	695680	16320	1.58	0.49
Communication	136380	1620	0.31	0.05
Information Technology and E-Commerce	4250	4750	0.01	0.14
Other Services	3626440	265560	8.24	7.98

Source: LFS (2005-06)

Table 3 shows that among different service activities, there is a concentration of unskilled labour in wholesale and retail trade and a concentration of skilled labour in education services. The IT sector however employs only 0.01 percent of unskilled labour and 0.14 percent of skilled labour.

TRADE IN SERVICES

Bangladesh's services exports have doubled during 2005 and 2010, from \$1249 million in 2005 to around \$2.4 billion in 2010 (Table 4). The contribution of traditional services such as transport and travel has declined while that of other services, in particular, communication, other business services and to some extent, computer and information services has grown over this period. However, government services dominate, constituting almost half of other services exports. Bangladesh's services imports have also registered a considerable increase during the same period, from \$2.2 billion in 2005 to \$4.4 billion in 2010. The share of traditional services such as transport has increased. The overall trade deficit in services grew from around US\$958 million to nearly US\$2 billion between 2005 and 2010. This deficit is concentrated in traditional services such as transport and travel whereas there has been a positive trade balance in emerging segments such as communications, other business services and to a lesser extent, computer and information services.

Table 4: Share of Exports and Imports (%) for different Service Subsectors

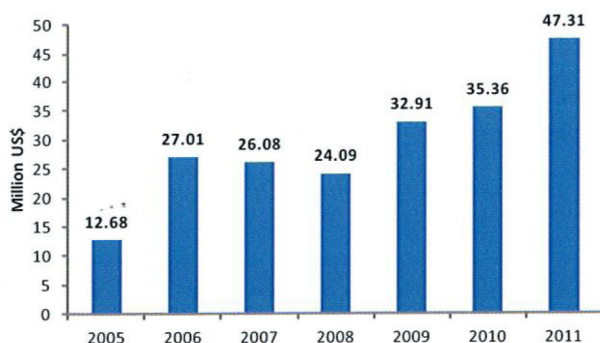
Services	2005		2010	
	Export	Import	Export	Import
Transport	9.05	70	7.18	78.28
Travel	5.61	6.18	3.36	5.93
Communications	1.91	0.93	11.48	0.46
Construction	1.13	0.05	0.29	0.14
Insurance	0.4	6.83	0.28	0.6
Financial services	1.44	0.6	1.69	1.03
Computer and information	1.5	0.19	1.56	0.12
Royalties and license fees	0.02	0.12	0.02	0.4
Other business services	16.81	6.24	24.07	6.95
Personal, cultural and recreational services	0.09	0	0.08	0
Government services	62.03	8.85	49.99	6.08
Commercial services	37.97	91.15	50.01	93.92

Data Source: UNCTADSTAT

THE IT SECTOR OF BANGLADESH

Bangladesh's IT sector grew from a negligible size industry to one that was worth US\$350 million in annual revenues in 2009, with software exports nearly trebling from a little less than \$13 million in 2005 to US\$35 million in 2009 and further to \$47.3 million in 2011. IT and non-voice IT-enabled services constitute the bulk of these exports.

Figure 2: Export of Software and Information Technology-Enabled Services– Bangladesh (US\$ million)



Source: <http://www.basis.org.bd/index.php/resource> and KPMG report (2011)

At present Bangladesh is exporting IT products to more than 60 countries. The main export markets are North America (accounting for 61 percent), followed by the EU (accounting for 13 percent), and East Asia, especially Japan (5 percent). The USA still dominates as an export destination for Bangladeshi software companies. The other two important destinations are the UK and Canada. In recent years, countries like Australia and Denmark have also been emerging as important export destinations. A number of companies have also achieved considerable success in some Asian and African markets including Japan, Malaysia, Singapore, Saudi Arabia and South Africa. One of the most remarkable successes in recent times is the penetration by Bangladeshi software companies (though in limited scale and for some niche product markets) into the highly competitive Indian market.

IT SECTOR REFORM AND EMPLOYMENT

Government measures in terms of the establishment of technology parks within Dhaka and surrounding areas to provide ready infrastructure including network, connectivity and telecom and power backups, initiatives to promote ICT capacity building, tax incentives, and the introduction of an IT Act to ensure IPR protection and to regulate e-transactions have played an important role in driving growth in this industry.

Education sector reform, which has provided opportunities to set up private universities and specialized training institutes, have benefited the industry by providing a ready pool of professionals. Growing education-industry linkages have provided the country with large pool of graduates, providing a ready source of cost-competitive and competent labour for the IT industry. Bangladesh scores favourably on labour costs. Entry level wages in its IT industry are more than 50 percent cheaper than in other Asian countries and wage inflation is considerably lower.

Rapid growth in freelance outsourcing has been driven by growing teledensity, rising internet penetration, falling bandwidth costs and a growing and maturing market for telecom services. Quality improvements in skill levels and delivery capabilities, quality and information security

certifications obtained by Bangladeshi outsourcing vendors and the ability of Bangladeshi companies to offer domain specific services owing to the country's large and growing domestic market in areas such as banking and financial services and telecom, have also contributed to the industry's growth.

The government vision of e-governance and promotion of the ICT sector in the Sixth Five Year Plan is likely to deliver significant gains in terms of productivity and employment in this sector for both domestic as well as foreign investors.

CHALLENGES

Despite the cost advantages and availability of ICT education, the skills of the labour force in Bangladesh's ICT sector are not up to the required level. Companies in Bangladesh, in general, suffer from a lack of documentation and work process skills. Companies also face difficulties in quality control. In-house training facilities are not adequate for scientists who are working on cutting-edge technologies. Many staff members who are trained abroad do not return home after the expiry of their training period and thus contribute to the poor performance or failure of projects.

Lack of finance is perceived as one of the major obstacles for Bangladeshi entrepreneurs in the ICT sector. Investors face credit constraints and have to pay high interest rates on loans, which is unrelated to their own performance. The problem is even worse for small- and medium-sized enterprises (SMEs) including the export-oriented ones. Banks are reluctant to lend to SME activities because they do not consider them as attractive and profitable undertakings.

An emerging constraint in this sector is a potential human resource shortage. Bangladesh may face a big 'resource crunch' in the near future on account of brain drain and the growing attractiveness of other business sectors which are pulling away professionals.

There are also physical infrastructural constraints, chief among which is the lack of a continuous power supply. Power generation capacity in Bangladesh is still among the lowest in the world and power failures and load shedding are rampant. Frequent power failure and low voltage are major hurdles for software companies in Bangladesh. Internet costs are high and the speed is limited.

There is little coordination between policy making and implementation of ICT-related activities which are carried out by a number of government entities. This acts as a barrier in carrying out the Master plan of building a Digital Bangladesh. The lack of coordination among implementing authorities has been causing setbacks to the development of the ICT sector.