

Public Disclosure Authorized

THE WORLD BANK

# BANGLADESH Development Series



Volume I: Overview

67991



Public Disclosure Authorized

Bangladesh: Towards Accelerated, Inclusive and Sustainable Growth—Opportunities and Challenges



Report No. 67991

# **Bangladesh: Towards Accelerated, Inclusive and Sustainable Growth—Opportunities and Challenges**

Volume I: Overview

September 2012

Poverty Reduction and Economic Management Sector Unit  
South Asia Region, World Bank



**Document of the World Bank**

---



**The World Bank**

**World Bank Office Dhaka**

Plot - E-32 , Agargaon,  
Sher-e-Bangla Nagar,  
Dhaka- 1207, Bangladesh  
Tel: 880-2-8159001-28  
Fax: 880-2-8159029-30  
[www.worldbank.org.bd](http://www.worldbank.org.bd)

**World Bank**

1818 H Street, N.W.  
Washington DC 20433, USA  
Tel: 1-202-4731000  
Fax: 1-202-477-66391  
[www.worldbank.org](http://www.worldbank.org)

**All Bangladesh Development Series (BDS) publications are downloadable at:**

[www.worldbank.org.bd/bds](http://www.worldbank.org.bd/bds)

**Standard Disclaimer:**

This volume is a product of the staff of the International Bank for Reconstruction and Development/ The World Bank. The findings, interpretations, and conclusions expressed in this paper do not necessarily reflect the views of the Executive Directors of the World Bank or the governments they represent. The World Bank does not guarantee the accuracy of the data included in this work. The boundaries, colors, denominations and other information shown on any map in this work do not imply any judgment on the part of the World Bank concerning the legal status of any territory or the endorsement or acceptance of such boundaries.

**Copyright Statement:**

The material in this publication is copyrighted. The World Bank encourages dissemination of this work and will normally grant permission to reproduce portion of the work promptly.

**Design:**

Cover designed and published by progressive printers (Pvt). Ltd.

**Illustration Credits:**

Front cover: Shehab Uddin  
Back cover: Shehab Uddin

## FOREWORD

Bangladesh's gross national income places it among the 25 largest developing countries in the world. Bangladesh has also made significant strides in improving human development indicators. These improvements have raised the value of the country's large and increasing working age population. Bangladesh is poised to move into a virtuous cycle characterized by sustained advances in human development fed by growth and, in turn, feeding growth. Structurally, a transition has been made from a primarily jute-exporting country to one whose exports are now almost entirely manufacturing-based. This is unique compared to countries at a similar stage of development, and has resulted from the country's highly unbalanced resource endowments, characterized by extreme scarcity of land and infrastructure and a very high and rising population density. Building on its socio-economic progress so far, Bangladesh now aims to become a middle-income country by 2021 to mark its 50<sup>th</sup> year of independence.

This report explores ways of accelerating inclusive and sustainable growth that will lead to Bangladesh becoming a middle income country by 2021. The Bank prepared a comprehensive report entitled *Strategy for Sustained Growth* in 2007. This report reassesses and updates the analysis presented in the previous Growth report in the light of several factors: the rethinking induced by the global food, financial and debt crises of the last three years; the growing realization that climate change effects are already being felt; and the awareness that unplanned urbanization in Bangladesh is choking growth and development.

While growth rates of 5-6 percent per annum in the recent past are favorable, they are insufficient for Bangladesh to become a middle-income country by 2021. The continuing global economic crisis may have a further moderating impact on growth in the near future. Meanwhile, poverty remains high and unemployment/underemployment rates of youth and educated youth are pervasive. To be a middle income country by 2021, **Bangladesh will have to grow at a sustained 7.5 to 8 percent each year and ensure that the growth process is inclusive.** Such a sustained increase in growth will require a significant increase in the investment rate to at least 33 percent of GDP as well as efforts to increase labor force participation and workers' schooling.

This report highlights six key challenges that Bangladesh will have to tackle to raise investment levels and productivity. *First*, it will need to **increase manufacturing-based export growth.** Several hurdles stand in the way of attaining this goal, including weak economic governance; overburdened land, power, port and transportation facilities; acute skills shortages; and limited success in attracting FDI in manufacturing. Easing these bottlenecks will be necessary for Bangladesh to better exploit its abundant supply of labor, access to the sea and its geographic location that could make it the gateway connecting South and East Asia. *Second*, in order to make growth inclusive, it will have to be accompanied by **productive job creation** on a sufficiently large scale in the domestic economy. This will require a significant departure from the weak growth-employment nexus experienced in the past two decades. It would also require making migration abroad more remunerative, inclusive and safe in order to alleviate the burden on the domestic economy to absorb labor. *Third*, given that labor is Bangladesh's most abundant factor, **investments in health, knowledge and skills** will be as important--if not more--as investments in the more visible, physical capital. International experience shows very clearly that investments in human capital eventually generate inclusive growth opportunities. *Fourth*, sufficiently high growth has to be sustained for years in the face of the **growing adverse effects of climate change.** This is a huge challenge requiring a departure from the "grow first and clean up later" attitude towards the environment towards an approach that pays urgent attention to both mitigation and adaptation. *Fifth*, no country has industrialized without urbanizing, but **urbanization** in Bangladesh needs to become more orderly. This will require a tough balancing act between scale and density on the one hand and congestion and pollution on the other. *Last but not the least*, cutting across all the challenges highlighted above is the need for a **political economy that enables the policy and institutional reforms** that are required for enhancing and sustaining productivity growth.

This report offers an analytical and evidence-based study on Bangladesh's immediate and long-term challenges in transforming the economy. It looks at long-standing challenges in a new way, by emphasizing the multi-dimensional impact of easing these bottlenecks on acceleration, inclusion and sustainability of growth. We trust that it will provoke a rich debate around critical growth challenges for Bangladesh.

Ernesto May  
Sector Director  
Poverty Reduction and Economic Management  
South Asia Region

Ellen Goldstein  
Country Director  
The World Bank  
Bangladesh and Nepal

## ACKNOWLEDGEMENTS

This report was prepared by Zahid Hussain and Lalita Moorty (Task Team leaders, SASEP). The core team included Faizuddin Ahmed, Sanjana Zaman, Diepak Elmer, and Nadeem Rizwan (SASEP).

The Climate Change chapter was prepared by Emmanuel Skoufias, Syud Amer Ahmed, Sushenjit Bandyopadhyay, Nobuo Yoshida, Meera Mahadevan, and Shinya Takamatsu (PRMPR). James Thurlow (UNU-WIDER) provided valuable guidance. This report has also benefited from helpful feedback from Winston Yu (SASDA), Terrie Walmsley, Angel Aguiar (Purdue University), and Csilla Lakatos (US ITC). The team gratefully acknowledges funding from JOTAP (funded by DFID).

The Urban chapter was prepared by Elisa Muzzini, Pedro Amaral, Gabriela Aparicio, Richard Clifford, Mario Di Filippo, Wietze Lindeboom, and Mark Roberts (SASDU). The garment survey for the study was undertaken by NIELSEN (Dhaka). The team would like to thank the Bangladesh Bureau of Statistics, the Bangladesh Garments Manufacturers and Exporters Associations, the Bangladesh Knitwear Manufactures & Exporters Association, and the Bangladesh Export Processing Zones Authority for their support to the survey team and the managers and workers of the garment firms that participated in the survey. The team would like to thank Thomas Farole (PRMTR), Songsu Choi, Zahed Khan, Bill Kingdom, Bala Menon (SASDU), Martin Norman, Shihab Ansari Azhar (CSABI) for their valuable contributions. Tony Venables, Professor of Economics, University of Oxford, provided technical inputs to the team on the survey questionnaire. The team thanks Cities Alliance and AusAID for the funding for this work.

The team would like to thank the peer reviewers, Dr. A.B.M. Md. Mirza Azizul Islam (Former Finance Adviser to the Caretaker Government), Jorge Araujo (Lead Economist, LCSPE), Steve Karam (Lead Urban Specialist, ECSS6) and Winston Yu (Senior Water Resources Specialist, SASDA) for valuable comments and suggestions. Comments were also received from Andras Horvai (Country Program Coordinator, Bangladesh and Nepal) and Luis Alberto Andres (Senior Economist, SASSD). The team would like to thank all participants of the stakeholder consultations held in Dhaka (see Appendix C for a list of all participants). We benefitted immensely from their comments and guidance.

The team also thanks the Government of Bangladesh for the cooperation extended in the preparation of the report and for their participation in stakeholder consultations. The views expressed in this report are those of the World Bank.

The team gratefully acknowledges guidance from Sanjay Kathuria (Lead Economist, SASEP) and Vinaya Swaroop (Sector Manager, SASEP). Ellen Goldstein (Country Director, Bangladesh and Nepal) and Ernesto May (Sector Director, SASPM) helped shape the strategic directions of this report.

Finally, the team thanks Mehar Akhtar Khan (SASEP) for formatting the document.

## GOVERNMENT FISCAL YEAR

July 1 – June 30

## CURRENT EQUIVALENTS

Currency Unit = Bangladeshi Taka (Tk)

US\$1 = Tk 81.8 (April 2012)

## ACRONYMS AND ABBREVIATIONS

ACC	Anti-corruption Commission	IDA	International Development Association
AGOA	African Growth and Opportunity Act	IGS	Institute of Governmental Studies
BASIS	Bangladesh Association of Software and Information Services	ILO	International Labor Organization
BBS	Bangladesh Bureau of Statistics	IMF	International Monetary Fund
BCCRF	Bangladesh Climate Change Resilience Fund	IOM	International Organization for Migration
BERC	Bangladesh Energy Regulatory Commission	IT	Information Technology
BIDS	Bangladesh Institute of Development Studies	ITES-BPO	Information Technology Enabled Services and Business Process
BMET	Bureau of Manpower, Employment and Training	KSA	Kingdom of Saudi Arabia
BTCL	Bangladesh Telecommunications Company Ltd.	L/C	Letters of Credit
BTTB	Bangladesh Telegraph and Telephone Board	LDC	Least-Developed Country
CAGR	Compound Annual Growth Rate	LF	Labor Force
CBN	Cost of Basic Needs	LMIC	Lower Middle Income Country
CCTF	Climate Change Task Force	LTU	Large Taxpayers Unit
CD	Custom Duty	MFA	Multi-Fiber Arrangement
CIB	Credit Information Bureau	MIC	Middle Income Country
CPI	Consumer Price Index	MLT	Medium and Long-Term
CPRC	Chronic Poverty Research Centre	MOEF	Ministry of Environment and Forests
DCI	Direct Calorie Intake	MoEWOE	Ministry of Expatriates' Welfare and Overseas Employment
EPZ	Export Processing Zone	MPI	Multidimensional Poverty Index
EU	European Union	MPRA	Munich Personal RePEc Archive
FDI	Foreign Direct Investment	NBR	National Board of Revenue
FY	Fiscal Year	NGO	Non-Governmental Organization
GATS	General Agreement on Trade in Services	OECD	Organization for Economic Co-operation and Development
GCC	Gulf Corporation Council	OI	Opportunity Index
GDP	Gross Domestic Product	OLS	Ordinary Least Squares
GED	General Economics Division	PKSF	Palli Karma Sahayak Foundation
GIC	Growth Incidence Curve	PPP	Purchasing power parity
GNI	Gross National Income	PREM	Poverty Reduction and Economic Management
GNP	Gross National Product	P-SD	Protective Supplementary Duty
GoB	Government of Bangladesh	PSM	Propensity Score Matching
GSP	Generalized System of Preferences	P-VAT	Protective VAT
HDI	Human Development Index	RD	Regulatory Duty
HIES	Household and Income Expenditure Survey	RMG	Ready-Made Garment
HRD	Human Resource Development	SDR	Special Drawing Right
HSC	High Secondary Certificate	SFYP	Sixth Five Year Plan
IC	Investment Climate	SIMA	Shore Intermediate Maintenance Activity
ICA	Investment Climate Assessments	SMA	Statistical Metropolitan Area
ICRG	International Country Risk Guide	SOE	State-Owned Enterprise
ICT	Information and Communication Technology	SSC	Secondary School Certificate



SSNP Social Safety Net Program  
TFP Total Factor Productivity  
UAE United Arab Emirates  
UNDP United Nations Development Program  
USA United States of America

VAT Value Added Tax  
WDI World Development Indicators  
WDR World Development Report  
WTI World Trade Indicators

**Vice President:** Isabel M. Guerrero, SARVP  
**Country Director:** Ellen A. Goldstein, SACBD  
**Sector Director:** Ernesto May, SASPM  
**Sector Manager:** Vinaya Swaroop, SASEP  
**Task Team Leaders:** Zahid Hussain, SASEP  
Lalita M. Moorthy, SASEP

## TABLE OF CONTENTS

<b>List of Figures .....</b>	<b>ix</b>
<b>List of Tables.....</b>	<b>ix</b>
<b>Towards Accelerated, Inclusive and Sustainable Growth in Bangladesh: Opportunities and Challenges.....</b>	<b>x</b>
Summary .....	x
I. Some Basic Questions on Growth in Bangladesh.....	1
II. Accelerating and Diversifying Labor-embedded Exports in Bangladesh.....	10
III. Augmenting Income Through Migration.....	17
IV. Making Growth Inclusive .....	21
V. Sustaining Growth: Climate Change and Urbanization.....	25
VI. The Long Road Ahead: The Reform Agenda .....	34
<b>Appendix A .....</b>	<b>38</b>
<b>Appendix B.....</b>	<b>44</b>
<b>Appendix C .....</b>	<b>47</b>
<b>References .....</b>	<b>49</b>
<b>Statistical Annex .....</b>	<b>51</b>

## List of Figures

Figure 1: Bangladesh Growth Trends .....	1
Figure 2: Bangladesh Population Growth .....	2
Figure 3: Bangladesh: Savings Rate .....	2
Figure 4: Resilient Growth Performance .....	3
Figure 5: Electricity Demand-Supply Gap is Acute in Bangladesh.....	9
Figure 6: Supply and Demand of Electricity .....	9
Figure 7: Rate of Protection .....	11
Figure 8: Share of Garment Exports in Total Merchandise Exports (percent) .....	13
Figure 9: Remittance/GDP (%).....	18
Figure 10: Poverty Trends .....	22
Figure 11: Growth Incidence Curves 2000-2010.....	23
Figure 12: A Summary of Adaptive Occupational Choice Due to Climate Risks.....	30

## List of Tables

Table 1: Required Growth Rate to Achieve Middle Income Status by 2021.....	6
Table 2: Feasible Long-Term Growth Rates in Bangladesh.....	7
Table 3: Openness Indicators.....	11
Table 4: Bangladesh Merchandise Exports—Share in Total Exports (percent) .....	12
Table 5: Decomposition of Remittance Growth .....	18
Table 6: Cumulative Growth of Macro-Economic Indicators for Bangladesh, Without Climate Change and Under Alternative Climate Change Scenarios (2010-21) .....	26
Table 7: Cumulative Growth for Broad Sectors, Without Climate Change and Under Alternative Climate Change Scenarios (2010-21).....	27
Table 8: Occupational focus and flood and local rainfall variability, summary results.....	29
Table 9: City Location Performance, from Garment Firms’ Perspective—summary rankings.....	32

# Towards Accelerated, Inclusive and Sustainable Growth in Bangladesh: Opportunities and Challenges

## Summary

*In Bangladesh, growth needs to accelerate to absorb the burgeoning labor force and continue making dents in poverty. Such acceleration will require sustained growth in exports and remittances. It will also need an increase in investment – both public and private. However, growth acceleration alone will not be enough to absorb the labor force. This will need an increase in employment intensity of growth, and a further improvement in inclusiveness of service delivery. Moreover, to help ensure that growth acceleration is sustained, the ex-ante and ex-post effects of climate change will need to be addressed. Finally, urbanization offers opportunities to accelerate growth, but can also undermine it if not proactively managed.*

1. **Bangladesh has made significant economic progress since its independence in 1971, despite challenges.** Once written off as a “basket case”, Bangladesh has beaten the odds. Despite its vulnerability to global and natural shocks, intermittent political turmoil, weak governance, and rising costs of unplanned urbanization, it has made significant progress on the economic front. Its Gross National Product grew well above the average for developing countries, reducing poverty by an impressive 26.4 percentage points in the past two decades. Its social indicators improved significantly, and Bangladesh is now poised to achieve several Millennium Development Goals by the target date of 2015.

2. **Why did Bangladesh beat the odds?** Economic growth has accelerated greatly since the 1990s because of the accumulation of physical capital, an increase in size of the labor force, and to a much smaller extent, an increase in total factor productivity.<sup>i</sup> Underpinning this were several economic reforms: good macroeconomic management, targeted trade policy reforms that enabled the garment sector to thrive, and similarly-focused policies that facilitated take-offs in other sectors such as frozen foods in European markets, financial sector liberalization, investment in human development, and improvements in social protection. In addition, the multiple channels through which services are provided in Bangladesh—especially through a large network of non-governmental organizations—also helped carry the development agenda forward. These NGOs deserve special mention as they were effective in addressing gaps in service delivery and were therefore instrumental in improving human development indicators.<sup>ii</sup>

3. **With this accomplished, Bangladesh has now set its sights on becoming a middle-income country by 2021 to mark its 50<sup>th</sup> year of independence. Can it get there?** Can Bangladesh combine its dynamic private enterprise with its burgeoning labor force to reach living standards set by its South East Asian neighbors? What would it take to reach this goal? Bangladesh needs to grow at a sustained 7 percent or more from now on to reach the minimum MIC threshold by 2021. Several challenges stand in the way, including poor infrastructure, vulnerability to natural disasters and climate change, limited success in attracting FDI in manufacturing, weak economic governance, and rising costs of rapid, unplanned urbanization. The current global economic crisis poses additional challenges in the near-to-medium term. Clearly, these problems have to be addressed for Bangladesh to *maintain* its current rate of economic growth. Looking ahead, for Bangladesh to become a middle-income country, growth needs to *accelerate* from its current levels in an *inclusive* and *sustainable* manner. Taking a long view, this report attempts to find a path to middle-income status for Bangladesh and lays out the opportunities and

---

<sup>i</sup> For a detailed analysis, see *Bangladesh: Strategy for Sustained Growth*, World Bank, 2007.

<sup>ii</sup> *Economics and Governance of NGOs in Bangladesh*, World Bank, 2005.

challenges. It argues that Bangladesh could become a middle-income country by 2021, but only with concerted efforts on several fronts.

4. **To accelerate growth in Bangladesh, higher investments in human and physical capital are needed.** In the past three decades, sustained, accelerated growth was caused by capital deepening,<sup>iii</sup> which increased labor productivity. The capital deepening was caused by a demographic transition that lowered dependency ratios and increased savings, increasing openness of the economy, deepening of financial markets, macroeconomic stability, and policy reforms. The report argues that while growth has been resilient to shocks so far, *maintaining* this growth performance can no longer be taken for granted because of several emerging fault lines: infrastructure deficits, a weak business environment, skills shortages, climate change and urban space that is falling behind in innovation, connectivity and livability. Looking ahead, this chapter demonstrates that Bangladesh would need to grow at 7-8 percent annually to reach middle-income status by 2021. To *accelerate* growth to these levels, higher investments in human and physical capital are imperative. For this, the business environment needs significant improvement to attract FDI and boost labor-embedded exports. The adverse effects of climate change need to be better managed. Moreover, to reap the benefits of higher investments, policy and institutional reforms are needed to manage rapid urbanization in Dhaka and Chittagong where economic production is concentrated.

5. **Accelerated growth cannot come from Bangladesh's domestic market.** Efforts to rebalance the economy towards domestic demand in Bangladesh would face an “adding up” problem. Bangladesh has a high consumption-to-GDP ratio (over 80 percent), low investment-to-GDP ratio (24.7 percent), low exports-to-GDP ratio (22.7 percent) and negative net exports-to-GDP ratio (-8.5 percent).<sup>iv</sup> To achieve the desired economic growth of 7 to 8 percent by 2015, Bangladesh would have to raise investment-to-GDP ratio to at least 33 percent (see below). This would require the consumption-to-GDP ratio to decline to generate savings for financing investment. This does not mean real consumption per capita cannot grow, but it will need to grow at a rate less than the growth in real income per capita. The imports-to-GDP ratio would have to increase in view of the country's high dependence on imports of capital goods and most of its raw material needs and intermediate goods. This, in turn, will require greater reliance on exports. At the current level of high consumption, low exports, low investment and high import dependence, Bangladesh has little option other than to pursue an export-oriented growth strategy. As will be seen below, this is in fact the preferred strategy for Bangladesh. An export-led growth strategy, however, would exert further pressure on the Dhaka metropolitan area as export-oriented garment firms continue to peri-urbanize and the economic boundaries of Dhaka expand. In addition, given its abundant labor, Bangladesh would also need to deepen its presence in the international migrant labor markets.

6. **Therefore, an export-led strategy is needed that builds on existing labor-embedded exports and focuses on diversifying products, skills and markets.** This report focuses on migration and remittances. A companion report<sup>v</sup> looks at the export potential at the intensive and extensive margins in Bangladesh. The companion report contends that exports of basic garments will continue to be important in the near future. However, Bangladesh's competitive advantage in this area could erode if its labor productivity growth does not keep pace with the competitors'. Accelerating exports will require not only a consolidation of existing strengths in basic garments but also a gradual diversification into other products such as higher-value garment and service exports. International experience suggests that measures need to

---

<sup>iii</sup> “Capital deepening” is a term used to describe an economy where capital per worker is increasing. This is also referred to as increase in the capital intensity. Capital deepening is measured by the capital stock per unit of labor input.

<sup>iv</sup> Fiscal 2011 data.

<sup>v</sup> *Consolidating and Accelerating Exports in Bangladesh*, World Bank, 2012. The Overview chapter here draws heavily from this report. .

be taken *now* to encourage such diversification in future. Such diversification would also help move the labor force into climate-resilient sectors, away from agriculture. This would require taking steps to diversify and upgrade the economic base of Dhaka city. To move to high-value products and services, Dhaka city needs to attract skilled labor and develop an innovation capacity fueled by the cross-fertilization of ideas that characterizes large metropolitan areas.

7. **Another potential stimulant to growth in Bangladesh is the direct export of labor.**<sup>vi</sup> There are currently large numbers of unemployed and underemployed labor as well as a fast growing labor force in Bangladesh. At this stage of development,<sup>vii</sup> Bangladesh will gain from building on its impressive performance in boosting migration. The report analyzes the determinants of migration and remittances and their contribution to economic growth and development. The findings show that the contribution of remittances to Gross National Income has grown substantially in the past decade, to around 10.5 percent of GDP in fiscal 2011. The rise in remittances has been driven by increases in net migration of mostly unskilled labor and not by increases in remittances per capita. There is evidence to show that remittances have substantially augmented household incomes, consumption and savings and allowed households to attain better nutrition, housing, education, and healthcare. Moreover, remittances have also boosted per capita growth by 0.12-0.74 percentage points. Given that its rapidly expanding labor force cannot be gainfully absorbed in the domestic market, Bangladesh should continue to deepen its presence in the global migrant labor market in the short and medium term to promote growth and reduce poverty. In the long term Bangladesh will need to generate jobs in the domestic economy to absorb its growing labor force.

8. **It is important to ensure that growth is inclusive.** This report finds that growth has been pro-poor in the sense that it came with a significant reduction in the number of absolute poor. Income inequality remains high, but the good news is that consumption grew for poor and non-poor alike over the past decade. Similarly, the distribution of economic opportunities has remained inequitable, but opportunities have increased for all deciles over time. Notwithstanding its achievements in poverty reduction, the size of Bangladesh's vulnerable non-poor remains very large. Simply moving from the national poverty line of US\$1.09 per day to the international US\$1.25 per day line increases the headcount ratio from 31.5 percent to 43.25 percent. The pace of poverty reduction in the last two decades slows considerably with the raising of the poverty line. Thus, while the Cost of Basic Needs-based<sup>viii</sup>

---

<sup>vi</sup> It should be noted that migration cannot be a substitute for economic development in the country of origin. However, in a labor-surplus economy, migration can be a useful safety valve if the economy is unable to generate enough jobs to provide gainful employment to all workers. This is especially true in countries where the labor is largely unskilled or semi-skilled. In theory, large-scale migration from the developing to the developed world would increase global incomes substantially. As Clemens and Pritchett (2008) argue in their paper, *Income per Natural: Measuring Development as if People Mattered More than Places*, Centre for Global Development, Working Paper Number 143, "crossing international borders is not alternative to economic development, it is economic development". In practice, however, political and social complexities associated with migration on a large scale make it unlikely to occur, at least not in the near future. Therefore, migration and the remittance it generates cannot substitute for economic development in the country of origin.

<sup>vii</sup> Given the growing labor force and the large backlog of underemployed, this could be the case even if investment rates were to rise to 33 percent of GDP and growth to accelerate to 7-8 percent (see Chapter 3 in the main report).

<sup>viii</sup> CBN poverty lines represent the level of per capita expenditure at which a household can be expected to meet its basic needs (food and non-food). This is measured by (i) estimating a food poverty line as the cost of a fixed food bundle (in the case of Bangladesh, consisting of 11 key items), providing minimal nutritional requirements corresponding to 2122 kcal/day/person, and (ii) adding an "allowance" for non-food consumption to the food poverty line. For the lower poverty line, the non-food allowance is the average non-food expenditure of households whose total consumption is equal to the food poverty line; whereas for the upper poverty line, the non-food allowance is the average nonfood expenditure of households whose food consumption was equal to

poverty headcount rate has declined rapidly in the past three decades, vulnerability has not. Large numbers of people are at the margin, indicating potential vulnerability to myriad idiosyncratic or covariate shocks to income and/or expenditures. Bangladesh has almost 81 million people in the US\$1.09-US\$2.00 per day range. Vulnerability varies by region and household characteristics. Bangladesh can make growth much more inclusive by focusing on enhancing the human capacities of the poor and vulnerable and by strengthening social insurance mechanisms. Inclusion is also helped by an enabling environment for local economic development in small and medium-size cities by connecting them to markets and creating a level playing field in the provision of basic services.

9. **Growth also needs to be sustainable.** This report looks at how this accelerated growth can be sustained given the challenges to growth posed by climate change and unplanned urbanization. Both these issues are increasingly affecting growth and need to be on the forefront of the development agenda in Bangladesh.

10. **As one of the most climate-vulnerable countries in the world, growth in Bangladesh is eroded through both ex-post and ex-ante channels.** Ex-post macro effects include the direct effects of climate phenomena such as sea-level rise, changes in crop yields, and floods *after* they occur. This report finds that over the next decade, growth could be 2-6 percentage points lower, depending on the frequency of flooding. It also finds that ex-post impacts of climate change include depression of labor demand, with demand for low-skilled workers declining more than that of skilled workers. Most of the effects of climate change will be felt a few decades from now and these impacts on the economy are only likely to worsen. These national level estimates capture impacts of climate change *after* they occur. But what about the ex-ante impacts of climate change *before* the shocks hit? This report also takes a micro view by looking at how households alter their behavior in anticipation of a climate risk and how this affects productivity and growth. For instance, anticipating climate risks, households can diversify employment of its members to hedge against such risks. While this is good if diversification happens due to “pull” factors that attract people to higher productivity jobs, this report finds evidence that climate-related “push factors” could lead to sub-optimal employment choices that lower productivity, welfare and growth under certain conditions. Adopting policies that encourage climate-resilient sectors as well as helping households cope with climate variability will help Bangladesh alleviate the impact of climate change on growth.

11. **While further urbanization offers opportunities to accelerate growth, it also comes with risks to sustainability if not managed properly.** Based on salient features of urbanization in Bangladesh today, this report sets forth an urban vision for a middle-income Bangladesh. Given its high urban population density and low economic density (GDP or value added per square km), this report argues that Bangladesh needs to substantially increase its economic density to become a middle-income country by 2021. This could happen if Bangladesh had taller “mountains” (higher value added per square kilometer) around its current growth centers in Dhaka and Chittagong and/or increased the number of “hills” (created alternate growth centers). Accelerated growth can be sustained only if the urban space is competitive—i.e., well connected, livable, and innovative. These three objectives could be achieved by a three-pronged policy approach that focuses on infrastructure, institutions, and incentives. Four strategic directions are provided that point to improving Dhaka’s competitiveness, leveraging Chittagong’s natural advantage as a port city, creating an enabling environment to foster local enterprise in smaller cities, and finally, locating EPZs strategically.

---

the food poverty line. As prices and consumption patterns vary between different geographical areas, poverty lines are estimated for each of 16 different geographical areas. For more detail on methodology, please see *Poverty Assessment for Bangladesh*, Bangladesh Development Series Paper No. 26, World Bank, October 2008.

12. **The reform agenda is vast for Bangladesh to become a MIC by 2021.** Real GDP growth would have to accelerate by a couple of percentage points from its current level. Where would this come from? Would it be inclusive and sustainable? While the report proposes a comprehensive list of actions across several fronts, it is interesting to note that at least four policy actions are important across all the objectives of accelerating growth, making it inclusive, and ensuring that it is sustainable. To help prioritize, the focus here is on key reforms that cut across the three main themes, while recognizing that bold actions across all fronts are necessary if Bangladesh is to reach its goals. These cross-cutting action areas are infrastructure, land, human development and the business regulatory environment:

- *Infrastructure* (especially energy) ranks at the top for both *accelerating* growth as well as for *sustaining* it by making urban agglomerations more competitive. Investments in infrastructure (including rehabilitation and maintenance) drive long-term economic output across countries and over time more than other kinds of physical investments. Availability of infrastructure determines the country's ability to connect regions and markets, develop alternative urban agglomerations, widen the distribution of economic opportunities across different socio-economic groups, and mitigate climate risks. The need to bridge the infrastructure deficit has been repeatedly emphasized in many earlier reports, but not much has happened. In electricity, for example, the gap between generation growth and demand growth rose from 0.4 percentage point in fiscal 2002 to 4.1 percentage points in fiscal 2011.
- Access to land is a serious constraint for industrialization. Continuation of industrialization depends on the large-scale development and utilization of land resources. The development of modern industry places a direct demand on the large-scale development and utilization of land resources, as the concentration of large areas of land is required for the clustering of industries and the creation of economies of scale.
- *Education and skills development* are important for economic growth and social inclusion. Availability of skills influences location decisions of firms as well. Education and skills development are important for Bangladesh to become an increasingly urban, industrialized and knowledge-based economy. Building human capital can also help Bangladesh diversify away from climate-affected sectors.
- Improvements in the *business regulatory environment* are critical for the private sector to be the engine of accelerated, inclusive and sustainable growth through new investments and job creation. A sound investment climate and low regulatory burdens are essential for promoting climate-resilient private enterprise. These factors also affect location decisions by firms.

13. **No matter which way we slice growth – acceleration, inclusiveness or sustainability – these four areas stand out as critical.** They span all aspects of growth and therefore need to be pursued with urgent vigor and in a coordinated manner. Other studies, too, have pointed to these as the central elements of the growth agenda, but this report highlights the multi-dimensional impact of achieving notable levels of all three. Doing so would undoubtedly be complex because of capacity and resource constraints, and the political economy surrounding reforms, but the payoffs from successful implementation would be substantial.

14. Policy measures needed for growth acceleration include, but are not limited to (for a detailed treatment of reforms, see the policy matrix on page-xv):

- Forging partnerships with domestic and private investors to increase power generation, raise public spending on road maintenance, improve the management of Chittagong port, target improvements in infrastructure in Dhaka, Chittagong and their peripheral areas.
- Ensuring formal property rights through effective administration of land, implementing the new Economic Zones Act, making it easier for entrepreneurs to register and transfer property by



computerizing land registries, introducing time limits for all land-related procedures and setting low fixed fees for transactions, and improving land management to facilitate better firm location.

- Making skills development (e.g., through the TVET system) more directly relevant to the needs of producing-sectors by increasing coordination between academia and industry, using trainee and employer-targeted financing, and undertaking an in-depth skills-gap survey.

15. Among the policy measures needed to make growth more inclusive are:

- Increasing investment in education, health, and other social services to expand human capacities, especially of the disadvantaged.
- Paying special attention to sectors with high labor intensity such as agriculture by improving agricultural productivity and capitalizing on the key linkages with agro-business and small and medium enterprises.
- Providing allocations from the public budget to ensure that these social sectors have adequate funding, and also strengthen their institutional capacities, policy frameworks, and governance.
- Building on the record for expanding access to basic education by increasing access to secondary and tertiary education, focusing on the relevance and quality of education and its link to skills formation.

16. For ensuring that growth is sustainable, actions are needed to:

- Transform Dhaka into a globally competitive metro region by developing appropriate institutional mechanisms for core-periphery coordination, improving infrastructure, and enhancing accessibility in Dhaka city.
- Leverage Chittagong city's natural comparative advantage as a port city, by expanding the capacity and improving the operational effectiveness of the city's port.
- Create the enabling environment for local economic development in small and medium-size cities by connecting these cities to markets.
- Promote strategically located EPZs to foster industry competitiveness and spearhead urban reforms, and by developing EPZs in proximity to markets and in line with the locations' comparative advantages to enhance the international competitiveness of Bangladesh's industries.
- Develop the skilled share of the labor force to take advantage of the more climate change-resilient sectors and reduce climate risks at household level by improving access to credit, safety nets and markets.

17. **This reform agenda is vast.** The following matrix lays out key constraints to growth and provides recommendations on how to address them. Four constraints stand out: infrastructure, land, skills and the business regulatory environment. Addressing the constraints will certainly be difficult because of capacity and resource constraints, not to mention the political friction inherent in reform-making, but the payoff in doing so would be substantial, not just in the medium term but for many more years to come.

**Policy Directions for Accelerated, Inclusive and Sustainable Growth in Bangladesh**

Key Issues	Policy Options
<b>Accelerating Growth (from the current 6 percent to 7-8 percent)</b>	
<b><i>A. Low private investment</i></b>	
<p>Large infrastructure deficit constrains private investment and firm location choices, including in peri-urban areas.</p> <p>Complications in access to land make new investments difficult and affect firm location choices.</p> <p>Shortage of skills leads to investment in low-value sectors and economic base remains narrow.</p> <p>Poor regulatory environment increases the cost of doing business.</p>	<p>Forge partnerships with domestic and private investors to increase power generation; increase public spending on road maintenance; improve the management of Chittagong port; targeted improvement in infrastructure in Dhaka and Chittagong and in peripheral areas.</p> <p>Ensure formal property rights through effective administration of land; implement the new Economic Zones Act, make it easier for entrepreneurs to register and transfer property by computerizing land registries; introduce time limits for all land-related procedures and set low fixed fees for transactions; improve land management to facilitate better firm location.</p> <p>Make skills development (e.g., through the TVET system) more directly relevant to the needs of producing-sectors by increasing coordination between academia and industry; use trainee and employer-targeted financing; undertake an in-depth skills-gap survey.</p> <p>Strengthen the judiciary to enhance contract enforcement by reducing backlogs through periodic reviews to clear inactive cases from dockets and by making procedures faster; improve customs procedures to reduce time taken for imports and exports to cross borders; reduce the time and cost of electricity connections; consolidate construction permitting requirements to ensure building safety while keeping compliance costs reasonable; deepen the financial sector by strengthening credit information systems to enable lenders to view a potential borrower's financial history, and collateral laws to enable businesses to use their assets, especially movable property, as security to generate capital.</p>
<b><i>B. Low public investment</i></b> <sup>ix</sup>	
Low revenue/GDP ratio lowers resources	Improve revenue generation to allow sustainable

<sup>ix</sup> The issues and recommendations on public investment in the matrix are drawn from other studies, such as the World Bank's Public Expenditure and Institutional Review (June, 2010), rather than this report.

<p>available for critical investments.</p> <p>Weak expenditure management reduces efficiency and effectiveness of public resources.</p>	<p>increases in public investment by introducing a simple, coherent and effective tax policy, especially for domestic taxes such as VAT and income tax.</p> <p>Improve implementation capacity by ensuring that MTBF reforms are perceived by stakeholders as bringing about improvements in budget planning and management, particularly in strengthening the management role of line ministries and gradually giving them more flexibility, providing predictable resources, streamlining budget execution procedures, and reducing the present duplication in budget planning and management procedures.</p>
<p><b><i>C. Narrow export base</i></b></p> <p>Poor logistics capacity constrains the ability of traders to move goods efficiently and connect manufacturers and consumers with international markets.</p> <p>Poor compliance with labor and environmental standards result in risks, increase social costs, and lower long-run competitiveness.</p> <p>Low skills constrain export diversification</p>	<p>Improve logistics to ensure that exports as well as imported inputs are shipped cost effectively, reliably, and on time by introducing tools to facilitate trade—such as single-window processing, risk-based inspections and electronic data interchange systems; strengthen multi-modal connections between Chittagong port and the hinterland; enhance air-shipment capacity and improve rail services by adding new physical capacity; introduce commercial management of logistics; enforce properly the “unified code of conduct” for garment workers’ rights and safety, adopted in 2006; modernize existing labor laws and monitor compliance better.</p> <p>Be more proactive in adjusting wages, and relocate factories from residential to industrial buildings that are better equipped to provide safe working conditions.</p> <p>See Section I A.</p>
<p><b><i>D. Underutilized migration opportunities.</i></b></p> <p>High migration costs reduce the ability of poor to use migration as a channel for finding jobs.</p> <p>Low share of skilled migrants keep returns to</p>	<p>Reduce information asymmetries between employers and prospective migrant workers; hold more direct negotiations with government counterparts and employers in the host country to mitigate visa trading and reduce the number of intermediaries; encourage establishment of memoranda of understanding that commit host-country counterparts to adhere to formal channels of labor recruitment.</p> <p>Improve the efficiency and coordination of the TVET system; link efforts at skills development for</p>

<p>migration low.</p> <p>Restricted female migration closes opportunities for women and keeps a large part of the labor force from being productive.</p>	<p>migration with national efforts of skills development; create a national curricula specifically geared at skills training for migrant workers in collaboration with private sector entities and other government agencies; upgrade existing training centers of Bureau of Manpower Education and Training and provide incentives to the private sector to set up educational and training institutions for potential migrant workers; incorporate vocational training and English language teaching into mainstream primary and secondary school curricula.</p> <p>Initiate advocacy and awareness raising campaigns to overcome socio-cultural constraints; remove legal restrictions on female labor migration; ensure cost-effective and safe migration for female workers.</p>
<p><b><i>E. Limited formal financial services for remittance</i></b></p> <p>Access to formal financial services is low which discourages remittance transfer and drives it underground.</p> <p>Uncompetitive remittance transfer market keeps costs of transfers high.</p>	<p>Improve access of poor migrants and their families to formal financial services by encouraging expansion of modern banking networks, allowing domestic banks to operate overseas, providing identification cards to migrants, and facilitating the participation of microfinance institutions and credit cooperatives in providing low-cost remittance services.</p> <p>Expand postal, banking, and retail networks to cover remittance services; support the introduction of modern technology in payment systems; strike a proper balance between preventing financial abuse, and facilitating the flow of funds through formal channels.</p>
<p><b>Making Growth Inclusive</b></p>	
<p><b><i>A. Inadequate domestic employment opportunities</i></b></p> <p>Low productivity of the workforce limits returns to wage and self employment.</p> <p>Inadequate attention to labor-intensive sectors constrains generation of employment.</p>	<p>Increase investment in education, health, and other social services to expand human capacities, especially of the disadvantaged.</p> <p>Pay special attention to sectors with high labor intensity such as agriculture by improving agricultural productivity and capitalize on the key linkages with agro-business and small and medium enterprises.</p>

<p><b><i>B. Low access, quality and efficiency in public services.</i></b></p> <p>Inadequate funding for education affects the quality of service delivery adversely.</p> <p>Low access to secondary and tertiary education reduces the pool of labor that can be trained for specific jobs.</p> <p>Low quality of social services and a fragmented safety net system keeps the poor vulnerable to risks including those posed by climate change.</p>	<p>Provide adequate allocation from the public budget to ensure that these social sectors have adequate funding, with strong institutional capacities, sound policy frameworks, and good governance.</p> <p>Build on the record for expanding access to basic education by taking actions to increase access to secondary and tertiary education; focus on the relevance and quality of education, and its link to skill formation.</p> <p>Establish an effective institutional structure to deliver results in service provision, especially for the poor; complement equitable access to social services by supply side policies to ensure efficiency and quality of public services and demand-side policies to avoid moral hazard behavior and wastages; strengthen social safety nets to prevent extreme deprivation.</p>
<p><b>Making Growth Sustainable</b></p>	
<p><b><i>A. Low resistance to climate risks</i></b></p> <p>Capacity to deal with shocks is low in certain sectors, making them vulnerable to climate shocks.</p> <p>Diversifying occupations due to push factors into low productivity sectors, thus lowering growth and productivity.</p>	<p>Develop the skills share of the labor force to take advantage of the more climate change resilient sectors; enhance export growth to reduce potential increase in the current account deficit, through mechanisms like export diversification.</p> <p>Reduce climate risks at the household level by improving access to credit, access to safety nets and access to markets.</p>
<p><b><i>B. Urban areas are falling behind in innovation, connectivity and livability</i></b></p> <p>Dhaka’s declining productivity advantage lowers its attractiveness for firms.</p> <p>Inability to capitalize on Chittagong’s comparative advantage as the country’s largest</p>	<p>Transform Dhaka into a globally competitive metro region, by developing appropriate institutional mechanisms for core-periphery coordination; improving infrastructure and enhancing accessibility in Dhaka city; upgrading peripheral infrastructure; strengthening institutions for a more efficient and integrated land and housing market; fostering a business environment that reward entrepreneurship and innovation; and improving livability and local amenities.</p> <p>Leverage Chittagong city’s natural comparative advantage as a port city, by expanding the capacity</p>

<p>seaport lowers its potential to serve as commercial lifeline.</p>	<p>and improving the operational effectiveness of Chittagong City's port and investing in institutions and infrastructure to sustain Chittagong's advantage as lower cost location, relative to Dhaka, as the city expands.</p>
<p>Lack of economic vibrancy in small and medium cities constrains their ability to act as alternate growth centers.</p>	<p>Create the enabling environment for local economic development in medium and small size cities by connecting medium- and small-size cities to markets, and creating a level playing field in the provision of basic services across locations.</p>
<p>Growing costs of unplanned urbanization are stifling productivity and therefore growth.</p>	<p>Promote strategically located EPZs to foster industry competitiveness and spearhead urban reforms, by developing EPZs in proximity to markets and in line with locations' comparative advantages to enhance the international competitiveness of Bangladesh's industries, and building support for urban change through EPZ demonstration effects.</p>

## I. Some Basic Questions on Growth in Bangladesh

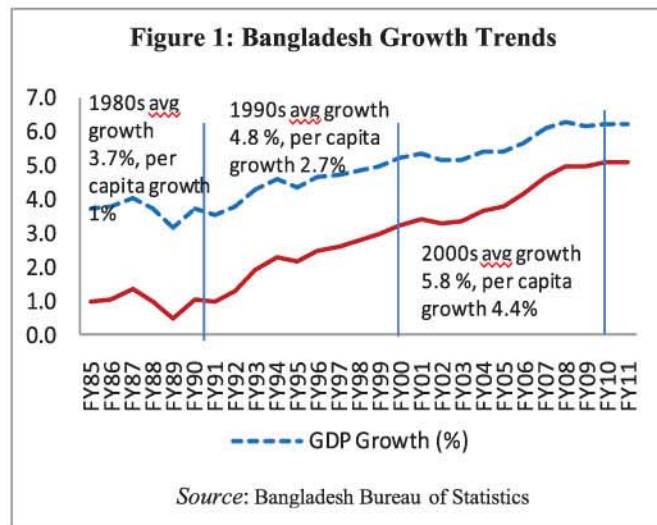
*Bangladesh has grown rapidly. It has improved its social indicators despite several hurdles in the form of weak governance, meager natural resource endowments, political constraints to exploiting the available natural resources (e.g., coal) and vulnerability to recurring natural disasters. Even in the recent global economic crisis, growth in Bangladesh held up well because of the resilience of its exports and remittances. Building on these achievements, Bangladesh aspires to be a middle-income country by 2021. Where will this growth come from and how can it be made more inclusive and sustainable? These questions are addressed in this report; we begin here by posing some basic questions on Bangladesh's growth performance, prospects and challenges.*

### What Have Been the Growth Trends and Sources?

**1.1 Bangladesh has sustained positive and accelerating growth for over 30 years...** Per capita GNI<sup>1</sup> grew at a compound annual growth rate of 4.9 percent over the last three decades. Growth in GNI came almost entirely from growth in GDP in the 1980s and 1990s, but this changed in the last decade. GDP growth increased every decade, from 3.7 percent in the '80s to 4.8 percent in the '90s and 5.8 percent in '00s (Figure 1). This led to growth in per capita GDP that accelerated by 1.7 percentage points in each of the decades. Meanwhile, the contribution of net factor income from abroad to GNI growth averaged only 0.1 percent in the '80s and 0.3 percent in the '90s. But this increased to nearly 1.3 percentage points in the last half of the decade ending 2010, reflecting growing remittances from Bangladeshi workers abroad as a significant source of household income.

**1.2 ...and its growth performance kept up with countries in the region.** In the 1990s, growth in Bangladesh accelerated faster than in Pakistan and Sri Lanka. India, Pakistan, Sri Lanka and Bangladesh—the four large South Asian countries—grew by over 5 percent in the 2000s, with Bangladesh outperforming Pakistan and Sri Lanka, with average GDP growth of 5.8 percent. Investment as a share of GDP increased in Bangladesh and, in the 2000s, in India. The shares stagnated in Sri Lanka and Pakistan. In none of the four major South Asian countries did the investment rates approach the average of 30–40 percent seen in East Asian economies during periods of their rapid growth.<sup>2</sup>

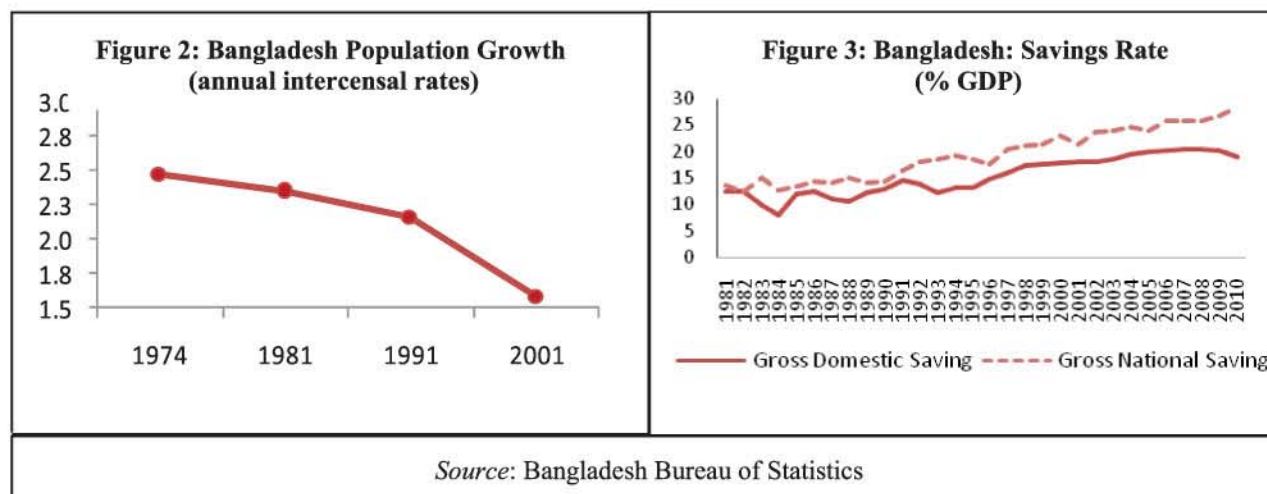
**1.3 Capital deepening resulted in an increase in labor productivity to drive growth, especially over the last two decades.** While population growth has slowed, the share of working-age population has continued to rise, due to faster population growth in the earlier decades. However, population growth and demographic change have accounted for only a small part of the variation in GDP growth in Bangladesh over the past three decades. Bangladesh's economic growth over that period has been driven by growth in GDP per working age person—a measure of labor productivity. In



<sup>1</sup> Gross National Income comprises the total value of goods and services produced within a country (i.e., its Gross Domestic Product) together with its income received from other countries, minus similar payments made to other countries.

<sup>2</sup> See Appendix A, Tables 1 and 2 for more information.

fact, the post-1990 acceleration in growth has been driven almost entirely by changes in labor productivity.<sup>3</sup> Growth accounting shows that capital deepening and, to a much lesser extent, TFP growth has been important for the growth in labor productivity (see Appendix A, Table A3). This is similar to the growth experienced in the rest of South Asia. Modest investment rates notwithstanding, capital deepening in both agriculture and industry has played an important role. However, in the latter half of the last decade the overall investment rate stagnated.



#### 1.4 What led to capital deepening and TFP growth?

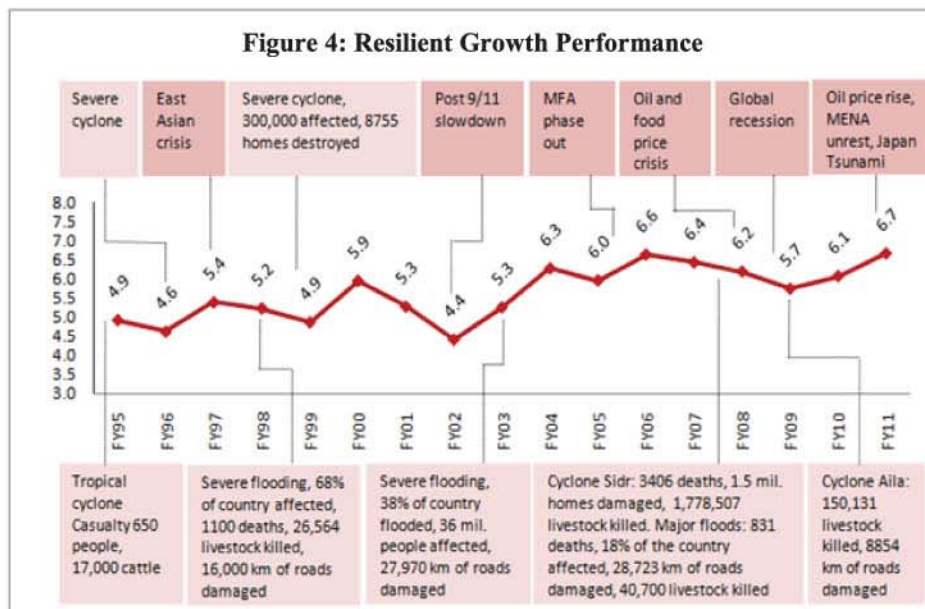
- **Demographic transition.** Bangladesh is now passing through the third phase of demographic transition with declining birth and death rates, and the cycle of demographic transition is still incomplete. Fertility decline began a few decades after the mortality decline. As a result, population growth rate has been decreasing (Figure 2). The population size increased to about 149 million in 2010; more than three times its size in 1951. The total working-age population grew by around 3 percent per annum in the '80s and '90s, when population growth declined from about 2.8 percent to less than 2 percent. The dependency ratio has continued to decrease in the past three decades, contributing to an increase in the savings rate (Figure 3).
- **Openness.** Openness in Bangladesh, as measured by the ratio of exports plus imports to GDP, increased from an average 16 percent in the '80s to over 40 percent in 2010. Overall, by aligning nominal exchange rate to reasonably competitive levels and avoiding significant periods of real exchange rate appreciation, as well as by reducing distortions in trade policy, Bangladesh was able to preserve export competitiveness. The emergence of a dynamic readymade garments industry was a significant positive achievement in the manufacturing sector.
- **Financial deepening.** Financial development indicators such as M2-to-GDP, private credit-to-GDP, and total deposits-to-GDP have risen, indicating financial deepening. Bangladesh's financial system has come a long way from the state-dominated system it was to a market-based system. The turnaround started in 1991 with quantitative improvements and then a qualitative shift with reforms in early 2000.
- **Macroeconomic stability.** Macroeconomic stability was maintained consistently with occasional slips. Inflation in Bangladesh was contained well below double-digits most of the time. Macro

<sup>3</sup> It is possible that labor productivity growth is overstated because of under-estimation of employment.



stability was also underpinned by sound fiscal policy. Public savings in Bangladesh have increased from 0.9 percent of GDP on average in the '80s, to 2.0 percent in the next 15 years and have remained well above 1 percent towards the end of the '00s. In addition to public saving, the overall budget deficit has been financed through prudent external borrowing that kept the effective interest rate on public debt at less than 5 percent. Public debt to GDP ratio has been declining throughout the last decade. Since adopting a floating exchange rate regime in 2003, the Bangladesh Bank has followed a managed market-based exchange rate policy that smoothed exchange rate volatility and built foreign exchange reserves.

- **Policy reforms.** The growth performance of the Bangladesh economy has been associated with significant policy reforms in the last three decades. The reforms aimed at creating a more market-based economy had varied pace of implementation across sectors and times. The experiment with a state-controlled economy after independence was reversed from the mid-1970s by gradual deregulation and liberalization to foster a process of private sector-led development. Bangladesh embarked on market-oriented liberalizing policy reforms towards the mid-1980s. The beginning of the 1990s saw the launch of a more comprehensive reform program. Successive governments since then have mostly built on these reforms.



## Can Bangladesh maintain current growth rates?

**1.5 Growth continued to be resilient despite several external shocks that slowed exports, remittance, and investment growth (Figure 4).** Several factors explain its resilience to global shocks so far, including strong fundamentals at the onset of the crisis, resilience of exports and remittance, relatively under-developed and insulated financial markets, and a pre-emptive policy posture. Bangladesh has developed a strong disaster management capacity to deal with natural disasters, rescue operations, and post-disaster relief/rehabilitation.

## 1.6 Resilience to global economic shocks, however, can no longer be taken for granted.

- Bangladesh's garment exports have proven vulnerable to the second-round effects of the global contraction and, of late, to the Euro zone crisis.

- The demand for Bangladeshi labor abroad has weakened since 2009. Bangladesh's problem was compounded by the Saudi government's moratorium on new work permits and renewals for Bangladeshi workers, and the Malaysian government also embargoed Bangladeshi recruitment.
- Infrastructure deficiencies constrain returns on investment. This is reflected in inadequate infrastructure coverage, poor management and cost recovery, and low quality of infrastructure services. The value-added share of infrastructure services in total GDP has remained mostly unchanged at around 11 percent since the '80s with insignificant difference between various forms of infrastructure.
- Doing business continues to be difficult. Access to land is a major impediment to new investments, particularly in manufacturing. Land availability is severely limited as large unused tracts are not available. Property registration typically takes 245 days in Bangladesh, compared with 44 days in India, 57 days in Vietnam, 22 days in Indonesia, and only 2 days in Thailand.
- Skills shortages are emerging as a binding constraint. A World Bank survey of 1,000 garment firms in 2011 found that skills were the main disadvantage firms faced if they located outside Dhaka. Five years earlier, the Bank's 2006 ICA survey recorded more than one quarter of large firms and nearly one quarter of small metropolitan firms complaining of acute skills shortages. So, availability of skilled workers has become increasingly binding on firms as they grow.

**1.7 Continued problems in the above areas have constrained the ability of investors to respond to new opportunities and have led to the outflows of capital.** The persistence of export of capital from Bangladesh over last two decades shows that the domestic environment is not conducive to investment. While the excess of national savings over investment was relatively small during the '90s and early '00s, it has risen significantly since fiscal 2005, reaching 3.7 percent of GDP in fiscal 2010. This reflects feeble growth in private investment and declining public investments, to the extent that national savings could not be entirely absorbed domestically. Weak incentives to investment appear the more binding constraint. It follows that Bangladesh has failed to improve its business environment/investment climate enough to absorb its entire national savings, or attract foreign savings.

**1.8 How, then, can the continued dependence of Bangladesh on foreign capital inflows be explained?** The government budget has remained dependent on net foreign financing to the extent of 1.5 to 2 percent of GDP (including official grants), or about one-third to one-half of public investments. In addition, the large NGO sector is heavily dependent on foreign grants. Part of the excess saving has gone into foreign reserve accumulation. During the last five years the annual increase in foreign reserves amounted to around 1 percent of GDP. But this cannot explain it all. The only other avenue is private capital outflows. Official accounts do not fully capture all of the outflows, probably due to payments extracted from public import procurements and investment contracts, and under-invoicing of exports motivated by tax evasion and insurance against uncertainty. Aggregate capital flight suggests that overall investment in the country is not constrained by the supply of investible resources.

**Meanwhile, macroeconomic stability, the bedrock of Bangladesh's growth acceleration, has eroded in the last two years.**

**1.9 Inflationary pressures, particularly from an increase in non-food prices, have worsened.** Inflation increased from 7.3 percent to 8.8 percent from fiscal 2010-2011, and rose further to 10.6 percent in fiscal 2012. While food inflation was the driving force behind the rise in prices in fiscal 2011, more recent increases the following year were driven by non-food price rises. Trends in inflation have been generally similar to India's, with Bangladesh diverging now due mainly to the higher non-food inflation. Expansionary monetary and fiscal policies boosted aggregate demand and induced large depreciation of

the taka. These, together with much-needed upward adjustments in administered prices of petroleum, natural gas, and electricity, contributed to a persistent rise in the non-food price index.

**1.10 The balance of payments has deteriorated, with reserves falling to below three months of imports at end-fiscal 2012.** Pressures on the external current account balance have intensified, driven largely by growing trade deficits due to strong increases in petroleum imports to feed the liquid fuel-based power plants. Export growth has slowed with Bangladesh's share to the EU market remaining volatile, and there is greater risk of further decline if the euro crisis worsens. These pressures have led to reserve losses and heightened external vulnerability, as evidenced by the declining import cover.

**1.11 Monetary policy remained accommodative for most of fiscal 2011 and the first half of fiscal 2012, but it is now on track with its monetary targets.** Although money growth rates in the first ten months of fiscal 2012 are in line with yearly targets, the composition of monetary growth is not. The reduction in monetary growth came mainly from a decline in growth of net foreign assets and the growth of credit to the private sector. Credit to the public sector increased by 32.4 percent in the first ten months. Tighter liquidity conditions have already yielded results in terms of reducing non-food inflation. It has also driven up deposit and lending rates at commercial banks as well as short-term interest rates. The Bangladesh Bank has allowed greater exchange rate flexibility, which has helped mitigate competitiveness losses from comparatively high inflation.

**1.12 The growing central government deficit and domestic financing are exerting pressure on macroeconomic balances.** Revenue growth has slowed since fiscal 2011 but is still performing well. Weak expenditure management contributed to recurrent expenditures overshooting the original 2012 budget target, driven by larger-than-budgeted growth in subsidies and transfers. Subsidies have increased as administered retail prices for energy (petroleum products and power) and fertilizer continue to fall short of costs, despite recent administered price hikes. The problems in implementing the capital budget remain. With lower than projected aid disbursements, this has induced large domestic bank financing of the deficit, including monetary financing.

**1.13 Heightened risks due to the unfavorable global environment, slippage in macroeconomic stability, and internal supply constraints coupled with stabilization measures could slow growth in the near term.** A slowdown in growth in fiscal 2012 was on the cards even before the euro crisis emerged. This was due to macro-policy tightening measures and financial-sector restraints that were needed to stabilize the economy and ease pressure on foreign exchange reserves, and continuing tepidness of the enabling environment for private investments, particularly energy and infrastructure deficits. These factors, along with an unfavorable external environment, provide the basis for projecting lower growth in the near term. A coordinated policy response to create fiscal space, rejuvenate the financial sector and stimulate investment and job growth in the export sector is essential for restoring macroeconomic stability. In the absence of such stability, policymakers will be unable to pay attention to alleviating the longer-term constraints to growth.

**Will it take more than just maintaining recent growth rates to be rated a middle-income country (MIC) by 2021?**

**1.14 This depends on what GNI per capita target Bangladesh can realistically aim for.** At current MIC thresholds, Bangladesh's per capita GNI would have to exceed US\$1,006 to reach the lowest end of "low middle income" status. Nominal Atlas GNI per capita would need to grow at a sustained 2.5 percent and total real GDP would need to grow at 3.8 percent per annum from now on for Bangladesh to barely make it to this threshold by 2021 (Table 1). Given Bangladesh's past growth achievements, this seems attainable. However, it is misleading because the income thresholds are revised from time to time to allow for international inflation, using the SDR deflator expressed in US dollars. The SDR deflator on most occasions has increased and the thresholds have moved up. For instance, the lowest MIC threshold increased by 33.1 percent, from US\$756 per capita in 2000 to US\$1,006 per capita in 2011. If this trend

continues through the next 10 years then the minimum MIC threshold is likely to rise to US\$1,310 Atlas GNI per capita by 2021. In this case, the required GDP growth rate would also rise, as Table 1 shows.

**Table 1: Required Growth Rate to Achieve Middle Income Status by 2021**

	When GNI per capita target is \$1,006	When GNI per capita target is \$1,310	When GNI per capita target is \$1,310	When GNI per capita target is \$1,446	When GNI per capita target is \$1,446
Required Per Capita GNI Growth Rate (%)	2.5	5.3	5.3	6.3	6.3
Share of Remittances in Atlas GNI	9.0	9.0	5.0	9.0	5.0
GDP per capita target for MIC Status	916	1192	1245	1316	1374
Required Per Capita GDP Growth Rate (%)	2.4	5.2	5.6	6.2	6.6
<b>Required GDP Growth Rate (%)</b>	<b>3.8</b>	<b>6.6</b>	<b>7.0</b>	<b>7.6</b>	<b>8.0</b>

Note: Figures are in nominal Atlas dollar terms unless otherwise stated. A 1.4 percent population growth and constant Atlas real exchange rate is assumed in all scenarios.

Source: World Bank estimates

**1.15 To reach the MIC threshold, both GDP growth and remittances would play important roles.** The difference between Atlas GNI per capita and Atlas GDP per capita in Bangladesh has grown from US\$22 to US\$60 during fiscal 2004-2011. This is attributable largely to growth in remittance. Hence, both GDP growth and remittance growth would have to play a key role in helping Bangladesh to achieve middle-income status. If the remittances share of GNI remains constant at its current 9 percent level, GDP per capita would have to grow at 5.2 percent and total GDP at 6.6 percent. The required GDP growth rate is sensitive to assumptions about the share of remittances in GNI. If the share of remittances declined to 5 percent, per capita GDP would have to grow by 5.6 percent and total GDP by 7.0 percent. If growth rates were to fall short of the required rate in the near future, then the growth rates in the medium term would need to be higher to make up the shortfall.

**1.16 If Bangladesh aimed to exceed the lowest MIC threshold, then GDP growth would need to accelerate further.** Bangladesh could aim to attain US\$1,450 GNI per capita by 2021 from its existing US\$784 per capita (fiscal 2011). This would require per capita GDP to grow by 6.2 percent and the total GDP to grow by 7.6 percent, assuming the share of remittances remained constant at 9 percent. The required total GDP growth rate accelerates to 8.0 percent if the share of remittances decline to 5 percent. These calculations assume a constant real exchange rate. The real GDP growth rate required to attain the same Atlas GNI growth rises with real depreciation of the Atlas exchange rate, which is a distinct possibility judging from past experience.

**1.17 Clearly, maintaining the recent 6 percent average growth would be far too little to achieve even low MIC status by 2021.** Anything short of 7 percent annual growth from now on would make graduation to middle income status by 2021 extremely difficult. There are already recent indications of lower investments and lower capacity utilization, as evidenced by a decline in imports of capital machinery, raw materials and non-oil intermediate goods and credit to the private sector in real terms. In addition, the pace of critical reforms has slowed recently. Of more concern are the recent reversals in trade policy, lack of use of PPP in infrastructure, financial and operational inefficiency in the energy

sector, dilution of the lending portfolio because of directed credit through state-owned banks, and the lack of reforms needed for building/maintenance of transport system. These conditions make achieving 7 percent growth in the near-term (2-3 years) difficult to say the least, and likely precluding Bangladesh's graduation to MIC status in the desired time span.

### What will it take to raise GDP growth to 7-8 percent?

**1.18 Increased investment in physical and human capital, together with TFP growth, will be critical.** To see what is required for accelerating growth, we assume that Bangladesh maintains the investment-GDP ratio at the current 28.5 percent level throughout the next decade.<sup>4</sup> Sustainable output growth would then be given by the growth of the labor force (adjusted for labor quality), and the rate of TFP increase. The Sixth Five-Year Plan projects Bangladesh's labor force will grow at 3.2 per cent through 2015. These figures are augmented to reflect prospects for increased labor force participation of women, and reduced underemployment. We assume further that the feasible range for Bangladesh to increase average years of schooling is from 0.5 to 1.5 over the next decade, which adds 3.4 to 3.8 percent per year to effective labor force growth. We assume Bangladesh can at best achieve TFP growth of 1-3 per cent per year. Finally, assume labor share in total income is unchanged at 70 per cent.

**1.19** With these assumptions, GDP grows by about 5.6 per cent per annum when TFP grows by 1 percent per annum and average years of schooling rises from the current 5.8 years to 6.3 years by 2021 (Table 2). If instead, TFP grows by 3 percent per year and years of schooling rise by 1 percent per year, GDP growth can be 7.6 percent at the current investment rate. A sustained 3 percent annual TFP growth throughout the next decade is, however, unrealistic. With the other variables all at the top of their ranges and TFP grows by 2 percent a year, Bangladesh could achieve output growth of 7.6 per cent per annum. In the past, Bangladesh's TFP growth has struggled to reach positive territory, let alone grow by 2 percent.

**1.20** These scenarios support the view that sustained increases in Bangladesh's growth will require significant increases in the investment rate to at least 33 percent of GDP, as well as efforts to increase labor force participation and worker skills through schooling. TFP growth from upgrading production technologies in existing activities and investment in new products and processes is an unlikely source of growth in a context in which economic expansion is expected from relocation of labor-intensive production from countries where labor is becoming increasingly expensive. However, reallocation of resources from agriculture to industry will lead to some increase in aggregate TFP (not firm-specific). Meanwhile, raising the level of investment in physical and human capital is Bangladesh's most feasible option, which will also contribute to TFP growth. What would that take?

**Table 2: Feasible Long-Term Growth Rates in Bangladesh**

Change in Average Years of Schooling	Total Factor Productivity Growth (%)					
	1.0		2.0		3.0	
	Investment Rates (% of GDP)					
	28.5	33.0	28.5	33.0	28.5	33.0
0.5	5.61	5.91	6.61	6.91	7.61	7.91
1.0	5.94	6.24	6.94	7.24	7.94	8.24
1.5	6.27	6.57	7.27	7.57	8.27	8.57

**Note:** Assuming return on education equals 10%, the share of physical capital in output ( $\alpha$ ) = 0.3, and constant return to scale.

*Source: World Bank estimates*

<sup>4</sup> This 28.5 percent invest-GDP ratio in fiscal 2011 is based on the constant price series. This is used here to maintain consistency with historic growth accounting where the capital stock series is based on the constant price GDP series.

**1.21 To attract investment, Bangladesh needs to improve the business environment.** Having secured a reasonable level of macroeconomic stability and completed the first generation reforms, Bangladesh is now set to focus on issues of competitiveness and productivity through microeconomic reform programs. An enabling investment climate is a significant factor in any country's competitiveness. Firm-level, survey-based Investment Climate Assessments (ICA) are commonly used to identify the principal bottlenecks to competitiveness and productivity growth and evaluate the impact these have on economic performance at the micro level. An ICA was last conducted in Bangladesh in 2006, covering private firms in metropolitan areas and non-farm enterprises in peri-urban areas, small towns and rural areas. The data collected in this survey provide the basic information for an econometric assessment of the impact or contribution of the investment climate (IC) variables on productivity and a few other measures of economic performance such as exports, FDI, and employment.

**1.22 What aspects of business environment matter most for attracting investment?** The results from this analysis help narrow the policy focus on some key factors for enhancing productivity growth, exports, FDI and employment. Quality and innovation and infrastructure matter most for productivity.<sup>5</sup> Infrastructure is also critical for exports and FDI for productivity. This suggests a potential virtuous cycle of growth: better infrastructure will improve productivity which in turn will make exports more competitive and attract FDI, thus leading to further improvements in productivity. The most important factor within the infrastructure groups for both FDI and exports is the number of days taken to clear customs. Power outages have the largest effect on FDI. Wage and capacity utilization are critical for employment. Although these findings are based on data that are now six years old, more recent surveys confirm that they still remain valid, and perhaps more so.

**1.23 Infrastructure is the most binding constraint on investments.** Bangladesh ranks last among its Asian competitors in terms of power outages. Currently, 78 percent of the country's power plants use natural gas as the primary energy. Gas availability to run these plants, as well as gas based captive generators in the private sector, is a major problem. Power outage is one reason why manufacturing productivity in Bangladesh is much lower relative to Vietnam and China. And the use of captive generation to compensate for outages adds to costs. Electricity deficit as a share of installed capacity is large in Bangladesh (Figure 6) and the gap between demand growth and generation growth has increased from 0.4 percentage point to 4.1 percentage points during fiscal 2002-2011 (Figure 6). Transportation has emerged as another critical constraint. The World Bank's Logistic Performance Index finds Bangladesh's transportation infrastructure and services to be of poor quality—ranking it 79th in 2010, compared with China (27), Philippines (44), India (47) and Vietnam (53). Bangladesh is at a competitive disadvantage in terms of port infrastructure, paved roads, airport density, quality of air transport, and railroads. Access to land is an impediment to new investments because large unused tracts are unavailable and the property registration process takes a very long time.

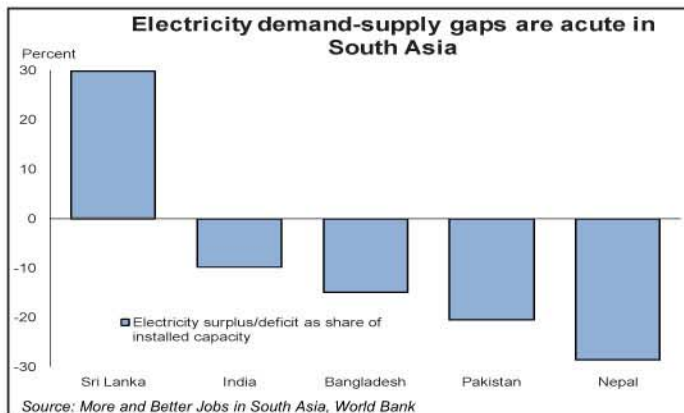
**1.24 High transaction costs and uncertain private returns could result in myopic investments.**<sup>6</sup> Policy uncertainty may also translate into increased transaction costs facing some types of vital long-term contracts to the detriment of growth. This has indirect effects on long-term investments, particularly where government contracts are involved. For instance, it has proved to be very difficult to get private investors to make long-term commitments in the power sector. This is an area where future income streams depend on contracts being honored by successive governments. With such uncertainty, investors would be wary of making long-term investments. Other types of investments and contracts can operate

---

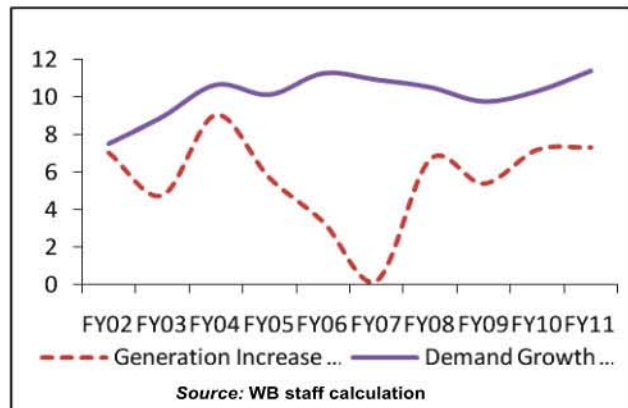
<sup>5</sup> See Appendix B, Figures B1-B4 for details.

<sup>6</sup> See Khan, M. 2010. *Political Settlements and the Governance of Growth-Enhancing Institutions*. Research paper, School of Oriental and African Studies, University of London. 2010. This, of course, is a hypothesis that has so far been based on anecdotal evidence. Future research hopefully will subject it to more rigorous testing.

**Figure 5: Electricity Demand-Supply Gap is Acute in Bangladesh**



**Figure 6: Supply and Demand of Electricity**



reasonably well with political instability, so long as the future income streams in question do not depend directly or indirectly on the government exchequer.

### What is the way forward?

**1.25 Bangladesh is one of Asia’s youngest countries.** It is poised to exploit the much-awaited demographic dividend with a higher share of working-age population and a declining dependency ratio. Labor is Bangladesh’s strongest source of comparative advantage. Bangladesh’s abundant and growing labor force is currently underutilized. Bangladesh’s competitors are becoming expensive. In the next 3-4 years the growth of China’s labor-intensive manufactured exports is projected to taper off. Chinese wages are rising above US\$150-250 per month, labor shortages are becoming serious in the Chinese coastal areas, costly labor regulations are increasing, and the Chinese government has made business more difficult for some foreign investors, hampering other investors in the process. Capturing just 1 percent of China’s manufacturing export markets would almost double Bangladesh’s manufactured exports. Wages in Bangladesh are half those in India, and less than one-third those of China or Indonesia.

**1.26 Bangladesh can take advantage of this low-cost edge over its competitors.** Bangladesh can become the “next China”, with its labor-intensive manufactured exports growing double-digit rates per year, if it can address the infrastructure bottleneck and take advantage of its large pool of underemployed labor. A recent World Bank study shows that if Bangladesh could improve the business environment half way to the level of India’s, it could increase its trade by about 38 percent. If Bangladesh fails to act soon, others will take the markets China is vacating.

**1.27 Export market diversification can help reduce impacts of economic shocks, such as the global financial turmoil and recession in the US and EU economies.** Experience from other countries suggests that export diversification is associated with generally strong economic performance. Diversification of the main migrant labor destination countries would provide the potential to increase the outflow of workers, which would result in higher remittance and contribute to economic growth. It would also reduce the vulnerability of Bangladesh’s remittance inflows.

**1.28 Diversification of the main migrant labor destination countries would provide the potential to increase the outflow of workers, which would result in higher remittance and contribute to economic growth.** It would also reduce the vulnerability of Bangladesh’s remittance inflows. Current instability in the Middle East and North Africa may have adverse consequences for Bangladeshis living and working abroad, which would negatively impact their ability to remit money back home. However, the direct adverse impact seems to be negligible unless the unrest spreads across the Gulf region, e.g., Saudi Arabia, the UAE, Bahrain, Qatar and Kuwait. Concerns over returnees would be less acute if

Bangladesh could absorb them internally by engaging them in large, medium and small industries helping the country's economy to remain on the higher growth path. Besides, alternative overseas markets, particularly in East Asia, Europe, Latin America and Africa would help mitigate the problem.

**1.29 A new wave of reforms is needed to raise Bangladesh's growth path and mitigate the risk of a slowdown.** This growth path is achievable by a strategy to deepen and diversify Bangladesh's labor-embedded exports and transform the country from a rural, agrarian economy into an urban, manufacturing economy. What hope is there for Bangladesh to mitigate the key constraints identified earlier? Observers of East Asia often see success in the way governments have forged partnerships with the private sector through informal and formal networks. Bangladesh needs a plan of action for innovative ways to enhance policymaking of the elected government and make it accountable for strict policy continuity. The country's governance regime may have been good enough to help the economy break free of weak growth cycles in the past, but now it may not be enough, and may actually inhibit the acceleration of growth necessary to put the economy on the path to global integration and modernization.

## II. Accelerating and Diversifying Labor-embedded Exports in Bangladesh<sup>7</sup>

*The importance of trade for economic growth and poverty reduction has been well documented.<sup>8</sup> Much of the growth and poverty reduction in Bangladesh over the past two decades has been associated with growth in its twin labor-embedded exports—readymade garments (RMG) and migration of people. Manufactured exports currently account for more than 90 percent of Bangladesh's export earnings. Small industries as well as many non-tradable sectors also gained from trade liberalization because of better access to imported inputs. Since fiscal 2000, remittances have more than quadrupled, to reach US\$11.7 billion and account for over 10.5 percent of GDP in fiscal 2011. Both the garment sector and remittances have taken advantage of Bangladesh's abundant labor supply. Deepening and diversifying RMG will expand manufacturing; higher remittances will continue to stimulate domestic demand and finance trade deficits.*

**2.1 Can growth come from Bangladesh's domestic market?** Any effort to rebalance the economy towards domestic demand in Bangladesh would face the "adding up" problem. Bangladesh has a high consumption-to-GDP ratio (over 80 percent), low investment-to-GDP ratio (24.7 percent), low export-to-GDP ratio (22.7 percent) and negative net export-to-GDP ratio (-8.5 percent).<sup>9</sup> To achieve the desired economic growth of 7-8 percent by 2015, Bangladesh will have to raise investment-to-GDP ratio to at least 33 percent as argued earlier. This means the consumption-to-GDP ratio has to decline to generate savings for financing investment, while the imports-to-GDP ratio will have to increase in view of the country's high dependence on imports of capital goods and most of its raw materials and intermediate goods. This, in turn, will require greater reliance on exports. At the current level of high consumption, low exports, low investment and high import dependence, Bangladesh has little option other than to pursue an export-oriented growth strategy. The exact economic sectors in which this growth will occur

---

<sup>7</sup> This section draws on *Consolidating and Accelerating Exports in Bangladesh, Bangladesh Development Series Paper No. 29*, World Bank, 2012.

<sup>8</sup> Recent evidence can be found in *Trade Causes Growth in Sub-Saharan Africa*, by Markus Brückner and Daniel Lederman, Poverty Reduction and Economic Management Network, International Trade Department, World Bank, March 2012. The paper estimates the effect of openness to international trade on economic growth, with panel data. Employing instrumental variables techniques that correct for endogeneity bias, it finds that "within-country variations in trade openness cause economic growth: a 1 percentage point increase in the ratio of trade over gross domestic product is associated with a short-run increase in growth of approximately 0.5 percent per year; the long-run effect is larger, reaching about 0.8 percent after ten years. These results are robust to controlling for country and time fixed effects as well as political institutions."

<sup>9</sup> These data pertain to fiscal 2011.



cannot be foreseen with precision. It seems, however, that considerable potential remains in the RMG industry in light of the rapidly rising labor costs in China and India. Other than garments, sectors with potential include pharmaceuticals, electronics, shipbuilding, jute, ceramics, leather, footwear, ITES-BPO, and agro-processing.

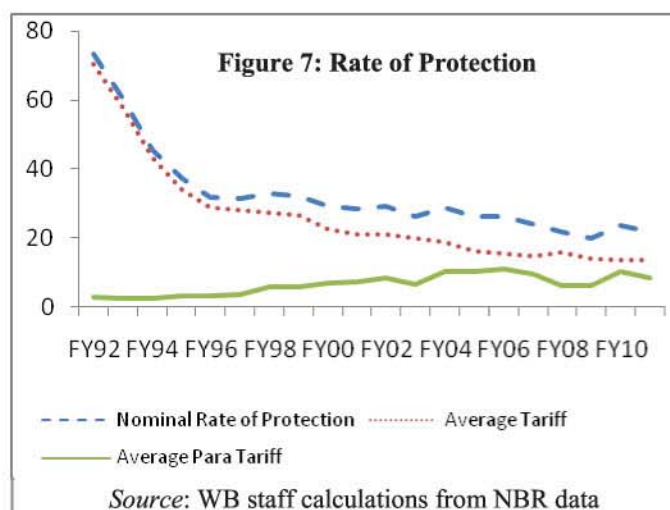
**Table 3: Openness Indicators**

	FY00-05	FY06	FY07	FY08	FY09	FY10	FY11
Per capita GDP (Atlas \$)	390	447	487	559	620	687	755
Trade GDP ratio	32.1	37.9	40.3	42.3	40.7	37.6	48.2
Export growth (%)	8.8	21.6	15.7	15.9	10.3	4.1	41.5
Import growth (%)	9.0	12.2	16.3	26.1	4.1	5.5	41.8
Remittance growth (%)	15.1	24.8	24.5	32.4	22.4	13.4	6.0
Current account balance (% of GDP)	-0.4	1.3	1.4	0.9	2.7	3.7	0.9
Real effective exchange rate	109.2	98.6	96.5	95.8	105.5	108.3	108.9

Source: World Bank estimates from official data

**2.2 Trade has yet to play a major role in promoting accelerated, inclusive and sustained growth in Bangladesh, but it is catching up.** While growing, trade's role in the overall economy remains low. Imports amounted to 27.4 percent of GDP and exports 20.8 percent in fiscal 2011. In four of the last five years, import growth has exceeded growth in exports, leading to growing dollar deficits on the trade account (Table 3). In accounting terms, consumption and investment have provided most of the recent impetus to growth, while net exports usually had a negative contribution. FDI inflows have continued to be relative small and restricted to a few sectors. However, remittances have increased rapidly and the trade/GDP ratio has increased from 32.1 percent in the first half of the past decade to an average of 41.2 percent during the last six years. New export markets are beginning to open, which should attract FDI as investors relocate to take advantage of Bangladesh's expanded market access.<sup>10</sup>

**2.3 Bangladesh is well placed to expand manufacturing exports but challenges remain.** Bangladesh will compete for market share and foreign investment with many other countries including China and India. While Bangladesh has expanded the range of export items well by South Asian standards, it is significantly below its East Asian competitors. Vietnam and Cambodia—large countries starting from a similar export base—increased their total numbers and values of export products much more rapidly than did Bangladesh.<sup>11</sup> The export base remains narrow as the garment export performance has yet to be replicated in other products.



<sup>10</sup> Bangladesh's garment industry is expected to get a boost with the duty-free access to the Indian market it has recently gained. During a trip to Bangladesh in September, 2011, Indian Prime Minister Manmohan Singh announced that quota restrictions of 10 million pieces, imposed for decades on duty free exports of garments to India, would be lifted.

<sup>11</sup> IMF, Bangladesh: Selected Issues, August 29, 2008.

**2.4 Bangladesh's trade regime has gradually become more liberal.** Three distinct regimes can be identified. The first (1972-75) was distinguished by heavy controls on exports and imports, and pervasive price controls. The second (1976-1990) was marked by a move towards a market-based economy, beginning of denationalization, modest downward adjustment of tariffs, partial elimination of quantitative restriction, and policy support to garment exports. The third regime (1990-to date) approached trade liberalization in a more concerted manner. Major progress made so far includes substantial scaling down and rationalization of tariffs, removal of trade-related quantitative restrictions, convertibility of the current account, and subsequent adoption of a floating exchange rate regime.

**2.5 Progress was made in reducing tariffs since fiscal 1992.** However, the pace of decline has slackened since the late 1990s and protection levels remain high in absolute terms and relative to neighboring countries. The average rate of tariffs (without including para-tariffs) declined at an annual rate of 10.48 percent during fiscal 1992-1996, from 70.63 percent to 28.70 percent. Since then it declined at an annual rate of only 1 percent, from 28.70 percent in fiscal 1996 to 13.56 percent in fiscal 2011. The average tariff in Bangladesh still remains amongst the highest in the region. For example, the average applied tariff in Bangladesh was 14.8 percent in 2008, whereas in South Asian countries like India, Pakistan, Sri Lanka, and Nepal it was 9.8 percent, 14 percent, 8.9 percent and 14.6 percent.<sup>12</sup>

**Table 4: Bangladesh Merchandise Exports—Share in Total Exports (percent)**

	Garments	Jute	Jute products	Leather	Frozen Food	Pharmaceuticals	Engineering Products	Agricultural Products
<b>FY95</b>	53.0	2.1	9.2	5.8	8.6	..	..	..
<b>FY00</b>	75.3	1.2	4.6	3.4	6.0	..	0.1	0.3
<b>FY05</b>	74.2	1.1	3.6	2.6	4.9	..	1.0	0.9
<b>FY10</b>	77.1	1.2	3.3	1.4	2.7	0.3	1.9	1.5
<b>FY11*</b>	77.8 (14170)	1.6 (290)	3.5 (635)	1.3 (239)	2.8 (511)	0.2 (36)	1.4 (254)	1.4 (264)
<b>Average Growth of Exports</b>								
<b>FY96-FY00</b>	19.3	2.7	-3.3	-0.3	3.6	..	-6.0	1.1
<b>FY01-FY05</b>	8.5	7.4	3.8	3.9	5.4	..	279.3	40.1
<b>FY06- FY10</b>	14.5	17.6	18.1	3.3	1.6	12.8	39.3	28.1

\* The figures in the parenthesis show the total value of exports in (current) million US\$, for July-April in fiscal 2011.

Source: Export Promotion Bureau

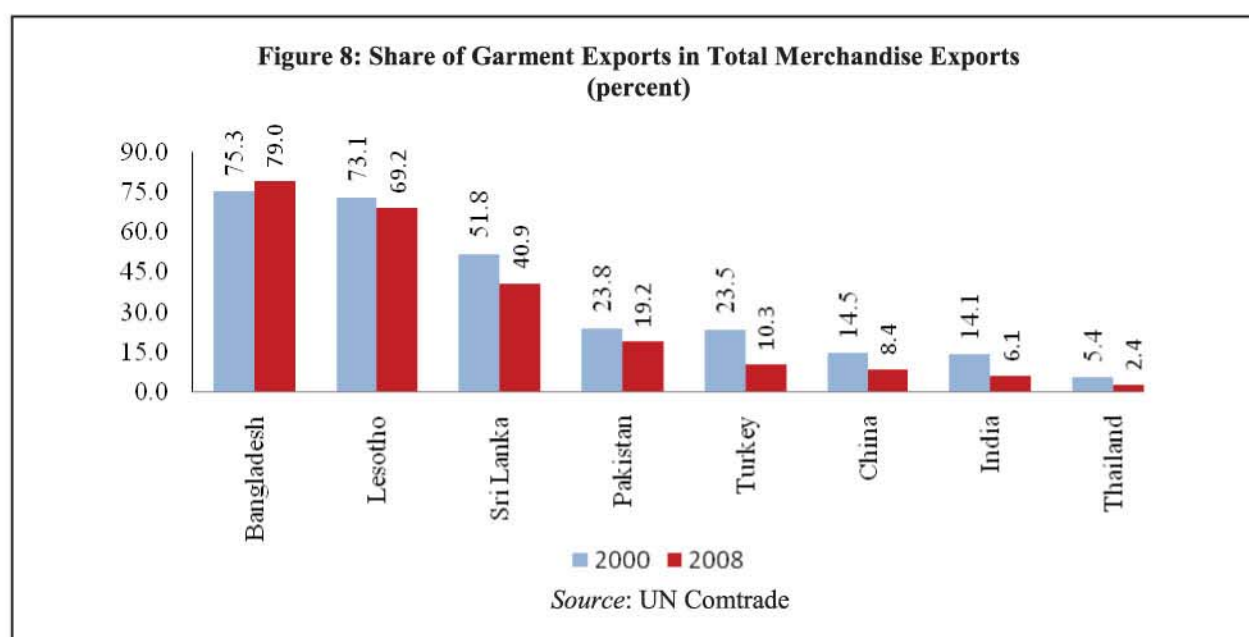
**2.6 Protection has increased slightly of late, and has become more uneven across sectors due to increasing use of non-transparent para-tariffs, and this is likely to have increased the anti-export bias in trade policy.** For the last five years, average customs tariffs hovered around 14 percent. In addition to regular tariffs (customs duties), the use of non-transparent para-tariffs has expanded in recent years, resulting in an increase in their average value from 2.98 percent in fiscal 1992 to 3.24 percent in fiscal 1996, and 8.55 percent in fiscal 2011. This has slowed the pace of decline in the nominal rate of protection, which is a non-linear sum of tariffs<sup>13</sup>—from 74 percent in fiscal 1992 to 32 percent in fiscal 1996 and to 24 percent in fiscal 2011 (Figure 7). The average nominal protection in fiscal 2010 and 2011 was slightly higher than in the previous three years. Moreover, the standard deviation of nominal protection, as well as the maximum tariff rate was significantly higher than in the previous three years.

<sup>12</sup> UNCTAD TRAINS database.

<sup>13</sup> Nominal rate of protection = (Unweighted) average of Tariff (customs duty, CD) + (Unweighted) average of Para Tariffs, where, para-tariffs include regulatory duty (RD), protective supplementary duty (P-SD), protective VAT (P-VAT). It is non-linear because para tariffs are applied on customs duty including the value of imports.

More than 1,000 items are subjected to supplementary duties. For example, the government imposed supplementary duties on 1,052 items (8-digit level classification in the HS Code) in FY11. Out of them, 256 were subject to 30 percent or higher supplementary duty. The same number was 231 in fiscal 2010. Thus, the anti-export bias in trade policy is likely to have increased in recent years, which is detrimental to export growth and diversification.

**2.7 The garment sector is the main driver of exports; other sectors were not treated as favorably as garments.** In fiscal 1995, soon after the start of trade liberalization, garments constituted 53 percent of total exports. This share grew to 75 percent in fiscal 2000 and is estimated at 79 percent in fiscal 2011. This growing dominance of garment exports is due partly to trade policies that gave special dispensation to the sector,<sup>14</sup> enhancing the natural advantage that Bangladesh has in labor-intensive products (Table 4). Meanwhile, the shares of agro-based exports such as jute, jute products, frozen food, tea (not included in the table) in total merchandise exports declined over fiscal 1995-2011. Fast growing sectors other than garments include engineering products, agricultural products, jute and jute products.



### **Bangladesh's Garment Sector: Exploiting Further the Intensive Margin**

**2.8** The garments sector in Bangladesh has about 5,500 running factories, including about 2,000 in the knitwear segment and 3,500 in woven, with about 500 involved in both segments. More than 98 percent of these factories were locally-owned in 2010. The sector employs about 3.5 million workers. Indirect (derived) employment is estimated at around 10 million.

**2.9 Bangladesh has several advantages in manufacturing basic garments.** Firstly, its labor cost is well below that of its competitors. This is partially offset by lower levels of productivity, and higher costs and time to access major international markets. Secondly, favorable trade arrangements give Bangladesh Generalized System of Preferences (GSP) access to the EU markets, enabling it to avoid a 12.5 percent tax that its competitors must pay. Recent liberalization in GSP rules mean that local sourcing is no longer critical to meeting value-addition norms, which has contributed to an increase in woven exports to the

<sup>14</sup> Bangladesh introduced back-to-back Letters of Credit (L/Cs) and special bonded warehouse facilities that facilitated credit flows and the availability of inputs at world prices for the garment exports sector.

EU.<sup>15</sup> Arrangements in the US are less favorable, however, with countries eligible for the African Growth and Opportunity Act (AGOA) receiving more favorable treatment.<sup>16</sup> Thirdly, many manufacturers have become adept at mass production, which makes them quite competitive in the market segment of large uniform orders. Finally, there is growing backward integration of inputs such as fabrics, yarn, accessories, etc., which helps to reduce delivery times and increase flexibility in the industry.

**2.10 The concentration on a single product category appears unique to Bangladesh.** Not only is the concentration high, but between 2000 and 2008, garments as a share of overall exports in Bangladesh increased from 75 to 79 percent (Figure 8). In other countries such as Pakistan, Sri Lanka and Lesotho, where per capita incomes have grown slower than Bangladesh's over 2000-08, the reliance on garments has declined substantially. In high-growth countries such as China and India, the relative decline in reliance on garments has been even faster. For Bangladesh, a lower degree of reliance on garments would make it less vulnerable to industry-specific shocks.

**2.11 The world market for garments is growing.** Overall world exports of garment grew from US\$198 billion in 2000 to US\$317 billion in 2009. This represents an increase in real terms, adjusted by the US CPI, to US\$254.4 billion in 2009 (at 2000 prices). Bangladesh's market share in garments has grown from 2.6 percent in 2000 to 4.3 percent in 2009. Its share in the EU-15 market grew from 3 percent to 4.7 percent, and in the US market from 3.4 to 5 percent over this period.

**2.12 Even if world garment exports are not growing at the same pace as overall world trade and face a more difficult trading environment, Bangladesh's garment exports could continue to grow by increasing their market share.** Globally, exports of garments are not growing as fast as overall exports. The annual average growth rates of garments and overall world exports were 6.7 and 10.3 percent in 2000 and 2009. Garment-exporting countries also face a significantly less favorable market access than the rest of the world (WTI, 2008). China was the clear front-runner in the global race for garments exports during the last decade, with its market share increasing from 18.2 percent in 2000 to 31.7 in 2009. Over the same period, Bangladesh became the second-largest garments exporter, with an increase in market share from 2.6 to 4.3 percent from 2000-2009.

**2.13 There is much evidence to show that Bangladesh's garment exports can continue to grow.** There is a body of literature that indicates that long periods of export growth in developing countries can be attributed to consolidation and growth of existing products.<sup>17</sup> The industry grew at an annual average rate of 14.2 percent since MFA was abolished in 2005. This period includes the opening up of world garments trade to full competition, as well as the global economic crisis that started in 2008. There is more room to grow. Japan is now actively seeking to diversify its garments import base away from a focus on China to "China plus." Chinese investors themselves are seeking to source from Bangladesh,

---

<sup>15</sup> Previously, the GSP favored knitwear, which was more likely to meet the required local content. Domestic value addition in knitwear is about 75 percent because of the backward linkage to spinning factories. Local factories supply about 90 percent of the total fabric required. In the immediate past, only about 16 percent of the woven exports to the EU qualified for the GSP facility because imported fabric typically accounts for 60 percent of the output price. So far, the EU is the major importer of Bangladesh knitwear accounting of about 75 percent of the total value versus about 16 percent for the US.

<sup>16</sup> The average tariff rate for the US is 13 percent on woven clothing and 14-18 percent on knitwear. This makes the EU market more attractive than the US market, where there have been quotas on 30 products since 1985.

<sup>17</sup> Growth of exports has been analyzed in terms of "intensive margins", i.e., continued growth in existing products, versus "extensive margins", i.e., growth via diversification into new products. Brenton and Newfarmer (2007) found that about 80 percent of export growth of developing countries during 1995-2004 could be explained by intensive margins. Amiti and Freund (2008) concluded the same by analyzing growth of Chinese exports during 1992-2007. Helpman, Melitz, and Rubenstein (2008) found a similar result in their study. Nonetheless, this literature does not seem to be conclusive. For example, Hummels and Klenow (2005), and Kang (2004) found that extensive margins played a more significant role in the growth of exports—the former in a multi-country study, and the latter studying Chinese, Taiwanese and South Korean exports.

because of rising wages in China.<sup>18</sup> Growing diversification away from garments by large countries such as India and China also gives Bangladesh an opportunity not only to increase its world market share in garments, but also to find new markets in these countries. And, despite recent increases, wages in Bangladesh remain very competitive.

**2.14 Geographically, Bangladesh is fortunately placed between two of the world's fastest growing and potentially largest economies, which are now changing from competitors to markets for Bangladeshi exports.** The US and EU will continue to be the main destination markets for Bangladeshi exports for the foreseeable future. However, the share of these markets in Bangladesh's total exports has declined while the combined share of India and China increased between fiscal 2005 and 2010. Bangladeshi exports rose at an annual rate of 28 percent in the Indian and Chinese markets compared to 14 percent in the US and EU markets over the same period. Bangladesh needs to make the most of the growth of the Asian giants. In doing so, it will be helped by the fact that it costs less in time and money to export to Asian markets than to the US and EU.

**2.15 The external environment is not a major issue in the growth of garments nor of exports in general in the long run.** The global economic crisis, if anything, boosted Bangladesh's garment sector, as buyers worldwide switched to less expensive garments—the so-called “Wal-Mart effect.” In addition, the rise in Chinese wages and the currency in recent years have made Bangladesh a more favorable investment destination. The other oft-cited constraints relate to trade barriers such as tariffs in the US. Another issue is the relative preferences given to some African countries. The African Growth and Opportunity Act (AGOA) have allowed duty- and quota-free access of a number of goods, including garments, from African countries to the US market since 2000. However, Bangladesh is a major player in garments and these preferences do not seem to affect its ability to compete worldwide. This is evidenced by the continuous growth of the garments sector and the fact that many garment firms report an inability to service all of the orders that they receive, due to power, logistics and skills constraints.

### **Export Potential in Services**

**2.16 Diversification into exports of non-factor services will help Bangladesh to exploit the emerging export potential in the global market.** Services trade has grown faster than merchandise trade in recent years. Service exports from developing countries almost tripled in the last ten years, growing by 11 percent annually, from about US\$240 billion in 1997 to US\$692 billion in 2007.

**2.17 It is reasonable to assume that the export of services will continue growing.** Services account for more than 70 percent of global GDP. The cost difference across countries in the production of services is enormous (Ghani, 2010). The option to narrow such cost differentials through migration is limited, as migration has become heavily regulated. However, the scope for exploiting the cost differentials by making use of the Internet (outsourcing) has increased. Last but not the least, unlike merchandise exports, it is harder to regulate the export of non-factor services, especially in the post-GATT, liberalized environment.

**2.18 Bangladesh has so far failed to make a mark in the export of non-factor services.** Export of services is driven by three forces—technology, transportability, and tradability—the 3Ts (Ghani, 2010).

---

<sup>18</sup> Wages of the internal migrant workers who fuel China's export industry rose by 40 percent in 2010, which is likely to be followed by about a 20-30 percent increase in 2011. Apparel companies and retailers are already feeling the pinch from higher wages in China. Britain's second-biggest retailer is facing an 8 percent increase in prices due to increased wages in China. Trading group Li & Fung of Hong Kong, a top apparel supplier to Wal-Mart, predicts a 15 percent increase in prices of Chinese garments export this year. Gerry Weber International, Germany's No. 2 maker of woman's clothing, is moving production from China. Chico's, too, is seeking to diversify its production base away from China.

(Source: [http://www.businessweek.com/magazine/content/11\\_11/b4219009844239\\_page\\_2.htm](http://www.businessweek.com/magazine/content/11_11/b4219009844239_page_2.htm))

*Technology*, especially information and communication technology, increases the digital *transportability* of services, making them more *tradable*. Information and communications technology in Bangladesh is still very underdeveloped, which affects the export of services, even though exports account for nearly 23 percent of GDP in Bangladesh.

**2.19 One possibility for diversification is the ITES-BPO sector.** This refers to information technology-enabled service and business process outsourcing (henceforth referred to jointly as ITES) which, although small in Bangladesh, is nonetheless a visible non-factor service export from the country. There are only about 400 registered IT/ITES firms in Bangladesh (BASIS, 2006). Of these, only 100 are engaged in exports, valued at about US\$35 million in fiscal 2010. Nonetheless, there are several reasons why the sector has export potential. Firstly, Bangladesh's large pool of young and trainable people and its competitive wages are an important strength. Many countries, such as the Philippines, Kenya, Nigeria, Sri Lanka, and Egypt, that have a demographic structure similar to Bangladesh's, have established themselves as attractive outsourcing destinations. Secondly, Bangladesh has the potential to attract large volumes of Indian (and other) FDI, given the accelerated wage increases seen in the sector in India.<sup>19</sup> Thirdly, the global market for ITES is big and growing faster than world trade, creating opportunities for new entrants. Even a small share of this market means large volumes of exports from Bangladesh. Fourthly, the existence of about 5,000 ITES freelancers working for American and European customers points to the potential of the ITES sector, which could be enhanced with proper policy and infrastructural support. Finally, development of information technology is a very high priority of the government, as manifested in the inclusion of a vision of "Digital Bangladesh" in the country's development agenda.

### **Constraints Limiting Exports**

**2.20 Apart from the overall investment climate issues, logistics, skills and compliance need particular attention to deepen and diversify exports.** Conversations with manufacturing firms have gleaned that logistics and skills constraints are weighing on the continued growth in garments, including the possible shifts to mid- and high-value garments. Much of the backbone of logistics, i.e., the infrastructure, is also a critical public good/service. Meanwhile, there is a market failure in the provision of sufficient skilled workers and management, which may need government intervention. Finally, serious stocktaking is warranted in the area of compliance, in light of studies induced by the Harkin Bill of 1993. Here, too, the possible tarnishing of the country's image by a minority of non-compliant firms may call for government action to prevent such practices.

**2.21 Efficient logistics are important to give Bangladesh a competitive edge in exports of basic- and medium-value garments.**<sup>20</sup> So far, low wages have given Bangladesh a competitive edge in garments and partially compensated for poor logistics. To ensure continued fast growth of basic garment exports, increased world market share, and consolidation of its basic strengths, logistics in Bangladesh would need to improve considerably. Even if wages remained competitive, as Bangladesh moves up the value chain, this low cost advantage may not be enough to compete globally. Thus, Bangladesh needs to improve logistics to ensure that exports, as well as imported inputs, are shipped cost-effectively, reliably, and on time. Strengthening multimodal connections between the Chittagong port and the hinterland, improving customs procedures, enhancing air shipment capacity, and improving rail services by adding new physical capacity and introducing commercial management would be crucial elements for better logistics of the garment sector. Improvements in trade logistics will also increase overall external competitiveness of the country and help other existing, and potential, merchandise export sectors.

---

<sup>19</sup> India is the leader with a market share of 37 percent in global outsourcing.

<sup>20</sup> For South Asian countries, there is evidence that the magnitude of the elasticity of trade in tariff liberalization was smaller than that of trade facilitation. Trade facilitation is thus a more effective way of enhancing intra-regional trade.

**2.22 Lack of skills is becoming an important constraint to growth in exports, and this gap will become more acute as Bangladesh moves into producing higher-value garments.** Available evidence suggests that the gap between the demand and supply of skilled workers in garments is growing. The lack of skilled workers could increase the overall costs of production through the high rates of rejection of final products for defects. Despite the reported unmet demand for skilled labor, firms seem reluctant to incur training costs to raise skills levels because workers change jobs frequently. The publicly-funded Technical and Vocational Education and Training institution is the main vehicle for training workers but it could improve its relevance to better meet the needs of garments and other sectors. Trainee- and employer-targeted financing and increased coordination between academia and industry could help improve overall skills in Bangladesh. More analysis is needed to uncover the quantum and pattern of skills gaps in Bangladesh, including an urgent need for an in-depth skills-gap survey. This would be a vital input in the quest for more specific policy options as Bangladesh seeks to ensure that its exports and manufacturing are not hindered by inadequate supply of skills.

**2.23 Compliance with internationally acceptable labor standards is becoming increasingly important for consumers in the US and EU, the main markets for garment exports from Bangladesh.** Aside from other reasons, compliance with labor standards is important because it involves externalities: experience in Bangladesh has shown that even if one firm fails to comply with labor standards, the resulting public attention can have negative repercussions for the entire industry.<sup>21</sup> But what is optimal from the industry standpoint may not be a rational economic decision for an individual firm that sees its costs increase with compliance while benefits are captured more generally. Given the externalities involved, there could be a role for the government in ensuring compliance. Responding to this need, the government of Bangladesh adopted a “unified code of conduct” in 2006 and modernized the existing labor laws, but monitoring and compliance is weak. As Bangladesh moves towards higher-value garment exports, it becomes all the more important to enforce compliance, because the consumers who buy these products can afford to be more discerning about the provenance of their clothes. So the government should begin by enforcing compliance, being more proactive in adjusting wages, and relocating factories from residential to industrial buildings better equipped to provide safe working conditions.

### III. Augmenting Income Through Migration

*Migration and remittances have played an important part in increasing growth and reducing poverty in Bangladesh. International migration contributes to the Bangladesh economy by easing pressure for employment creation in the domestic economy. There is persuasive evidence that remittances received from migrant workers have become a significant source of rural incomes. “The remittance income accrued mostly to high income groups in 1988, as indicated by the concentration coefficient of 0.8 from the income from this source. In 2004, the concentration coefficient was reduced to 0.56, indicating that over time the lower income households have started benefiting from this source.”<sup>22</sup> Remittances contribute directly to Bangladesh’s national income (GNI), and indirectly by influencing real GDP growth through various channels. Continued growth of remittances through increased migration, as well as increases in remittance per worker, will thus help expand income both directly and indirectly.*

**3.1 The share of remittances in national income has grown rapidly in the last decade in Bangladesh.** Remittances reached 10.5 percent of GDP in fiscal 2011, from 4 percent in fiscal 2001

---

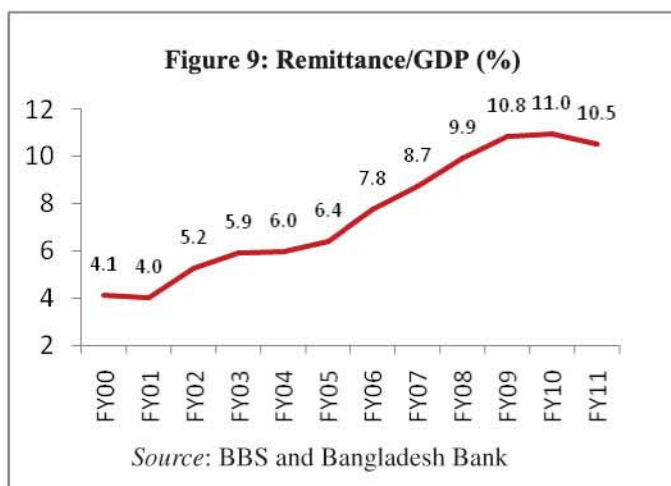
<sup>21</sup> The collapse of the Spectrum sweater factory in April 2005 and the death of workers tarnished the image of the country, and buyers from the EU and US put pressure on buying firms not to source their supplies from Bangladesh until compliance improved.

<sup>22</sup> Hossain and Bayes, 2009.

(Figure 9). Remittance growth peaked at 32.4 percent in fiscal 2008, and then declined as rapidly as it had risen in the lead-up to fiscal 2008. Migrant remittances to Bangladesh have accounted for a much larger share of external inflows than that to other developing countries in general, reaching 87 percent of total external flows (in aid, FDI and portfolio) in fiscal 2011.<sup>23</sup>

### 3.2 Growth in remittance has been driven largely by net migration.

Remittance growth can be approximately broken into growth in remittance per worker and growth in the stock of the Bangladeshi migrant population abroad (Table 5). The latter has been the dominant source of remittance growth in recent years, except in fiscal 2006. Growth in remittance per worker has been somewhat volatile. Labor outflows from Bangladesh seem largely a response to the lack of gainful employment opportunities domestically as well as a rising demand for unskilled labor for the non-traded services sector in the labor-importing economies. Growth in the stock of migrant Bangladeshis abroad cannot be a sustainable source of long-run growth in remittances. However, in the short and medium run, there is considerable room for sustained positive net migration because of rising unemployment and high underemployment domestically, and strong demand for migrant labor internationally in normal times.



**3.3 Most Bangladeshis migrate for short-term employment.** Migration to the Middle East and Southeast Asia has been characterized by short-term employment with specific job contracts. Migrants tend to be young, married males with moderate education. Females are largely excluded from migration due to socio-cultural norms and a regulatory regime that assumes that men are better judge of women's safety than the women themselves. Including unofficial migration the total share of female migrants from Bangladesh may be as high as 15 percent. There are geographical disparities in access to migration with over 82 percent of migrants coming from the Eastern part of the country. External demand conditions, network effects and domestic liberalization appear to explain the changes in the aggregate stock and flow of migrants over time. Econometric analysis of micro data sets suggests that both demographic and economic factors affect the likelihood of migration

**Table 5: Decomposition of Remittance Growth**

	FY05	FY06	FY07	FY08	FY09	FY10	FY11
Remittance Growth (%)	14.2	24.8	24.5	32.4	22.4	13.4	6.0
Growth in stock of migrants (%)	10	9.1	13.9	21.9	12	17.9	5.6
Growth in remittance per worker (%)	4.2	15.7	10.6	10.5	10.4	-4.5	0.4

Source: Based on BMET and BB data

(see Appendix A Table A5). Age and education bear a nonlinear relationship while the pre-remittance income of migrant households bears an inverse relationship to the probability of migration.

<sup>23</sup> For details on the significance of remittance relative to foreign aid and FDI, see Appendix A, Table 4.



**3.4 Migration is constrained by the complexity of the process, high direct upfront out-of-pocket costs, and reliance on informal sources of finance.** The labor migration process from Bangladesh is complex with a multitude of actors involved at home and in destination countries. Individual migrants usually procure their employment visas through social networks. Persons already located in the destination country, very often former migrant workers themselves, organize visas for their family members, relatives, friends or members of the same community in the home country. In most cases these persons are not able to procure the visas directly from the employer, but have to go through a layer of other contacts and intermediaries in the destination country. Consequently, private cost of migration is high and variable in the range of Tk 200,000-300,000 per migrant. Payments to intermediaries and other helpers account for around three-quarters of upfront cost. Migration is financed mostly by informal borrowing and asset sale/mortgages.

**3.5** Amounts remitted are correlated to **the stock of migrants and economic conditions in home and destination countries.** There is a fairly robust relationship between the stock of Bangladeshi migrants abroad and the level of remittance received. GDP per capita, exchange rate and international oil price also play a role at the aggregate level (see Appendix A, Table A6). By definition, the level of migrants' remittance flows depends on the migrants' income and their propensity to save and remit—that is, the fraction of income they choose not to consume abroad and the fraction of saving they choose to remit back home. Survey evidence<sup>24</sup> shows that the savings rate out of current income is high (over 60 percent). Migrants remit half of their savings on average. The amount remitted rises sharply with increase in the level of remuneration. It also has high and positive correlation to migrants' level of education and varies according to types of occupation.

**3.6 There is micro evidence that the capacity to remit and motivations other than altruism are important determinants of remittance behavior.** Econometric evidence points to the positive and significant coefficient on the pre-remittance income of the receiving households. This is unresponsive of the altruism hypothesis and quite consistent, though not the only possibility, with the self-interest hypothesis. The coefficient itself is also economically significant. A one-taka increase in the pre-remittance income of the households crowds in remittances by Tk 0.16. There also is no evidence supporting remittance decay. If remittance decay were present, the migrant's length of stay variable (Time) will need to have a significant negative coefficient allowing also for nonlinear relationships. The results show that the coefficient on Time is positive and highly significant while the coefficient on Time-square is negative and significant. This suggests that the level of remittance increases at a decreasing rate with the migrants' length of absence, controlling for other variables.

**3.7 None of the demand-side variables—the existence of a surviving parent or spouse—seem to matter, although the coefficients have the right sign.** Among supply-side variables, education and skill matter most. A migrant with secondary education is likely to remit Tk 30,000 more on average per annum than a migrant without secondary education, a migrant with higher education is likely to remit on average Tk 40,000 per annum more than a migrant without secondary education, and a migrant who is unskilled is likely to remit on average Tk 29,000 per annum. The destination country does not seem to matter, no matter how it is modeled—that is, whether we use dummy only for KSA or for GCC as a group.

**3.8 Remittances substantially augment a recipient household's income, consumption and saving.** The Household Income and Expenditure Survey (2010) has found that average remittance receipts per household per annum are over 1.5 times their pre-remittance income. Remittances account for 63 percent of total household expenditure, and are mostly spent for the purposes intended by the senders. Recent household survey data reaffirms that remittances significantly boost income, consumption and savings at the household level—and savings per month on the three factors is 82 percent, 37.7 percent, and 107 percent higher on average for the remittance-receiving households than those not receiving

---

<sup>24</sup> Conducted by the International Organization for Migration, 2010.

remittances. There seems to be agreement on the positive impact of remittances on household consumption and saving, results so far are less clear regarding expenditure decisions and outcomes on human development. Most micro-level surveys and studies conducted in Bangladesh conclude that a large fraction is used for current consumption.

**3.9 Remittances have developmental impact.** The development impact of remittances extends beyond the narrow definitions of poverty. Poverty headcount rates of remittance-receiving households in Bangladesh are 61 percent lower than of those who do not receive remittance, according to HIES 2010. Only 13.1 percent of the remittance-receiving households were below the poverty line in 2010, compared with 33.6 percent for non-receiving households, and 31.5 percent for the national average poverty incidence. HIES 2005 showed poverty among remittance-receivers at 17 percent compared with 42 percent for those without remittances. These statistics are consistent with the possibility that remittance-receiving households may be non-poor to begin with. However, several econometric studies, which control for this factor, show that remittances have a pro-poor effect in Bangladesh.<sup>25</sup> A large number of the short-term Bangladeshi migrant workers are from low-income families in rural areas; remittances constitute a significant part of their income and allows them to get better nutrition, housing, education, health care, and protection from vulnerability. Poor migrants have limited access to formal financial services (because they lack bank accounts and/or private bank branches in their more remote villages) and end up using expensive informal channels.

**3.10 Analyses of international panel data suggest that the impact of remittances on per capita GDP growth is economically significant.** The magnitude of the impact of remittances on per capita growth ranges from 0.12 to 0.74 percentage point, which is larger than usually found in the related empirical literature based mainly on data sets preceding the latter half of the past decade, when migration and remittances grew significantly. The findings are consistent with the few studies that have investigated the impact of worker remittances on economic growth in more recent years. They are also reliable because they are based on a comprehensive dataset covering a larger group of countries and an updated time series, and employ generally accepted estimation methodologies.<sup>26</sup> One notable caveat stemming from econometric analysis of the remittance-growth relationship is that political and economic stability and quality of institutions are key conditions for remittances to become conducive to economic growth.

**3.11 At its current stage of development, and given its large, rapidly growing labor force—only two-thirds of which can be domestically absorbed and at very low wages—continued deepening of Bangladesh’s presence in the global migrant labor market will help promote growth and reduce poverty.**<sup>27</sup> Increased oil prices and expansion of economic activity in the source regions bode well for migration and remittance prospects, while the ongoing protests and internal conflict in North Africa and parts of the Middle East have somewhat disrupted the employment of migrant labor. Globalization of

---

<sup>25</sup> A World Bank study showed that remittances in Bangladesh contributed to a 6 percentage points decline in the poverty headcount ratio during 1990-2006: World Bank, 2006.

<sup>26</sup> Empirical studies of the impact of remittances on growth generally use modified versions of conventional growth models. Other than including remittances as an explanatory variable, these models control for a variety of other factors influencing growth, including international openness, government consumption, domestic investment, inflation, some subjective measures of political environment, foreign direct investment (FDI) and domestic credit growth. Based on the empirical literature, this study estimates a conventional growth model incorporating remittances as an explanatory variable by controlling for most of the growth determinants mentioned above. Here we discuss regression results based on an international panel data set (1995-2009) that captures the surge in migration and remittances observed during 2006-09. Different models (OLS, Fixed Effects, and Fixed Effects Instrumental Variable) have been estimated to calculate the impact of remittances on growth.

<sup>27</sup> It is possible that once growth accelerates and the quality of jobs improves, net migration could slow and eventually reverse. However, until that stage is reached, migration will remain an important safety valve and contributor to growth and poverty reduction.

labor markets provides an opportunity to improve the lives of potential Bangladeshi migrants and their families, but cross-border issues related to the movement remain a problem.

**3.12 Migrant workers often face difficulties at home and abroad during migration; government and NGOs are in a position to alleviate these.** There are several cases where prospective migrants pay large fees to recruiting agencies and do not get the promised jobs. Migrants are often deported back home because of legal problems. Female migrant workers face the biggest challenges because of limited types of work available to them, and many are pushed into illegal activities. The global recession is another blow to migrants' prospects. New opportunities need to be explored and better ways determined for reintegrating them. The government and NGOs need to take the lead in trying to improve the efficiency, safety and inclusiveness of the migration process.

**3.13 The evidence presented here generally counters the conventional wisdom that there is little scope for policy intervention by remittance-receiving economies.** The appropriateness of such policy depends on our understanding of the factors that most affect migrants' remittance behavior, and the motivational characteristics policymakers should consider in seeking to stimulate greater remittance inflows. If individual remittance rates tend to decline during the early years of migration, it is necessary to raise the rate of new migration in order to sustain the aggregate remittance level. On the other hand, if migrants' remittance levels are positively related to the length of stay, as appears the case with the Bangladeshi migrants, aggregate remittance levels may not decline over time, even if the rate of new migration is insufficient to offset the stock losses from attrition due to death or return-migration. Also, the extent to which remittances are responsive to variables other than the needs of dependents left behind determines the space for government policy intervention to induce higher remittance levels. The evidence provided here shows that investment in human capital and the export of such capital is a rational strategy for Bangladesh because the returns are higher for migrants relative to what they would have earned by staying home.

**3.14 Remittances play a large role in countries like Bangladesh.** Analysis for this report shows that remittance is not driven exclusively by the need for family support but also by migrants' skills, educational level, and motivation to transfer their savings as investment in their home country. Also, remittances play a vital role in supporting consumption levels and as a major source of funds for investment. The extent to which remittances become investment depends on the extent of governments' supportive policies, and whether the economic environment is conducive to investing, including investment in human capital. It must be noted, however, that efforts by governments to channel remittances to investment have met with little success.

#### **IV. Making Growth Inclusive**

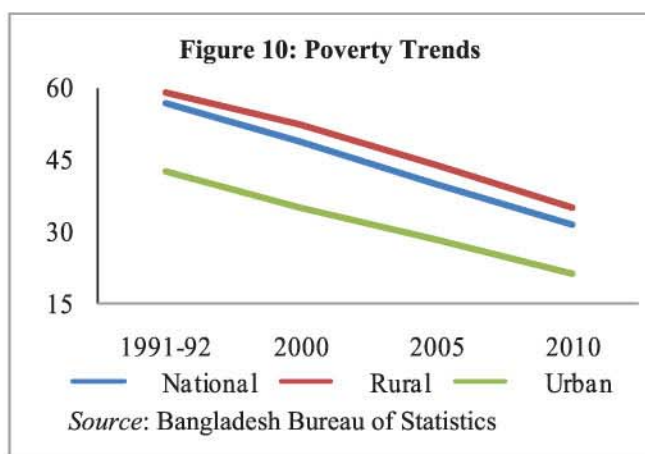
*When growth first takes off, incomes rise and countries are able to finance more spending on health and education which, for some, translates into much-needed progress toward the Millennium Development Goals. Following this initial spurt, other questions arise: how inclusive is this growth? Are the benefits well-spread or do they accrue only to a few? The concern for a growth pattern that include all income strata is not new, but what is different is the urgency in trying to achieve greater inclusiveness—and a realization that without it, sustained growth will not be possible. Has growth in Bangladesh benefited the poor in absolute terms? What happened to the distribution of income and expenditure in the growth process? What happened to the distribution of economic opportunities? Has growth created enough jobs? What policies are needed to make growth more inclusive?*

**4.1 Economic growth in the last two decades in Bangladesh has been pro-poor.** Poverty declined significantly, from 56.8 percent in fiscal 1992 to 31.5 percent in 2010 (Figure 10). The number of poor declined by around 15 million as the pace of poverty reduction accelerated during 2000-2010. There has

also been regional convergence in poverty patterns during 2005-2010 (see Appendix A, Table A7). Poverty reduction in the lagging divisions (Rajshahi, Khulna, and Barisal) was larger than in the eastern divisions. The poor have increasingly migrated to urban areas in search of income. A number of other indicators of welfare also show notable improvements between 2000 and 2010, for the general population and poor alike. At an aggregate level, growth in real GDP per capita, increase in foreign remittance per capita and increased access to services, particularly education, micro-credit and safety net, appear to have contributed to the observed decline in poverty. Increased returns to the endowments of the poor contributed more to poverty reduction at the micro level.

**4.2 Notwithstanding its achievements in poverty reduction, the size of Bangladesh’s vulnerable non-poor remains very large.**

Simply moving from the national poverty line of US\$1.09 a day to the international US\$1.25 a day line increases the headcount ratio from 31.5 percent to 43.25 percent. The pace of poverty reduction in the last two decades slows considerably with the raising of the poverty line. Thus, while the Cost of Basic Needs<sup>28</sup> (CBN)-based poverty headcount rate has declined rapidly in the past three decades, vulnerability has not. Large numbers of people are at the margin, indicating potential vulnerability to a myriad idiosyncratic or covariate shocks to income and/or expenditures.



Bangladesh has almost 81 million people in the US\$1.09-US\$2.00 per day range. Vulnerability varies by regions and household characteristics. Vulnerability in the coastal division (Chittagong) is much higher than in the rest of the country. Vulnerability tends to be highest among households headed by illiterate persons. Households headed by persons with more than secondary education are better placed to cope with risk and uncertainty. Also, agricultural households are more vulnerable than non-agricultural households.<sup>29</sup>

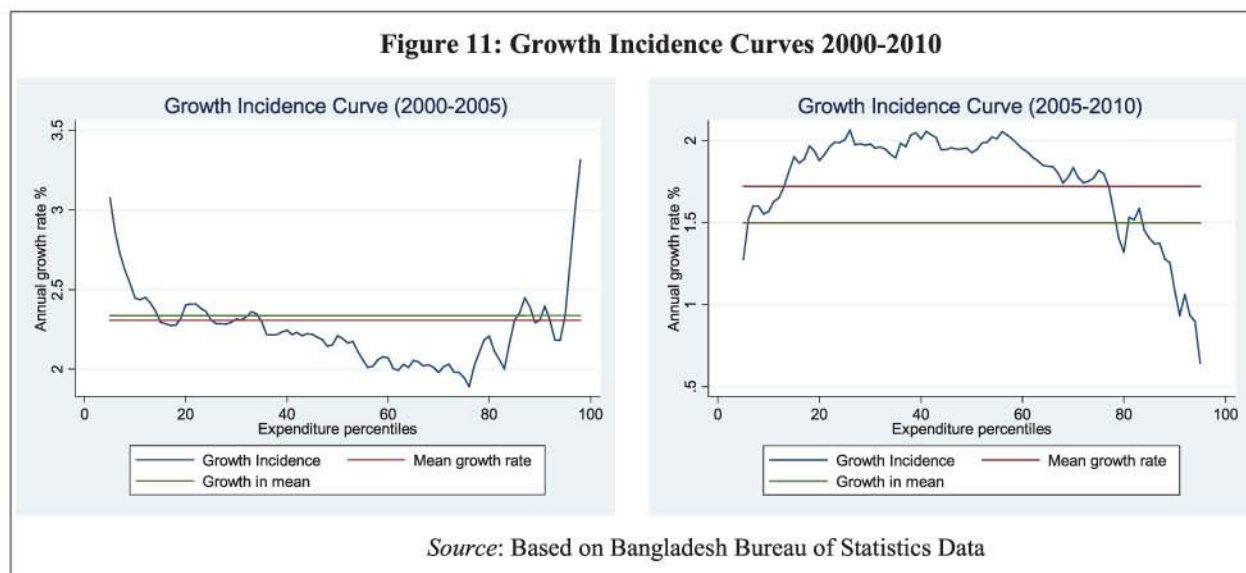
**4.3 Safety-net programs in Bangladesh have limited coverage.** They cover about 10 million people, which is well below the needs of the 26.4 million extremely poor. Not only is the coverage inadequate, there is relatively high leakage from food based programs in particular. There are also too many programs run by multiple government departments, resulting in fragmentation.

**4.4 Income distribution appears to have stabilized, after deteriorating in the 1990s.** While comparisons based on consumption data have been used to argue that inequality in Bangladesh is low by international standards, when income rather than HIES consumption data are used, inequality appears to

<sup>28</sup> CBN poverty lines represent the level of per capita expenditure at which a household can be expected to meet its basic needs (food and non-food). This is measured by (i) estimating a food poverty line as the cost of a fixed food bundle (in case of Bangladesh, of 11 key items), providing minimal nutritional requirements corresponding to 2,122 kcal/day/person, and (ii) adding an “allowance” for non-food consumption to the food poverty line. For the lower poverty line, the non-food allowance is the average non-food expenditure of households whose total consumption is equal to the food poverty line; whereas for the upper poverty line, the non-food allowance is the average non-food expenditure of households whose food consumption was equal to the food poverty line. As prices and consumption patterns vary between different geographical areas, poverty lines are estimated for each of 16 different geographical areas. (For more details on methodology, see *Poverty Assessment for Bangladesh*, Bangladesh Development Series Paper No. 26, World Bank, October 2008.)

<sup>29</sup> Aphichoke Kotikula, Ambar Narayan and Hassan Zaman, *To What Extent Are Bangladesh’s Recent Gains in Poverty Reduction Different from the Past?* The World Bank, Policy Research Working Paper No. 5199, February 2010.

be much higher. The degree of income inequality was reasonably low and stable compared to countries such as Malaysia, Thailand and Philippines during the 1970s and 1980s. But there was a sharp increase between fiscal 1992 and 1996. Gini consumption concentration ratios based on HIES 2000, 2005, and 2010 data were almost unchanged while income concentration ratios increased by 3.5 percent during 2000-2005, followed by a 1.9 percent decrease during 2005-2010. Income inequality in Bangladesh is relatively high. Among countries at its level of development, only Sri Lanka has a higher income Gini than Bangladesh, though Cambodia is close.



**4.5 The good news is that it has been a race to the top in the past decade, with consumption growing for the poor and non-poor alike.** The Growth Incidence Curves (GICs, Figure 11)<sup>30</sup> indicate that annual average growth of per capita consumption during 2000-2005 was highest for the bottom 20 percent and top 10 percent of the population. This changed in the latter half when annual average consumption growth was lowest for the top 10 percent and the bottom 10 percent. A comparison of the mean of growth rates of deciles of per capita consumption with the growth rate of mean per capita consumption suggests that growth was nearly equitable across consumption groups in percentage terms. During the last five years in particular, the mean of consumption growth by deciles has exceeded the rate of growth of the overall mean consumption per capita, suggesting that growth was more pro-poor in the last half relative to the first half of the past decade.

**4.6 A certain degree of inequality, and an increase in inequality, can be expected during the growth process.** This has been seen in many growth experiences. In Bangladesh, there has been only a slight increase in income inequality over the last decade, when growth was strong. Moreover, access to education, health and electricity has improved. This bodes well for the future.

**4.7 Unequal distribution of income is underpinned by unequal distribution of economic opportunities, but inclusivity of opportunities has largely improved.** Labor is the single most important endowment of the poor. The good news is that the average employment opportunity for Bangladeshis has increased with a surge in migration abroad in the last half of the past decade. Also, the distribution of employment opportunities has remained pro-poor. The bad news is that domestic employment opportunities have not kept pace with growth in the domestic labor force. The decline in the inclusiveness of domestic employment was exacerbated by a decline in the inclusiveness of access to

<sup>30</sup> Growth Incidence Curves depict per capita consumption growth rates for each decile, based on comparison of average consumption in a particular decile in the current survey with average consumption in the same decile in the past survey.

land.<sup>31</sup> Meanwhile, access to education, health and electricity continue to remain inequitable—electricity highly so; but inclusivity has improved on all the three indicators because of an increase in average opportunity as well as the distribution of opportunities.

**4.8 Catching up on inclusion requires stimulating both employment growth and productivity growth.** Labor markets are the main channels through which economic growth is distributed among poor people. While there can be a negative relationship between the growth of labor productivity and job growth, there is extensive empirical evidence showing that the long-term trend in countries has been towards simultaneous growth in per capita income, productivity and employment. This requires, in addition to sound macroeconomic policies, a sensible role for market forces in allocating resources to their most productive uses. It also requires a sound institutional environment that can help realize the long-term growth potential.

**4.9 In Bangladesh, productivity growth outpaced GDP growth, resulting in employment elasticity declining from 0.8 in the early '80s to 0.4 in the late '00s.** Bangladesh is not unique in experiencing a decline in employment elasticity, which is a result of productivity growth. In economies with positive GDP growth such as Bangladesh, employment elasticity between 0 and 1 correspond with positive employment and productivity growth and lower elasticity within this range correspond to more productivity-driven growth. This was particularly the case in the latter half of the last decade. Low productivity growth and high employment growth were associated with an employment elasticity of 0.9 during 2000-2003. This was followed by high productivity and low employment growth which drove employment elasticity down to 0.3 during 2003-2006. With a higher pickup in employment growth relative to productivity growth, the employment elasticity rose back to 0.4 during 2006-2010.

**4.10 Bangladesh's fast growing labor force presents both growth possibilities and challenges.** Bangladesh has a young population and one of the lowest female participation rates in the world. The demographic transition will result in more workers entering the labor force in the future. Nearly 21 million people will enter the prime working age population over the next decade. Labor supply growth is 4.6 percent per annum in Bangladesh, above the 2.3 percent South Asian average and the global average of 1.8 percent. The increased bulge in the labor force and increased female participation can contribute to additional growth if they can be gainfully employed with greater use also of the existing underemployed. The annual 2.1 million increase in labor force adds to a backlog of 2.7 million openly unemployed and 11 million underemployed, most of whom are self-employed with earnings below the poverty line. Even 7 percent annual GDP growth would add only 1.5 million jobs if the employment elasticity of growth does not decline further. This is well short of the number added to the labor force every year. Creation of productive employment for at least 25 percent of the existing underemployed adds another 2.75 million jobs. Thus, the employment challenge ahead for Bangladesh is to absorb higher numbers of new labor force entrants at rising levels of productivity. The demographic dividend could enable the factor accumulation needed for faster inter- and intra-sectoral reallocation of labor. Creating more and better jobs for a growing labor force calls for a new wave of reforms, including those needed to further boost migration abroad, to augment human capacity and raise productivity.

**4.11 Government needs to focus on promoting social and economic justice.** The expansion of human capacities would not ensure equal opportunity for all if some people do not have access to

---

<sup>31</sup> Inclusiveness is measured using the idea of a social opportunity function. Increase in the social opportunity function depends on the average opportunities available to the population and how those opportunities are distributed among the population. The social opportunity function gives greater weight to the opportunities enjoyed by the poor: the poorer a person, the greater the weight. Opportunity can be defined in terms of various services, e.g., access to a health or education service, access to job opportunity in the labor market, etc. This methodology was applied to the Bangladesh Household Income and Expenditure Survey (HIES) 2000, 2005 and 2010 datasets to see how inclusiveness has changed in six dimensions: employment, ownership of cultivable land, access to primary and secondary education, access to electricity, and access to health services.

employment opportunities because of their circumstances, face low returns on those capacities, and have unequal access to complementary factors of production. Such social and economic differentiation is often reflective of poor policies, weak governance mechanisms, faulty legal/institutional arrangements, or market failures. The central role of the government in promoting social and economic justice is to address all of these failures of market, institution, and policy. Numerous empirical analyses have demonstrated that lower inequality and a larger “class in the middle” leads to better institutional outcomes.<sup>32</sup>

**4.12 A multi-pronged approach is needed for greater inclusion.** Firstly, Bangladesh must build on its impressive record for expanding access to basic education, and increase access to secondary and tertiary education as well. The focus should not be solely on access, but also on the relevance and quality of education and its link to skills formation. The high rates of unemployment among educated people need to be reversed. Secondly, sectors with high labor intensity deserve special attention, especially since Bangladesh has seen the harmful effects of their neglect, such as in lessened agricultural productivity. Improving agricultural productivity can help not only the rural poor by directly increasing their income, but also the urban poor by keeping food prices affordable. To raise employment and productivity, however, Bangladesh will need to capitalize on the key linkages between agri-business and small and medium enterprises. Thirdly, remittance presents a yet-to-be-capitalized area of greater inclusion. The inflow of remittance into Bangladesh has been relatively robust, even in the midst of the financial crisis. Better incentives and stronger financial infrastructure for channeling a greater proportion of remittance to investment could help small businesses flourish and stimulate job creation, leading to more inclusive growth (also see Section II). Last but not the least, a state that is accountable to its citizens, with checks and balances to minimize capture by special-interest groups, is essential. Establishing an effective institutional structure to deliver results in service provision, especially for the poor, is key to accountable government. Inclusion is vital for obtaining developmental results from economic growth. It is also necessary for ensuring that growth can indeed be sustained in the longer term.

## V. Sustaining Growth: Climate Change and Urbanization

*Beyond inclusion, sustainability of growth in Bangladesh is subject to two specific challenges: climate change and urbanization. Existing literature points to a growing consensus that while climate change presents a pressing challenge to the wellbeing of all countries, its adverse effects will be felt most by the poorest countries and especially by the poorest people among them. This is true in Bangladesh, which is among the countries most vulnerable to climate change. The socio-economic impacts of climate change are well documented. But how does it affect sustainability of growth both through ex-ante and ex-post channels? Meanwhile, the growth of urban centers is a manifestation of agglomeration forces, and they play an important part in the growth of a country. By creating thick markets for labor, capital, and intermediate and final goods and facilitating knowledge spillover between firms, cities enable agglomeration economies through cost savings, efficiency and productivity improvement and innovation. If not well managed, agglomeration forces may, however, create problems of rising pollution, crime, rising factor costs due to unplanned growth, and congestion that makes growth unsustainable. Agglomeration forces are currently influential in Bangladesh’s rapid economic transformation. How are cities in Bangladesh shaping growth?*

### Growth Impacts of Climate Change

**5.1 Climate change will have both ex-post and ex-ante impacts on growth.** Bangladesh is one of the most climate-vulnerable countries in the world. Key factors contributing to its vulnerability are its

---

<sup>32</sup> Easterly, Ritzen, and Woolcock. 2006. *Social Cohesion, Institutions and Growth*, Economics and Politics, Vol. 18, No. 2, July 2006.

geographic location, low elevation, high population density, poor infrastructure, and high levels of poverty. Climate change is expected to have an impact on its economy by affecting the average temperature and rainfall and also increasing their variability. It is associated with more frequent and more extreme weather events. In its 2009 Climate Change Strategy and Action Plan,<sup>33</sup> the government recognized the likely effects of climate change on the country: heavy and more erratic rainfall on the Ganges-Brahmaputra-Meghna river catchment area, lower and more erratic rainfall in northern and western parts of the country, melting of the Himalayan glaciers, increasing and frequent tropical cyclones, and sea level rise. Bangladesh is already flood-prone, and as climate variability increases, major floods like those of 1998, 2004, and 2007 are also expected to become more frequent. Climate change could affect growth ex-post, i.e., after climate-related events occur, or ex-ante, i.e., before the shocks hit. This study examines the former at a macro level using a computable general equilibrium (CGE) model and the latter at a micro level using the 2010 household survey data.

**Table 6: Cumulative Growth of Macro-Economic Indicators for Bangladesh, Without Climate Change and Under Alternative Climate Change Scenarios (2010-21)**

Scenario	GDP	C	I	G	X	M
<i>Percent</i>						
<i>Additional Effects due to Climate Change (Percentage Points, relative to start of decade)</i>						
Sea-Level Rise, Median Rice Yield Impacts, and Two Floods	-1.67	0.67	0.92	20.79	-0.94	0.25
Sea-Level Rise, Median Rice Yield Impacts, and Three Floods	-5.53	-3.16	3.15	12.24	-12.53	-0.70 <sup>34</sup>
<i>Additional Effects due to Climate Extremes in Other Countries (Percentage Points)</i>						
Median Global Damage	0.00	2.68	4.52	19.27	-8.11	11.96
High Global Damage	-0.20	3.45	9.07	26.28	-11.96	18.70
Low Global Damage	0.04	1.80	2.32	12.84	-5.29	7.24

Source: World Bank simulations

**5.2 Ex-post impacts include direct effects of climate phenomena such as sea-level rise, changes in crop yields, and floods after they occur.** As the sea-level rises, the land available for agriculture will be adversely affected, putting pressure on the prices of land, crops, and the output of downstream industries, such as processed rice and other processed foods that require on-crop inputs. At the same time, higher atmospheric CO<sup>2</sup> might benefit the yields of some crops, as long as there is sufficient precipitation and no major flooding. Bangladesh experiences floods on an annual basis and the agricultural sector has often benefitted from these. However, major floods that exceed the scale of the expected annual floods will hurt agricultural production, and damage the capital stock in multiple sectors of the economy. The direct damage to agricultural production would have implications for food supply and food prices. As sectors experience faster depreciation of capital in years with major floods, their production will decline, with subsequent impacts on output, employment, prices, consumption, and trade. Since floods in Bangladesh are expected to become more frequent and intense, they can be expected to progressively reduce the rate of economic growth.<sup>35</sup> Climate change impacts in Bangladesh's trading partners can also be transmitted to Bangladesh through the trade and investment channels. This study, using a CGE model,

<sup>33</sup> MoEF, 2009.

<sup>34</sup> The imports are slightly lower due to contraction in demand for intermediate inputs. Flood damages reduce capital stock in all sectors. Due to the complementary nature of intermediate inputs and value added (including capital) in the production structure, the reduction in capital stock leads to a contraction in the demand for intermediate inputs, including imported inputs.

<sup>35</sup> After disasters there is often an increase in transfers through remittances or disaster aid which increases the rate of recovery. Since the magnitudes of these transfers cannot be predicted ex-ante, the analysis assumes that no additional transfers occur.



examines how growth is affected over 2011-2021 because of sea-level rise, climate-instrumented agricultural production, and more frequent major floods arising from climate change.

**Table 7: Cumulative Growth for Broad Sectors, Without Climate Change and Under Alternative Climate Change Scenarios (2010-21)**

Scenario	Agriculture	Industry	Manufacturing	Services
<i>Percent</i>				
<i>Additional Effects due to Climate Change (Percentage Points)</i>				
Sea-Level Rise, Median Rice Yield Impacts, and Two Floods	-2.5	3.4	-2.6	-1.0
Sea-Level Rise, Median Rice Yield Impacts, and Three Floods	-9.5	4.5	-5.8	-3.4
<i>Additional Effects due to Climate Extremes in Other Countries (Percentage Points)</i>				
Median Global Damage	0.3	2.4	4.1	-1.4
High Global Damage	0.4	4.7	8.0	-3.4
Low Global Damage	0.2	1.3	2.0	-0.5

*Source: World Bank simulations*

**5.3 The study’s focus on the coming decade has two advantages.** The existing literature on climate change looks at the long term because the most substantial impacts of climate change on Bangladesh will not be felt until the 2030s, 2050s, or even the end of the century. However, we focus on the next decade for two reasons. Firstly, the government aims to become a middle-income country by 2021, and focusing on the 2011-2021 timeframe highlights the immediate climate impacts within this planning horizon. The shorter time horizon sharpens the focus to impacts that will be experienced very soon, highlighting the immediacy of the challenges. Secondly, a focus on impacts in the coming decade allow for an analysis that reduces the uncertainty in the various climate predictions. These uncertainties are often compounded by the potential economic impacts being influenced by unaccounted interventions, such as adaptation and technological improvements.

**5.4 Ex-post, climate change could reduce Bangladesh’s real GDP over the decade by 2-6 percentage points, depending on the frequency of major flooding.** Without climate change, Bangladesh’s economy is estimated to grow at an average annual rate of 6.75 percent. However, the growth rate can be eroded by climate change by 2-6 percentage points, especially through major floods, that are expected to occur more frequently in the future. Agriculture is particularly sensitive to climate change (Table 7), with growth decreasing by 2.5-9.5 percentage points over the decade, depending on the frequency of major floods.

**5.5 Ex-post impacts of climate change also include depression of labor demand growth.** Demand for less-skilled workers is likely to be more adversely affected than for skilled workers, and the effects will become more severe with more frequent floods. Without climate change, the average sectoral demand for skilled labor is estimated to rise by 30 percent between 2010 and 2021, while the demand for less-skilled labor is estimated to rise by 45 percent. In the climate change scenario with two floods, the demand for skilled labor is estimated to decline by 0.36 percentage points while the demand for low-skilled labor is expected to decline by 0.42 percentage points. These estimated declines in demand are greater when the three-flood scenario is considered, with skilled labor demand declining by 2.4 percentage points and low-skilled labor demand declining by 4.3 percentage points. The lower demands for labor due to floods reflect the lower output of most sectors due to the damage to capital stocks, or dampened land supply, in the case of agricultural production.

**5.6 Climate extremes in the rest of the world have a small impact on GDP growth, but affect trade.** If the rest of the world experiences more high-impact climate extremes such as extreme heat, droughts, floods and storms, then Bangladesh’s cumulative GDP growth over the decade would be lower by less than 0.2 percentage points, the export growth rate would be dampened by 5.3-12.0 percentage

points, and the import growth would rise by 7.2-18.7 percentage points. When other countries experience climate extremes, it leads to a contraction in their import demand due to the reduction in their income, which also pushes down imports sourced from Bangladesh. The lower global demand would also depress world prices, and facing lower prices, Bangladesh could demand more imports. The resulting disparity in the export and import growth rates may exacerbate Bangladesh's balance of payments challenges.

**5.7 The national growth estimates captured here show the effect of labor moving from one industry to another after a climate shock,** such as a flood, has occurred. However, a household is likely to be able to take proactive adaptive actions based on its current knowledge of historic climate volatility, which cannot be captured by the ex-post impact analyses. So the study looks at anticipatory behavior at the household level in the microeconomic context.

**5.8 Climate change can also affect growth when households take ex-ante actions to reduce their exposure to climatic variability.** Ex-ante effects include diversification of occupational choices by households in anticipation of climate variability: anticipatory adaptive behavior that could lead to lower productivity and income growth. If households face large climate risks, they might make occupational choices that are less than optimal. When households make occupational choices based on “pull factors”—such as increasing demand, higher wage rates, and higher returns from nonfarm activities—higher productivity and growth result. However, when occupational choices are based on “push factors”—such as climate risks—they may not be optimal and this could depress productivity and growth. Two major climate risks are considered: floods and local rainfall variability. These are considered push factors, since they could push households into low-productivity jobs to hedge risks. Two types of occupational choices are considered: sectoral choices (people will diversify away from sectors more affected by climate risks) and self- versus wage-employment choices (to reduce entrepreneurial risk).

**5.9 Empirical evidence shows that flood and local rainfall variability push households to diversify occupations and attain income stability by sacrificing higher returns.** Households cope with flood and local rainfall variability in different ways. Members of a household are less likely to be in the same occupation, in the same sector, or both in agriculture if the household lives in the flood-prone Upazila (**Error! Reference source not found.**, part A). This means households are likely to use sectoral diversification to cope with flood risks. On the other hand, households are more likely to diversify between self- and wage-employment to cope with local rainfall variability.

**5.10** One possible explanation for lack of significance in the relationships between sectoral focus and local rainfall variability may be heterogeneity (Table 8, Part A). For example, in flood-prone areas, households may use normal flood water as a substitute for rain and irrigation water. If this is correct, households in flood prone areas would face different sets of risks than those in non-flood prone areas. To take account of possible heterogeneity, separate models were estimated for non-flood prone areas and flood-prone areas. The analysis finds that households in non-flood prone areas diversify across sectors as well as between self- and wage-employment to cope with local rainfall variability (Table 8, Part B). On the other hand, in flood-prone Upazilas where “normal” flooding reduces the dependence of households to the level of local rainfall and its variability, households do not need to diversify across sectors or employment to cope with local rainfall variability (Table 8**Error! Reference source not found.**, Part C). This is summarized in Figure 12.

**5.11 Higher rainfall variability also accounts for significantly lower consumption welfare in non-flood prone Upazilas.** When households' occupational choices are driven by push factors, such as local rainfall variability, households attain income stability by sacrificing higher returns. The evidence of low consumption suggests households have low productivity or may be combining diversifying occupation with savings as self-insurance. In case of an adverse weather outcome, liquid savings can be used for consumption. Savings for self-insurance blocks a part of the savings in liquid assets and prevents investment in physical or human capital. Less-productive occupations and savings as self-insurance thus lower investments in both physical and human capital, leading to lower growth.

<b>Table 8: Occupational focus and flood and local rainfall variability, summary results</b>						
VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
<b>A. Pooled sample, CRU based CV of Rain</b>						
Flooded areas 1998	<b>-0.331***</b> (-3.028)	<b>-0.263**</b> (-2.455)	<b>-0.273*</b> (-1.833)	0.0717 (0.485)	-0.0252 (-0.178)	-0.180 (-1.049)
Local rainfall Variability	-1.439 (-0.695)	-1.237 (-0.601)	1.076 (0.376)	<b>-8.948***</b> (-3.133)	<b>6.434**</b> *	- <b>6.330**</b> (-2.322)
<b>B. Upazilas not flooded in 1998, CRU based CV of Rain</b>						
Local rainfall Variability	<b>-4.365*</b> (-1.739)	<b>-4.569*</b> (-1.818)	<b>-4.906*</b> (-1.669)	<b>-12.06***</b> (-3.468)	<b>9.030**</b> *	<b>11.87**</b> *
<b>C. Upazilas flooded in 1998, CRU based CV of Rain</b>						
Local rainfall Variability	4.733 (1.486)	4.906 (1.511)	<b>12.25***</b> (2.683)	-3.293 (-0.754)	-1.062 (-0.332)	3.710 (1.064)

Robust z-statistics in parentheses \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Note: The dependent variables for each column are (1) "Same Occupation as Head;" (2) "Same Sector as Head;" (3) "Both in Agriculture;" (4) "Both self-employed;" (5) "Both in the same sector and self employed;" and (6) "Both self employed in agriculture" respectively.

Source: World Bank simulations

**5.12 When households have access to credit, or safety nets, and/or markets, the influence of push factors on occupational and sectoral diversification is likely to be weaker.** That is, if households have access to credit, safety nets, or markets, households are more likely to make occupational choices because of pull rather than push factors. The estimates based on the full sample suggest that access to credit and safety nets tend to weaken the role of push factors for diversification within households. Access to markets may completely eliminate the households' need to diversify into different occupations if they live in flood-prone areas.

**5.13 The macro and micro analyses above suggests two sets of policy actions:**

- **The first set relates to "no regrets" policies to help make growth robust to climate change.** These policies would be no-regrets in that they would be beneficial under various climate change scenarios as well as under the no-climate-change baseline. Firstly, the skills share of the labor force needs to be developed to take advantage of the more climate change-resilient sectors (also see Section II on labor-embedded exports). Output growth of the agriculture and manufacturing sectors are sensitive to damages from floods, which can be expected to become more frequent and intense with climate change. The services sector, in contrast, is much less sensitive. Skilled labor demand is thus less adversely affected by extreme climate shocks than the demand for less-skilled labor. Secondly, export growth needs to be enhanced to reduce potential increase in the current account deficit, through mechanisms such as export diversification (Section III). Export growth dampened in most of the climate change scenarios, while import growth heightened. Export intensification from higher-value sectors such as manufacturing, transportation, or business services may be helpful, especially if there are higher-skilled workers available to aid this expansion.

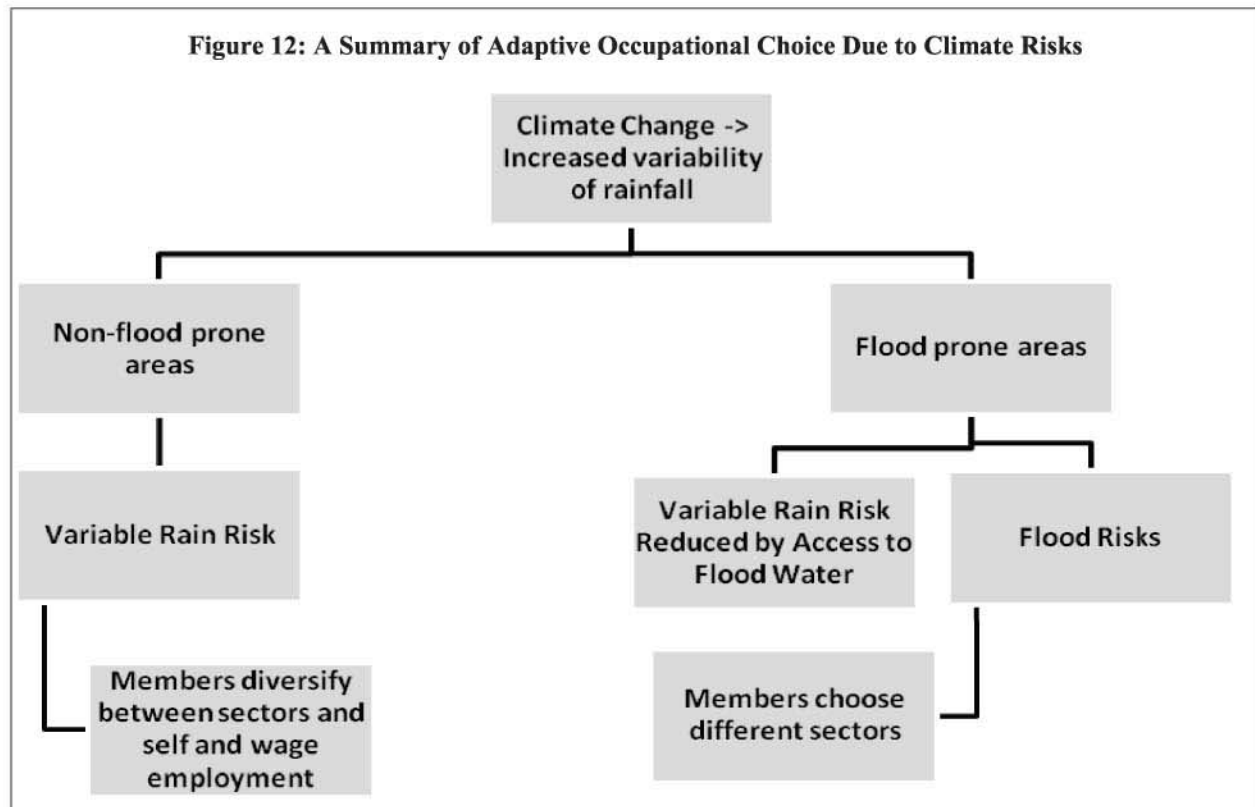
- **The second set relates to various policy actions that reduce climate risks at the household level: access to credit, access to safety nets and access to markets.** Access to credit and safety nets lower the likelihood of pushed occupational diversification when faced with higher rainfall variability. However, access to credit and safety nets cannot completely eliminate the households' need to diversify in order to cope with rainfall variability. The net negative effects of rainfall variability and access to credit or safety nets on consumption welfare suggests households who face higher rainfall variability but have access to credit or safety nets still face welfare loss due to ex-ante rainfall variability. Our results suggest access to markets, on the other hand, may provide households with other strategies to cope with rainfall variability and eliminate the need to choose a lower welfare-providing, diverse portfolio of occupations between household members.

### Urbanization: An Engine of, or Drag on, Growth?

**5.14 Bangladesh needs a globally competitive urban space to accelerate and sustain growth.** Competitive cities are well-connected, innovative and livable. Bangladesh's cities have to take proactive measures to improve and sustain their competitiveness. Strengthening competitiveness across the spectrum of Bangladesh's cities calls for coordinated, multi-pronged interventions encompassing infrastructure, institutions and incentives.

#### The Salient Features of Urbanization in Bangladesh

**5.15 Urban areas in Bangladesh have exceptionally high population density, but relatively low economic density.** High population density, combined with rapid urbanization, implies a large and fast-growing urban population to manage. Dhaka city, the largest urban conurbation in Bangladesh, is one of the most densely populated urban areas in the world. However, the economic density of Bangladesh's urban areas (GDP or value-added per square km) is relatively low from an international perspective.



**5.16 Economic activity is concentrated in Dhaka and Chittagong.** About 9 percent of the Bangladesh population lives in the Dhaka metropolitan area, which contributes to 36 percent of the country's GDP. An additional 11 percent of the Bangladesh GDP is generated by Chittagong, the second-largest city and home to 3 percent of the population. The economic gap between Dhaka and Chittagong compared to other medium- and small-size cities is large and widening.

**5.17 Both Dhaka and Chittagong, specializing in producing garments, are increasingly bumping up against infrastructure and service-delivery constraints.** The garment industry was born and has thrived in Bangladesh's two largest cities, but the pace of growth has stretched urban infrastructure to its limit. Bangladesh's manufacturing sector is dominated by export-oriented, low-value garments. The garment industry is concentrated in Dhaka metro and Chittagong city. While garment production has thrived in Bangladesh's labor-abundant urban areas, urban infrastructure and services have lagged. Dhaka ranks among the bottom 10 cities in the world<sup>36</sup> for quality of infrastructure, services and amenities—and other cities are not spared from infrastructure and service-delivery challenges.

**5.18 Peri-urban areas around Dhaka are becoming important, but there is no institutional mechanism for core-periphery coordination.** Garment production, while still concentrated in Dhaka city, is spreading to peri-urban areas. This has led to the emergence of a greater-Dhaka metro region. Despite the growing economic importance of peri-urban areas, there is no institutional mechanism for core-periphery coordination at the metropolitan level.

### **Make Bangladesh's Urban Space Better Able to Support and Sustain Higher Growth**

**5.19 High population density requires equally high economic density (GDP or value-added per square km) for economic growth.** Given its exceptionally high population density, Bangladesh needs to substantially increase its economic density to accelerate growth. Only a highly competitive urban space—that has the capacity to innovate, is well connected internally and to external markets, and livable—can sustain such a high level of economic density.

**5.20 As the country's growth center, Dhaka metro's competitiveness is important for sustaining accelerated growth.** While Bangladesh should aim to strengthen the competitiveness of its entire urban space, it needs a competitive Dhaka metropolitan area, given the capital's primacy in GDP. While specialization in low-value garment products has served the country well to date, Dhaka metro needs to gradually diversify its economic base from low- to high-value products and services to become a more competitive urban economy and contribute to Bangladesh's goal of becoming a MIC.

### **Urban Competitiveness: Drivers and Obstacles from the Perspective of the Garment Sector**





















**5.21 Dhaka City is still the most productive location for garment firms in Bangladesh...**<sup>37</sup> It has a Total Factor Productivity (TFP) premium relative to both Chittagong city and Dhaka's peri-urban areas in garment production. Access to markets and a relatively better quality of power supply are Dhaka city's main comparative advantages. Dhaka has the best-performing city locations for access to skilled labor and power supply—the two factors garment firms value most when deciding on location—proximity to suppliers, sub-contractors, machine-repair technicians and support businesses.

**5.22 ...but is falling behind other locations in accessibility and, for some firms, Dhaka city's costs have started outweighing opportunities.** Dhaka city is the worst-performing location for urban mobility and access to the highway. Firms in the city also are disadvantaged in access to the port and airport, compared to those located in Chittagong city. Both firms and workers located in Dhaka must also struggle with limited availability and high prices of land and housing (Table 9).

<sup>36</sup> EIU Global Livability Index.

<sup>37</sup> Based on data collected from a survey of 1,000 garment firms for this study.

**Table 9: City Location Performance, from Garment Firms' Perspective—summary rankings**

	Dhaka City	Dhaka Peri-Urban (Urban)	Dhaka Peri-Urban (Rural)	Chittagong City
Access to labor				
Access to markets				
Accessibility				
Infrastructure				
Land and Housing				

*Note: Green = Satisfactory & best performance among city locations; Yellow = Satisfactory & worst performance or unsatisfactory & best performance among city locations; Red = Unsatisfactory & worst performance among city locations.*

**5.23 The high productivity of the garment workforce in Dhaka city has not led to better living conditions for production workers.** Garment workers in Dhaka city live in a deteriorating urban environment, characterized by over-crowding and lack of amenities, and have significantly lower access to housing and services than the average Dhaka urban dweller or garment workers in Chittagong and Dhaka's peri-urban areas. Dhaka city is the location with the highest share of urban-related inefficient worker turnover (defined as the separations caused by unhealthy urban environment, rather than by more-competitive job offers). Housing availability is cited by workers as the main reason for "urban-related" separations in Dhaka city, followed by high cost of living.

**5.24 Inadequate access to land and transport infrastructure in Dhaka city is the leading cause of firm relocation to the peri-urban areas.** It must be noted that the birth of new garment firms, rather than relocation, is driving peri-urbanization. However, of the firms that have relocated, about half said they did so mainly to gain better access to transport infrastructure and avoid Dhaka's congestion. Another 25 percent of firms said they relocated because of high costs and limited availability of land, buildings and housing in Dhaka city. Peri-urbanization is associated with the growth of a more competitive, vertically integrated business model in the garment sector. Peri-urban garment firms are more land-intensive and more likely to be vertically integrated than garment firms in Dhaka city. This suggests that younger firms are opting for a consolidated, vertically integrated business model, which has significant advantages for international competitiveness. Vertically integrated garment firms statistically have significantly lower lead times than the industry average, and are therefore better equipped to compete internationally from the current situation in Bangladesh.

**5.25 Peri-urban areas benefit from proximity to Dhaka city, have comparative advantage in accessibility to land and housing, but suffer from the city's congestion, and have lower access to infrastructure.** Peripheral municipalities are performing as well as Dhaka city in access to skilled labor, suggesting that they benefit from proximity to the city. Peripheral rural areas are, however, less competitive than Dhaka city in access to markets—particularly in proximity to buyers, suppliers, sub-contractors, competitors and support businesses. Peri-urban areas have a significant advantage in land and housing, urban mobility and access to a highway, compared to those in the city. However, firms located in peri-urban areas suffer indirectly from the city's high congestion, and from lower access and quality of infrastructure and services (Table 9).

**5.26 Chittagong city has a disadvantage in access to markets, but an advantage in transport accessibility, land and housing.** Chittagong is a low-productivity, low-cost garment production center compared to Dhaka city. Chittagong is less competitive than Dhaka in access to markets, in particular access to skilled labor—the factor garment firms value most—proximity to suppliers and support businesses. Chittagong city’s lower productivity is compensated by its cost advantage in land and housing. Chittagong city is ranked by garment firms as the best-performing location for availability and cost of land, buildings and housing for workers. It also has a marked comparative advantage in accessibility, being the top location for access to port, airport, highway and urban mobility. However, Chittagong has not been able to capitalize on its comparative advantage of being the largest seaport city in Bangladesh. Chittagong has one of the most inefficient ports in Asia, and the slow turnaround times seriously affect exports. The Chittagong port is identified as the main factor negatively affecting lead time in the industry—averaging about 88 days among the surveyed firms, compared to 40-60 days in China and 50-70 in India.

**5.27 Medium- and small-size cities are uncompetitive “distant places” from the perspective of the garment sector, and need to foster local entrepreneurship to find their comparative advantages, as opposed to attracting existing firms from elsewhere through relocation incentives.** Access to markets, in particular skilled labor, is cited by garment firms as the main disadvantage in medium and small cities. Contrary to the very successful EPZs in Dhaka and Chittagong, the EPZs located in “distant locations” have not succeeded in attracting garment firms. The failures of EPZs outside Dhaka and Chittagong is partially explained by the “path dependency” of garment firms’ location choices. Only 10 percent of the sampled firms relocated to a different location. Of the firms that did relocate, none moved to another city.

**5.28 EPZs are higher-productivity, higher-cost locations, and are partially shielded from Dhaka and Chittagong’s inefficiencies.** EPZs are more productive garment locations, with higher TFP than non-EPZ garment firms, even when controlling for firms’ characteristics. From a productivity viewpoint, therefore, EPZs are attractive locations. However, wages and building rent levels are also higher for EPZ firms than for non-EPZ firms. The cost differential suggests that the attractiveness of the EPZs is interacting with constraints on the supply-side to bid-up wages and rent levels. Chittagong EPZ is the best-performing location among all the surveyed locations, and the only one with satisfactory performance in all location factors, including access to electricity.

### **Building a Competitive Urban Space in a Global Economy: Strategic Directions**

**5.29 Bangladesh needs to build an urban space that is capable of innovating, is better connected and more livable in order to make cities competitive.** Bangladesh’s urban space is falling behind in all three of these drivers of competitiveness. The Dhaka metro area needs to evolve into a diversified economy with skilled human resources and an innovation capacity fueled by the cross-fertilization of ideas typical of large metropolitan areas. Dhaka metro area also needs to be better connected internally and with its peri-urban areas, and both Dhaka and Chittagong have to strengthen their connection to the global economy. Improved connectivity within Bangladesh’s system of cities is also important for productivity and export competitiveness. The development of an economically dynamic urban space, in particular in the Dhaka metro region, has occurred at the expense of livability. The livability of the urban space will become an even more binding constraint to sustained growth as Bangladesh transitions to a new business model based on higher-value industries and services, which need a highly skilled and internationally mobile workforce. This is a tall order for Bangladesh, but planning needs to start today for Bangladesh’s cities to become more competitive in future.

**5.30 Proactive measures are needed to improve and sustain urban competitiveness.** Coordinated actions encompassing infrastructure, institutions and incentives, are needed in four strategic directions:

- Transform Dhaka into a globally competitive metro region, by (i) developing appropriate institutional mechanisms for core-periphery coordination in the emerging Dhaka metro region, (ii) improving infrastructure to leverage Dhaka city's productivity advantage, while (iii) enhancing accessibility to manage the growing diseconomies of agglomeration in Dhaka city, (iv) upgrading peripheral infrastructure in a bid to transform peri-urban areas into globally competitive manufacturing centers, (v) strengthening institutions for a more efficient and integrated land and housing market, (vii) strengthening the coordinating role of local authorities to foster a business environment that rewards entrepreneurship and innovation, and (viii) making urban growth more environmentally and socially sustainable in order to improve livability.
- Leverage Chittagong City's natural comparative advantage as a port city, by (i) expanding the capacity and improving the operational effectiveness of Chittagong city's port and (ii) investing in institutions and infrastructure to sustain Chittagong's advantage as lower-cost location relative to Dhaka, as the city expands.
- Create the enabling environment for local economic development in medium- and small-size cities by (i) connecting medium- and small-size cities to markets, and (ii) creating a level playing field in the provision of basic services across locations to improve livability and foster local entrepreneurship in medium- and small-size cities.
- Promote strategically located EPZs to foster industry competitiveness and spearhead urban reforms, by (i) developing EPZs in proximity to markets and in line with locations' comparative advantages to enhance the international competitiveness of Bangladesh's industries, and (ii) building support for urban change through EPZ demonstration effects.

## VI. The Long Road Ahead: The Reform Agenda

**6.1 A vast reform agenda lies ahead for Bangladesh if it wants to become a MIC by 2021.** Real GDP growth has to accelerate from its current level of 6 percent to around 7-8 percent. Where will the 1-2 percentage point acceleration come from in an inclusive and sustainable manner? The findings of this report point to a long list of actions across several fronts. But it is noteworthy that a few policy actions are important for all: accelerating growth, making it inclusive, and ensuring that it is sustainable. To help prioritize, the focus here is on reforms that cut across the three main themes, while recognizing that bold actions across all fronts are necessary if Bangladesh is to reach its goals.

**6.2 Invest in infrastructure.** This report shows that infrastructure (especially energy) is the top priority for *accelerating* and *sustaining* growth because it makes urban agglomerations more competitive. Investments in infrastructure (including rehabilitation and maintenance) drive long-term economic outputs in many countries with a wide variety of physical investments.<sup>38</sup> It is also evident that provision of infrastructure affects economic geography—and if inadequate, may well undermine the benefits of agglomeration.

**6.3 Public investment is constrained by finance and weak expenditure management.** There is an urgent need to improve revenue generation to allow sustainable increases in public investment by introducing a simple, coherent and effective tax policy, especially for domestic taxes such as VAT and income tax. Increased revenue generation has to be complemented by improved implementation capacity, by ensuring that medium-term budgetary framework (MTBF) reforms are perceived by stakeholders as bringing about improvements in budget planning and management—particularly in strengthening the management role of line ministries and giving them more flexibility, providing predictable resources, and

---

<sup>38</sup> OECD, 2009.



streamlining budget execution procedures, as well as reducing the present duplication in budget planning and management procedures.

**6.4** Bangladesh's severe energy crisis is a constant threat to growth momentum. In addition, Bangladesh's transport infrastructure is weak. A significant improvement in the quality and transparency of public investment is needed to complement the government's plans to ramp up public investment in infrastructure. This requires a range of measures to streamline the capital investment project cycle and improve the preparation of projects, rollout the MTBF to all ministries and agencies, upgrade the financial management information system, and introduce and extend electronic procurement, as well as online procurement monitoring. Both short- and long-term measures outlined in the government's Energy Sector Roadmap need to be speedily implemented. These include development of a more comprehensive energy policy, augmentation of existing power generation plants through retrofitting, tariff rationalization, and strengthening the rural electrification sector. To ensure adequate and stable flow of funds for transport maintenance, the government needs to establish a Road Fund based on user charges.

**6.5 Improve the investment climate.** A vibrant private sector is important for accelerating growth. A sound investment climate and low regulatory burdens are essential for promoting private enterprise. These factors also affect location decisions by firms. A growing private sector also affords economic opportunities to all, thereby promoting inclusion.

**6.6** Bangladesh continues to rank poorly in the Global Competitiveness Index, the Corruption Perception Index, and several of the World Bank's Doing Business Indicators. The private sector can play a role—as financier, partner, or operator—in improving the efficiency of infrastructure service. Its optimal role is sector-specific. The investment climate has to be improved to tap private resources in a cost-effective manner. Public-Private Partnerships (PPPs) are an example of how the private sector can become a partner in providing infrastructure at sector or project level. For this to work, the design of PPPs requires rethinking, with improved regulatory frameworks, greater investor certainty, and circumscribed government liability.

**6.7** Regulatory constraints are choking entrepreneurship and growth in the formal economy. Although the past two decades have seen streamlining and simplification, the regulatory environment in Bangladesh remains costly, over-regulated, and poorly administered. Laws and regulations that govern business activities are often outdated, inadequate, and ineffective. Problems go beyond policies and procedures into the design and performance of regulatory institutions themselves. Redressing the constraints on the availability of land, including a new Economic Zones Act, piloting of automation in land-title registration and land records, and reducing time taken for imports and exports to cross borders, are key priorities. Sustained good policies are needed in the telecommunications sector, so that it continues to attract foreign direct investment and domestic private investment. Reform of regulation alone will not be enough; complementary efforts are required to build systemic and institutional capacities in order to improve the business environment.

**6.8** A good investment climate for the poor will attract finance for job creation and enhance Bangladesh's factor endowments. Bangladesh has progressed well in financial inclusion compared with countries at a similar level of development. Its vibrant microfinance sector has been an important catalyst for broader financial inclusion. However, 45 percent of the adult population in Bangladesh still has no access to banking. Raising participation levels further in formal financial services could have a significant payoff. It goes beyond the traditional rubric of microfinance, which focuses mainly on the provision of financial services to the poor, to encompass the whole range of financial service providers working within their comparative advantages to reach underserved but bankable individuals and firms. Steps could also be taken to expand financial access by leapfrogging traditional ATM/branch expansion constraints, and building on technological innovations such as mobile banking.

**6.9** Unshackle the competitive constraints on Bangladesh’s two largest urban agglomerations and leverage their assets to accelerate and sustain economic growth, while creating an enabling environment for local economic development in small and medium cities. Bangladesh has been mostly reactive in tackling the growing economic costs of unplanned urbanization. This has stifled productivity and competitiveness. Evidence indicates that Bangladesh’s cities are falling behind in innovation, connectivity (both internal and external), and livability—three important dimensions of city competitiveness. A proactive approach to managing urbanization—based on a combination of institutional reforms, infrastructure investments and innovation policy—is needed to accelerate growth. To capture the economic benefits of rapid urbanization, Bangladesh needs to give priority to building institutions for improved policy and investment coordination at the metropolitan level, fostering entrepreneurship and innovation in Dhaka metro, and developing efficient and sustainable urban land and housing markets. In parallel, sustainable investments are needed to address infrastructure bottlenecks, enhance accessibility and improve livability and amenities in Dhaka and Chittagong metros.

**Box 1: Development Vision for Bangladesh**

The government’s long-term vision on how to graduate to MIC has been outlined in its perspective plan for 2010-2021. The Sixth Five-Year Plan for fiscal 2011-2015 provides a medium-term framework for Bangladesh to move forward to tackle key challenges to growth acceleration, sustainability and inclusion. Achieving the ambitious growth targets set out in the plan would require a break from the past, particularly with regard to increasing investment in infrastructure, alleviating energy constraints, and increasing domestic revenue mobilization through tax reforms. The plan recognizes the importance of private sector development and anticipates an increase in private investment equal to 4 percentage points of GDP. More attention is needed to encourage domestic and foreign investment, promote export-oriented manufacturing and services, create employment opportunities in the domestic economy, and find jobs abroad for Bangladeshi workers. There is a general consensus in Bangladesh on what the critical constraints are to trade, finance for the poor, capital markets, public financial management, and overall economic governance. But the consensus lacks clarity on the proper sequencing and prioritization of these reforms and specific policy changes.

**6.10 Invest in human development.** A holistic view is emerging on education and skills development as an engine for economic growth and social inclusion. Availability of skills also influences location decisions of firms. More specifically:

- This vision on *education and skills development* is linked to the macroeconomic perspectives of Bangladesh as an increasingly urban, industrialized and knowledge-based economy. The transition to such an economy would require increasing the share of GDP allocated to education from the present 2.3 percent to at least 4 percent. This would be one input into the goal of transforming the education and skills training systems into efficient, flexible and responsive producers of human capital that meets the requirements of the domestic and international labor markets. It is important to better harness the complementarities in different policies that have a bearing on education and skills development.<sup>39</sup> In addition, the role of information disclosure and transparency in the education sector has been underscored in public discourse. To improve the accountability and management of schools, information disclosure and transparency can be inbuilt into the design and capacity building of school performance monitoring systems.
- Bangladesh’s *health policy* emphasizes reducing severe malnutrition, high mortality and fertility, promoting healthy lifestyles, and reducing risk factors to human health from environmental, economic, social and behavioral causes with a focus on improving the health of the poor. However, there exist significant variations in mortality and nutritional status by gender and socio-economic

<sup>39</sup> Such as the National Education Policy, National Skills Development Policy, National Child Labor Elimination Policy, National Policy on Children, Migration Policy, and Non-Formal Education Policy.

status of households—so it is not inclusive. Improving access to quality basic health services for all would not only improve inclusion but also help increase productivity and growth.

- *Social safety nets* are important not just to protect the poor from economic shocks and promote inclusion, they help also to insure against climate risks and sub-optimal occupational choices. The coverage of social safety nets has expanded. In 2010, 24.6 percent of households reportedly received benefits from at least one program type, compared with 13 percent of households in 2005. However, there are too many programs run by too many government departments, resulting in large administrative overhead costs, and too many layers of decision-making in beneficiary selection. Meanwhile, there are hardly any social safety net programs for the urban poor.

**6.11 In summary, the reform agenda for accelerated, sustainable and inclusive growth requires doing more of the same—and going beyond.** Bangladesh could become a middle-income country, but this would require substantial efforts on many fronts. It would include maintaining macroeconomic stability, strengthening revenue mobilization, tackling energy and infrastructure deficits, deepening financial-sector and external trade reforms, improving labor skills, better economic governance, good urban management, and proactive adaptation to climate change. Bangladesh can become an export powerhouse with its labor-intensive manufactured and service exports growing at double-digits on a sustained basis if it speeds up government decision-making. If Bangladesh fails to act soon, others (such as Vietnam and Myanmar) will take the markets China is being forced to vacate.

## Appendix A

**Table A1: Bangladesh's Growth: A Comparative Perspective**

Region/ Period	GNI/Capita (PPP, Current International \$)	Population (Millions)	Annual Rates of Change		Investment Share in GDP (Percent)
			GDP	Labor Force	
<b>Bangladesh</b>					
1981-1990	452	93.8	3.7	3.2	16.7
1991-2000	717	118.7	4.8	2.4	19.7
2001-2008	1221	139.2	5.8	2.5	23.9
<b>India</b>					
1981-1990	668	774.8	5.6	2.3	20.6
1991-2000	1,220	940.8	5.5	1.9	22.7
2001-2008	2,258	1086.8	7.4	2.0	28.6
<b>Pakistan</b>					
1981-1990	980	96.3	6.3	2.6	17.0
1991-2000	1,515	124.1	4.0	3.0	16.9
2001-2008	2,158	153.8	4.8	3.8	17.5
<b>Sri Lanka</b>					
1981-1990	1,129	16.1	4.2	1.3	24.9
1991-2000	2,072	18.1	5.2	1.4	25.2
2001-2008	3,479	19.5	5.1	0.8	22.9
<b>East Asia &amp; Pacific</b>					
1981-1990	1,964	1696.2	5.2	2.5	28.6
1991-2000	3,835	1944.6	3.1	1.4	28.9
2001-2008	6,606	2113.6	3.8	1.1	25.7

*Source: Staff estimates based on the World Bank's World Development Indicators*

**Table A2: Decomposition of Growth (GNI per capita)**

Region/ Period	GDP/Labor Force (PPP, Current International \$)	GNI/GDP (PPP, Current International \$)	Labor Force/ Population	GNI/Capita (PPP, Current International \$)
<b>Bangladesh</b>				
1981	792.5	1.02	0.40	360
1990	1146.8	1.02	0.43	550
2000	1774.2	1.04	0.45	890
2008	2804.8	1.09	0.48	1600
<i>Percent change</i>	<i>253.9</i>	<i>7.01</i>	<i>19.46</i>	<i>344.44</i>
<b>India</b>				
1981	1321.0	1.00	0.37	490
1990	2410.1	0.99	0.37	890
2000	4149.6	0.99	0.38	1560
2008	7730.0	1.00	0.39	3040
<i>Percent change</i>	<i>485.2</i>	<i>-0.40</i>	<i>7.22</i>	<i>520.41</i>
<b>Pakistan</b>				
1981	2235.9	1.08	0.29	710
1990	4224.4	1.04	0.29	1260
2000	5683.6	0.99	0.30	1690
2008	7581.1	1.02	0.34	2600
<i>Percent change</i>	<i>239.1</i>	<i>-5.66</i>	<i>15.28</i>	<i>266.20</i>
<b>Sri Lanka</b>				
1981	2098.6	0.99	0.40	830
1990	3684.3	0.99	0.40	1450
2000	6557.3	0.98	0.41	2670
2008	11185.4	0.98	0.41	4490
<i>Percent change</i>	<i>433.0</i>	<i>-1.84</i>	<i>3.63</i>	<i>440.96</i>
<b>East Asia &amp; Pacific</b>				
1981	2811.7	0.99	0.48	1342
1990	5243.1	1.00	0.52	2736
2000	8955.5	0.99	0.54	4757
2008	15714.1	1.00	0.55	8658
<i>Percent change</i>	<i>458.9</i>	<i>1.36</i>	<i>13.90</i>	<i>545.26</i>

*Source: Staff estimates based on the World Bank's World Development Indicators*

**Table A3: Growth Accounts for Bangladesh**

	<b>GDP Growth</b>	<b>Physical Capital Growth</b>	<b>Human Capital Growth</b>	<b>Labor Growth</b>	
1981-90	3.73	8.17	0.47	2.30	
1991-00	4.80	7.49	0.68	3.26	
2001-10	5.82	8.20	0.68	3.22	
<b>TFP Growth</b>					
	<b><math>\alpha = 0.3,</math> <math>\gamma = 1.0</math></b>	<b><math>\alpha = 0.4,</math> <math>\gamma = 1.0</math></b>	<b><math>\alpha = 0.5,</math> <math>\gamma = 1.0</math></b>	<b><math>\alpha = 0.4,</math> <math>\gamma = 0.8</math></b>	<b><math>\alpha = 0.4,</math> <math>\gamma = 1.2</math></b>
1981-90	-0.66	-1.20	-1.74	-0.21	-2.18
1991-00	-0.21	-0.56	-0.92	0.51	-1.63
2001-10	0.63	0.20	-0.23	1.33	-0.92
<b>Contribution of Capital Stock to Growth</b>					
1981-90	2.45	3.27	4.09	2.62	3.92
1991-00	2.25	3.00	3.74	2.40	3.59
2001-10	2.46	3.28	4.10	2.62	3.94
<b>Contribution of Labor (quality adjusted) to Growth</b>					
1981-90	1.94	1.66	1.38	1.33	1.99
1991-00	2.76	2.37	1.97	1.89	2.84
2001-10	2.73	2.34	1.95	1.87	2.81

Note: Return to schooling = 5%.  $\alpha$  is the share of capital in the output,  $\gamma = 1$  is constant return to scale,  $\gamma > 1$  is increasing return to scale,  $\gamma < 1$  decreasing return to scale.

Source: WB Staff Estimates

**Table A4: Composition of External Inflows**

	<b>Remittances</b>	<b>Grants</b>	<b>FDI &amp; Portfolio Investment</b>	<b>ODA</b>	<b>Total</b>	<b>Remittance GDP Ratio(%)</b>
US\$ Million						
FY01	1882	373	169	54	2967	4.0
FY02	2501	479	385	29	3663	5.2
FY03	3062	510	378	46	4416	5.9
FY04	3369	257	282	14	4055	6.0
FY05	3848	200	800	49	5339	6.4
FY06	4802	500	775	53	6612	7.8
FY07	5979	587	899	51	7977	8.7
FY08	7915	703	795	75	10171	9.9
FY09	9689	523	802	56	11577	10.8
FY10	10987	564	519	91	12984	11.0
FY11	11650	727	740	31	13429	10.5

Source: Bangladesh Bank

**Table A5: Correlates of Migration**

	Dependent Variable Migrant Flow				Dependent Variable Migrant Stock	
	I	II	III	IV	I	II
GDP Growth	12.37 (0.78)	8.4 (0.5)			8.66 (0.52)	
Inflation	-3.29 (0.8)	-3.62 (-0.82)	-2.42 (-0.61)		-3.46 (-0.82)	
Investment	1.21 (0.12)	-1.8 (-0.16)	0.37 (0.04)			
Economic Reform	8.49 (0.6)	45.32** (2.26)	13.51 (1.09)	16.24** (2.3)	43.76** (2.52)	48.22*** (3.0)
Lag of Migrant Flow (-1)	0.38** (2.4)		0.37** (2.35)	0.36** (2.42)		
Lag of Migrant Stock (-1)		-0.05 (-1.34)			0.94*** (24.23)	0.95*** (24.88)
Oil Price	3.4** (2.49)	4.83*** (3.02)	3.17** (2.4)	2.78** (2.44)	4.86*** (3.12)	4.21*** (3.16)
R <sup>2</sup>	0.82	0.8	0.82	0.82	0.99	0.99
Adjusted R <sup>2</sup>	0.79	0.76	0.79	0.8	0.99	0.99
N	35	35	35	35	35	35
F-Statistic	22.08	18.95	26.74	46.81	3503.67	6082.85
Durbin Watson Statistic	1.45	1.06	1.39	1.35	1.06	0.99

t-statistics are given in the parentheses,\*\*\* Significant at 1% level,\*\* Significant at 5% level,\*Significant at 10% level  
Note: Migrant stock and flow are in thousands ('000),Inflation is calculated from GDP deflator, Investment is given as % of GDP, Reform dummy is the same as in Table(..),Oil price is the average of nominal US domestic crude oil prices given in US\$/Barrel,

Data Source: Bureau of Manpower, Employment and Training (BMET), WDI, [www.inflationdata.com](http://www.inflationdata.com)

**Table A6: Macro Correlates of Remittances**

	I	II	III	IV	V	VI	VII
Migrant Stock	3.65*** (10.6)	3.03*** (9.34)	3.07*** (9.25)	1.54*** (3.88)	2.54*** (5.63)	1.65*** (4.18)	2.77*** (6.22)
Lag of Remittance (-1)				0.59*** (6.13)		0.6*** (6.02)	
Lag of Remittance (-2)					0.45*** (2.82)		0.4** (2.38)
GDP per Capita	-130.76*** (-6.33)	-82.44*** (-4.65)	-75.64*** (-4.28)	-48.5** (-2.5)	-56.68** (-2.25)	-60.76*** (3.09)	-72.19*** (2.63)
GDP per Capita <sup>2</sup>	0.09*** (6.61)	0.06*** (5.03)	0.06*** (4.69)	0.04** (2.46)	0.04* (1.98)	0.04*** (3.03)	0.05** (2.63)
Inflation	42.11*** (3.43)			-9.32 (-0.39)	-70.48 (-1.63)		
Real Interest Rate						-2.52 (-0.11)	56.42 (1.47)
Exchange Rate	142.49*** (3.34)			70.83** (2.17)	87.23** (2.13)	99.21*** (3.12)	126.93*** (3.24)
Inflation*Exchange Rate		1.79*** (2.9)	2.31*** (4.28)	1.45 (1.44)	3.11* (2.25)		
Real Interest Rate * Exchange Rate						-0.94 (1.01)	-2.63** (-2.07)
Oil Price	14.01* (1.89)	13.38 (1.58)		10.16* (1.89)	0.5 (0.06)	11.71** (2.16)	1.25 (0.16)
T	-258.62*** (-4.1)	-87.53*** (-2.79)	-114.5*** (-4.25)	-145.69*** (-3.17)	-297.29*** (-4.28)	-159.41*** (-3.41)	-317.85*** (-4.66)
R <sup>2</sup>	0.98	0.98	0.98	0.99	0.99	0.99	0.99
Adjusted R <sup>2</sup>	0.98	0.98	0.98	0.99	0.99	0.99	0.99
N	36	36	36	35	34	35	34
F Statistic	382.93	383.29	437.27	705.21	431.75	671.2	418.41
Durbin-Watson	1.57	1.39	1.17	2.31	1.89	2.38	1.94

t-statistics are given in the parentheses, \*\*\* Significant at 1% level, \*\* Significant at 5% level, \*Significant at 10% level

Note: Remittance is given in US\$ million, migrants are numbered in thousands ('000); GDP per capita is in constant 2000 US\$; inflation is calculated from GDP deflator; exchange rate is given in BDT per US\$; oil price is the average of nominal US domestic crude oil prices given in US\$/barrel; and, T=1, 2, 3...36.

Data Source: Bureau of Manpower, Employment and Training (BMET), Bangladesh Bank, WDI, [www.inflationdata.com](http://www.inflationdata.com)



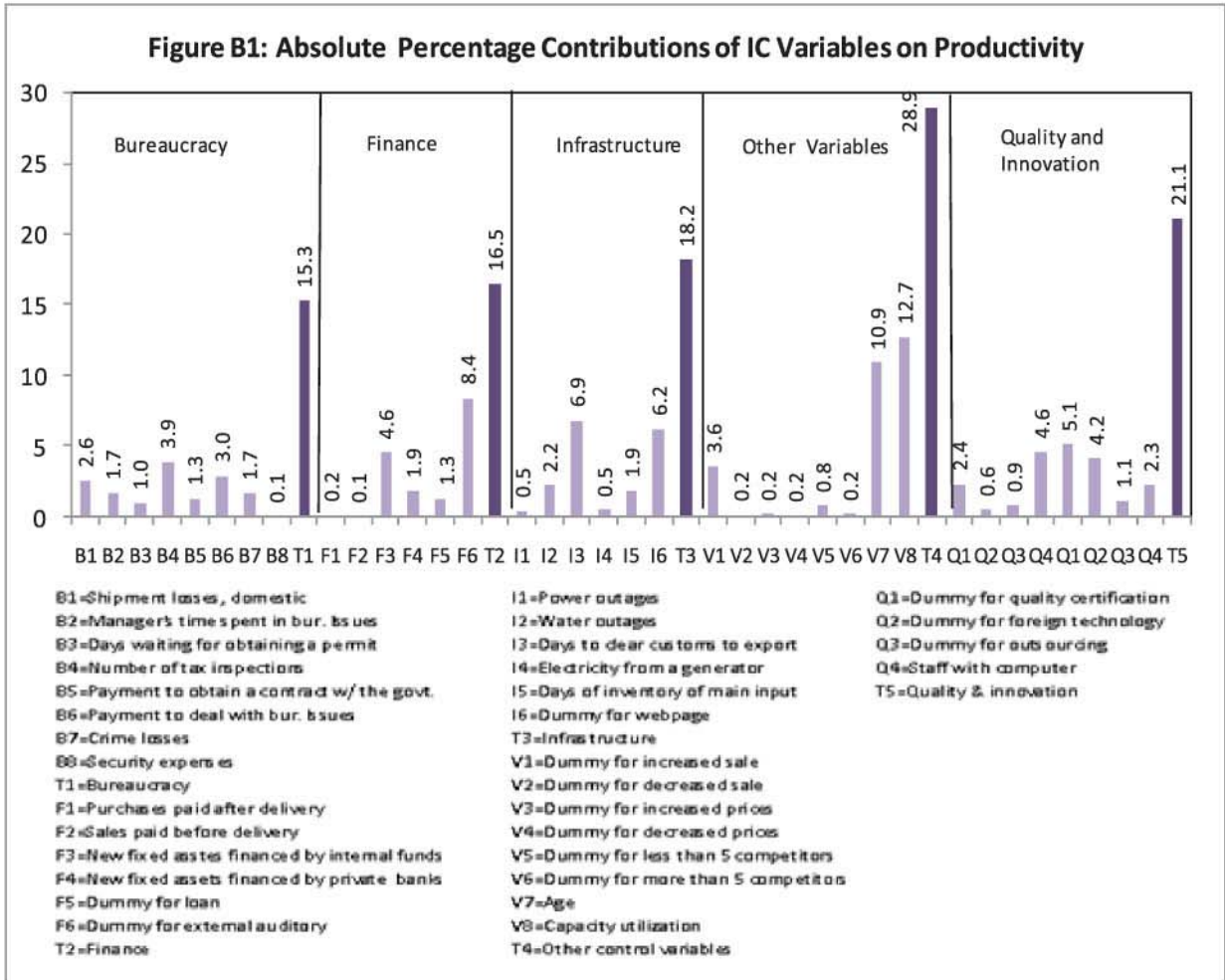
<b>Table A7: Poverty Headcount Rate and Gap</b>				
(percent)				
	<b>1991-92</b>	<b>2000</b>	<b>2005</b>	<b>2010</b>
<b>Poverty Headcount</b>				
National	56.8	48.9	40.0	31.5
Rural	59.0	52.3	43.8	35.2
Urban	42.6	35.1	28.4	21.3
<b>Poverty Gap</b>				
National	17.2	12.8	9.0	6.5
Rural	18.1	13.7	9.8	7.4
Urban	12.0	9.0	6.5	4.3

*Source:* Household Income and Expenditure Survey, BBS

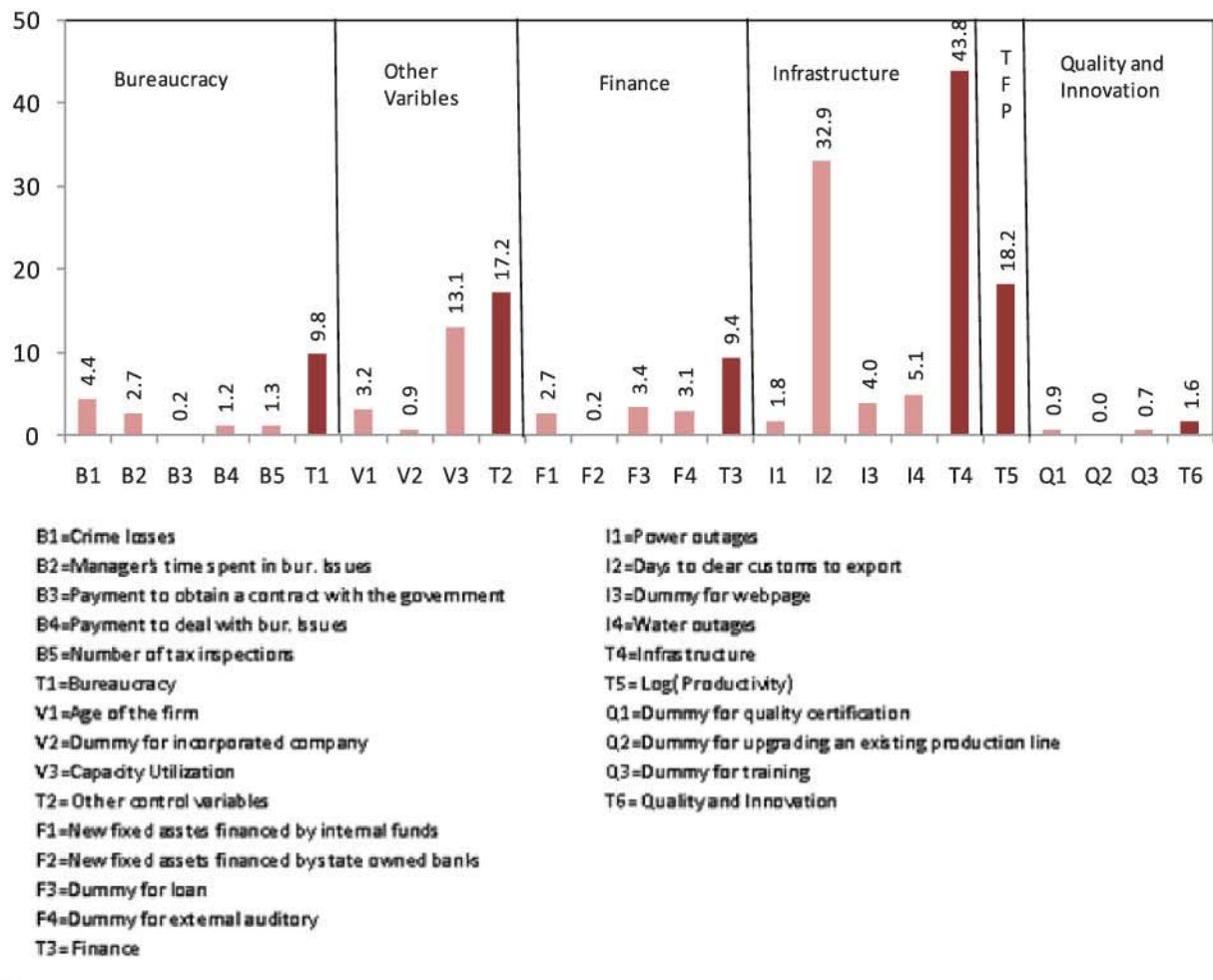
<b>Table A8: Number of Poor (millions)</b>				
	<b>1991-92</b>	<b>2000</b>	<b>2005</b>	<b>2010</b>
National	61.7	61.7	55.5	46.8
Rural	55.5	52.7	45.8	38.5
(% of National)	(89.9)	(85.5)	(82.4)	(82.4)
Urban	6.2	8.9	9.7	8.3
(% of National)	(10.1)	(14.4)	(17.6)	(17.8)
Total Population (Millions)	108.7	126.1	138.8	148.5

*Source:* Calculated from HIES Survey 2005 and HES Survey 1995-96

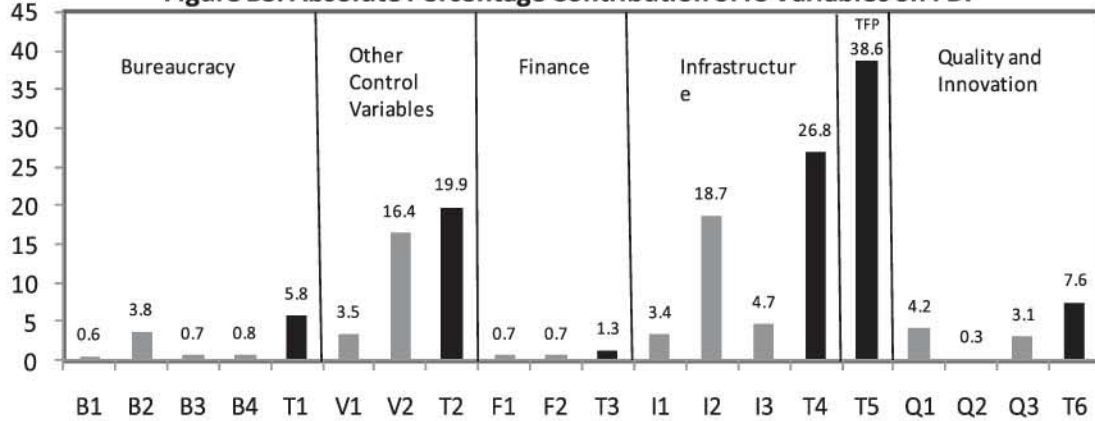
## Appendix B



**Figure B2: Absolute Percentage Contribution of IC Variables in Exports**

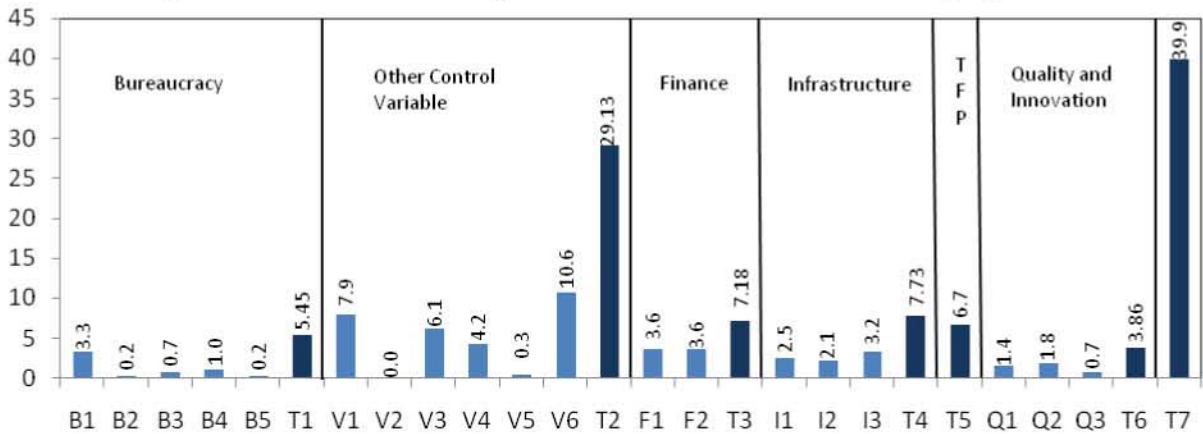


**Figure B3: Absolute Percentage Contribution of IC Variables on FDI**



- B1=Number of tax inspections
- B2=Security expenses
- B3=Payment to obtain a contract with the government
- B4=Manager's time spent in bur. issues
- T1= Bureaucracy
- V1=Dummy for importer
- V2=Capacity utilization
- T2=Other control variable
- F1=New fixed assets financed by internal funds
- F2=Dummy for external auditory
- T3= Finance
- I1= Water Outages
- I2=Power Outages
- I3=Days to clear customs for export
- T4=Infrastructure
- T5= Log(Productivity)
- Q1=Dummy for foreign technology
- Q2=Dummy for R&D
- Q3=Dummy for training
- T6=Quality and innovation

**Figure B4: Absolute Percentage Contribution of IC Variables on Employment**



- B1=Crime losses
- B2=Manager's time spent in bur. issues
- B3=Payment to obtain a contract with the government
- B4=Payment to deal with bur. issues
- B5=Number of tax inspections
- T1=Bureaucracy
- V1=New fixed assets financed by internal funds
- V2=New fixed assets financed by state owned banks
- V3=Age of the firm
- V4=Dummy for exporter
- V5=Dummy for incorporated company
- V6=Capacity utilization
- T2=Other control variable
- F1=Dummy for loan
- F2=Dummy for external auditory
- T3=Finance
- I1=Power outages
- I2=Days to clear customs to export
- I3=Dummy for webpage
- T4=Infrastructure
- T5= Log(Productivity)
- Q1=Dummy for quality certification
- Q2=Dummy for upgrading an existing production line
- Q3=Dummy for training
- T6=Quality & innovation
- T7=Log(Wage)

## Appendix C

June 14, 2010

### Country Economic Memorandum

Dr. Nazneen Ahmed, Senior Research Fellow, BIDS  
Mr. Mahabub Hossain, Executive Director, Bangladesh Rural Advancement Committee (BRAC)  
Dr. S.R. Osmani, Professor, Economics Department, BRAC University  
Dr. Mustafizur Rahman, Executive Director, Center for Policy Dialogue  
Dr. Fahmida Khatun, Additional Director, Research, Center for Policy Dialogue  
Mr. Mamun Rashid, Managing Director & Citi Country Officer, Citibank. NA  
Ms. Rabab Fatima, Regional Representative for South Asia, International Organization for Migration (IOM)  
Professor Nazrul Islam, Chairman, University Grants Commission of Bangladesh  
Dr. Zaidi Sattar, Chairman, Policy Research Institute (PRI)  
Dr. Sadiq Ahmed, Vice Chairman, Policy Research Institute (PRI)  
Dr. Ahsan Mansur, Executive Director, Policy Research Institute (PRI)  
Ms. Tasneem Athar, Deputy Director, Campaign for Population Education (CAMPE)  
Dr. Sayema Haque Bidisha, Assistant Professor, Department of Economics, University of Dhaka  
Dr. A. B. Mirza Md. Azizul Islam, Former Adviser to the Ministry of Finance, Government of Bangladesh  
Dr. S.M. Zulfikar Ali, Senior Research Fellow, BIDS  
Mr. Mainuddin Khondaker, Bangladesh Center for Advanced Studies (BCAS)

June 21, 2011

### BD Labor-Embedded Growth

Dr. Wahiduddin Mahmud, Professor, Economics Department, Dhaka University  
Dr. Mustafa Kamal Mujeri, Director General, BIDS  
Dr. Nazneen Ahmed, Senior Research Fellow, BIDS  
Dr. Hossain Zillur Rahman, Executive Chairman, Power and Participation Research Center  
Dr. Mustafizur Rahman, Executive Director, Center for Policy Dialogue  
Dr. Debapriya Bhattacharya, Distinguished Fellow, Center for Policy Dialogue  
Mr. Mamun Rashid, Professor and Director, BRAC Business School  
Ms. Rabab Fatima, Regional Representative for South Asia, International Organization for Migration (IOM)  
Dr. Sadiq Ahmed, Vice Chairman, Policy Research Institute (PRI)  
Dr. Sayema Haque Bidisha, Assistant Professor, Department of Economics, University of Dhaka  
Professor Ainun Nishat, Vice Chancellor, BRAC University  
Dr. Qazi Kholiquzzaman Ahmad, Chairman, Palli Karma Shahayak Foundation (PKSF)  
Mr. Mohammad Helal Uddin Ahmed, Assistant Professor, Economics Department, Dhaka University  
Dr. Atonu Rabbani, Assistant Professor, Department of Economics, University of Dhaka

Dr. A. Atiq Rahman, Executive Director, Bangladesh Center for Advanced Studies (BCAS)  
Dr. M. Zahid Hossain, Senior Country Specialist, Asian Development Bank

February 23, 2012

Bangladesh Growth Report Climate Change Chapter

Mr. Mesbah-Ul- Alam, Secretary, Ministry of Environment and Forests  
Mr. S M Manjurul Hannan Khan, Deputy Secretary (Environment 1), Ministry of Environment & Forest  
Dr. Mohammed Nasiruddin, Joint Secretary (Development), Ministry of Environment and Forests  
Mr. Arastoo Khan, Additional Secretary, Economic Relations Division, Ministry of Finance  
Mr. Fazle Rabbi Sadeq Ahmed, Director, (Climate Change and International Convention)  
Professor Muzaffor Ahmed, President, Bangladesh Poribesh Andolon (BAPA)  
Mr. Ahsan Jakir, Director General, Disaster Management Bureau, Ministry of Food and Disaster Management  
Dr. M Aslam Alam, Secretary, Disaster Management and Relief Division, Ministry of Food and Disaster Management  
Professor A.K. Enamul Haque, Professor, Department of Economics, United International University  
Dr. Md. Mafizur Rahman, Professor, Bangladesh University of Engineering and Technology (BUET)  
Dr. Fahmida Khatun, Additional Director, Research, Center for Policy Dialogue (CPD)  
Dr. Kazi Ali Toufique, Senior Research Fellow, BIDS  
Dr. Atiq Rahman, Executive Director, Bangladesh Centre for Advanced Studies (BCAS)  
Dr. Puji Pujiono, Project Manager, Comprehensive Disaster Management Programme (CDMP)  
Dr. M A Matin, Professor and Head, Department of Water Resources Engineering, Bangladesh University of Engineering and Technology (BUET)  
Dr. Md Asaduzzaman, Research Director, Bangladesh Institute of Development Studies, BIDS  
Mr. Syed M. Hashemi, Research Director, BRAC Development Institute, BRAC University  
Dr. Ainun Nishat, Vice Chancellor, Brac University  
Mr. Zahir Dasu, Economic Advisor, DFID Bangladesh  
Daniel Davis, Senior Program Manager, DFID  
Richard Butterworth, Team Leader, DFID

## References

- Amiti, M. and C. Freund. 2008. "The Anatomy of China's Export Growth," World Bank Policy Research Working Paper No. 4628.
- Bangladesh Bureau of Statistics. 2000. Household Income and Expenditure Survey 2000 Report. Dhaka.
- Bangladesh Bureau of Statistics. 2005. Household Income and Expenditure Survey 2005 Report. Dhaka.
- Bangladesh Bureau of Statistics. 2010. Household Income and Expenditure Survey 2010 Preliminary Report. Dhaka.
- Brenton, P. and R. Newfarmer. 2007. "Watching More than the Discovery Channel: Export Cycles and Diversification in Development," World Bank Policy Research Working Paper No. 4302.
- Brückner, M. and D.I Lederman. 2012. "Trade Causes Growth in Sub-Saharan Africa," The World Bank, Poverty Reduction and Economic Management Network, International Trade Department. March.
- Clemens, M. A. and L. Pritchett. 2008. "Income per Natural: Measuring Development as if People Mattered more than Places," Centre for Global Development, Working Paper No. 143.
- Easterly, W., J. Ritzen, and M. Woolcock. 2006. "Social Cohesion, Institutions, and Growth," *Economics and Politics*, 18(2).
- Economic Intelligence Unit. 2010. "Liveability Ranking Report".
- Gill, I. and H. Kharas. 2007. An East Asian Renaissance: Ideas for Economic Growth. World Bank, Washington DC.
- Helpman, E., M. Melitz, and Y. Rubinstein. 2007. "Estimating Trade Flows: Trading Partners and Trading Volumes," NBER Working Paper No. 12927.
- Hossain, M. and A. Bayes. 2009. Rural Economy and Livelihoods: Insights from Bangladesh, AH Development Publishing House, Dhaka.
- Hummels, D. and P. L. Klenow. 2005. "The Variety and Quality of a Nation's Exports," *American Economic Review*, 95(3): 704–723.
- Intergovernmental Panel on Climate Change. "Clean Energy for Development Investment Framework: The World Bank Group Action Plan".
- International Monetary Fund. August 2008. Bangladesh: Selected Issues.
- International Organization for Migration. 2010.
- Kang, K. 2004. "The Path of the Extensive Margin (Export Variety), Theory and Evidence," University of California, Davis working paper, mimeo.
- Khan, M. 2010. "Political Settlements and the Governance of Growth-Enhancing Institutions."

- Kotikula, A., A. Narayan and H. Zaman. 2010. To What Extent are Bangladesh's Recent Gains in Poverty Reduction Different from the Past? The World Bank, Policy Research Working Paper No. 5199. February.
- Leung, S. and S. Kennedy. March 2011. "Global Inflation Starts with Chinese Workers," Bloomberg Businessweek.  
["http://www.businessweek.com/magazine/content/11\\_11/b4219009844239\\_page\\_2.htm"](http://www.businessweek.com/magazine/content/11_11/b4219009844239_page_2.htm)
- Mahmud, W., S. Ahmed and S. Mahajan. 2008. "Economic Reforms, Growth and Governance: The Political Economy Aspects of Bangladesh's Development Surprise," Commission on Growth and Development Working Paper No. 22.
- Ministry of Environment and Forests. 2009. "Bangladesh Climate Change Strategy and Action Plan 2009," Government of the People's Republic of Bangladesh, Dhaka, Bangladesh.
- Balázs Égert, Tomasz Kozluk, Douglas Sutherland, "Infrastructure Investment: Links to Growth and the Role of the Public Policies", OECD Economics Department Working Paper No. 686.
- UNCTAD TRAINS database.
- World Bank. 2005. "Economics and Governance of Nongovernmental Organizations in Bangladesh," Bangladesh Development Series Paper No. 11. Dhaka.
- World Bank. 2006. "Economic Implications of Remittances and Migration," Global Economic Prospects 2006: Economic Implications of Remittances and Migration.
- World Bank. 2007. Bangladesh Strategy for Sustained Growth, Bangladesh Development Series Paper No. 18. Dhaka.
- World Bank. 2008. Poverty Assessment for Bangladesh: Creating Opportunities and Bridging the East-West Divide, Bangladesh Development Series, Paper No. 26, Dhaka.
- World Bank. 2009. World Development Report 2009: Reshaping Economic Geography, Washington DC.
- World Bank. 2010. "Bangladesh Public Expenditure and Institutional Review—Toward a Better Quality of Public Expenditure". June.
- World Bank. 2012. "Consolidating and Accelerating Exports in Bangladesh", Bangladesh Development Series, Paper No. 29, June.
- World Bank. 2012. Infrastructure Gap in the South Asia Region, Progress Summary, February.



# **Statistical Annex**



**Table SA1: Bangladesh Macroeconomic Indicators**

	FY05	FY06	FY07	FY08	FY09	FY10	FY11
<b>Growth Rates (%)</b>							
GDP Growth	6.0	6.6	6.4	6.2	5.7	6.1	6.7
GDP Growth Per Capita	4.5	5.4	5.3	5.1	4.7	4.9	5.4
Per Capita GNI Atlas Method (US\$)	480	500	520	570	640	700	770
Per Capita GDP (Current US\$)	429	435	475	547	608	675	735
<b>Saving &amp; Investment (% of GDP)</b>							
Gross Domestic Saving	20.0	20.2	20.4	20.3	20.1	20.1	19.3
Gross National Saving	23.9	25.8	25.8	25.7	26.7	27.7	25.9
Private Investment	18.3	18.7	19.0	19.3	19.7	19.4	19.5
Public Investment	6.2	6.0	5.4	5.0	4.7	5.0	5.6
<b>Central Govt. Budget (% of GDP)</b>							
Total Revenue	10.5	10.7	10.4	11.4	10.4	10.9	11.6
Total Expenditure	13.9	14.1	13.5	15.0	14.3	14.6	15.9
Overall Budget Deficit	3.5	3.4	3.1	3.6	3.9	3.7	4.3
<b>Balance of Payments (% of GDP)</b>							
Trade	33.9	37.9	40.3	42.3	40.1	37.6	48.2
Exports	14.2	16.6	17.6	17.7	17.4	16.2	20.8
Imports	19.7	21.3	22.7	24.7	22.7	21.4	27.4
Services & Income (net)	-2.6	-2.8	-3.2	-3.2	-3.5	-2.7	-3.8
Current Transfers	7.1	8.7	9.6	11.1	11.4	11.6	10.9
Current Account Balance ( including transfers)	-0.9	1.3	1.4	0.9	2.7	3.7	0.9
<b>External Indicators</b>							
External Debt (US\$ b.)	17.8	17.9	19.6	21.0	23.0	22.4	25.4
Ext. Debt as % of GDP	29.6	28.9	28.7	26.4	25.7	22.3	22.7
BB Gross Reserves (US\$ b.) (end of period)	3.0	3.5	5.1	6.2	7.5	10.75	10.9
BB Gross Reserves (in months of imports)	2.6	2.8	3.4	3.4	3.7	5.4	3.9
External Debt Service Ratio (% of Total foreign exchange earnings)*	4.6	4.1	3.7	3.2	3.2	2.9	2.6
External Debt Service Ratio (% of Total export earnings)	6.3	5.8	5.3	4.8	4.9	4.7	3.7
<b>Money and Credit</b>							
M2 Growth (% , year-on-year)	16.9	19.5	17.1	17.6	19.2	22.4	21.3
Net Domestic Asset Growth (% , year-on-year)	17.2	19.7	12.6	18.1	17.8	19.1	25.0
Ratio of Private Sector Credit to GDP (%)	29.9	31.5	32.2	34.8	38.6	39.1	42.8
<b>Exchange Rate</b>							
Nominal Period Average (Tk/US\$)	61.5	67.2	69.1	68.6	68.8	69.2	71.2
Nominal End of Period (Tk/US\$)	63.7	69.7	68.8	68.5	69.0	69.5	74.2
Real Effective Exchange Rate Index	101.8	98.6	96.5	95.8	105.5	108.3	108.9
<b>Rate of Inflation (%) (year on year)**</b>	6.5	7.2	7.2	9.9	6.7	7.3	8.8
<b>Inflation (GDP deflator)</b>	5.1	5.2	6.8	8.8	6.6	6.4	7.4
<b>Total Public Debt (% of GDP)</b>	47.5	46.9	46.8	46.8	45.4	41.4	42.9
<b>Memorandum Items</b>							
GDP at Current. Prices (Taka bill.)	3,707	4,157	4,725	5,458	6,148	6,943	7,875
GNI at Current. Prices Atlas Method (US\$ bill)	64.9	70.1	75.6	85.0	93.8	106.2	118.0
GDP at Current. Prices Atlas Method (US\$ bill)	61.8	65.8	70.3	78.1	86.0	97.2	109.0
GDP at Current. Prices (US\$ bill)	60.3	61.9	68.4	79.6	89.4	100.3	110.6
Population (mill)	140.6	142.4	144.0	145.5	147.0	148.7	150.6
Population growth Rate	1.4	1.3	1.1	1.1	1.1	1.1	1.3

Source: Bangladesh Bureau of Statistics, Bangladesh Bank, Ministry of Finance, The World Bank and IMF

**Table SA2: Millennium Development Goals**

	1990-92	2005-2010	2015 Target	Status
<b>MDG 1: Eradicate extreme poverty and hunger</b>				<b>Target = halve 1990 poverty and malnutrition rates</b>
<i><b>Target 1: Halve by 2015 the proportion of people living below the poverty line</b></i>				
Poverty Headcount Ratio	56.6	31.5	29.0	On track
Squared Poverty Gap:	6.8	2.0	3.4	Goal met
Poverty Gap Ratio	17.0	6.5	8.0	Goal met
<i><b>Target 2: Halve by 2015 the proportion of people who suffer from hunger</b></i>				
Prevalence of underweight children under-five years of age (percent)	66.0	46.3 (2007)	33.0	Off track
Proportion of Population below minimum level of dietary energy consumption (percent)	28.0	19.5 (2005)	14.0	On track
<b>MDG 2: Achieve universal primary education</b>				<b>Target = net enrollment to 100</b>
<i><b>Target 3: Ensure that all boys and girls complete a full course of primary schooling</b></i>				
Net enrollment ratio in primary education, percent	60.5	91.1 (2007)	100	On track
Proportion of pupils starting grade 1 who reach grade 5, percent	40.7	52.0 (2007)	100	Off track
Adult literacy rate of 15-24 years of population (Female), percent	37.0	69.9 (2006)	..	Off track
<b>MDG 3: Promote gender equality</b>				<b>Target = education ratio to 100</b>
<i><b>Target 4: Eliminate gender disparity in primary and secondary education preferably by 2005 and at all levels by 2015</b></i>				
Ratio of girls to boys in primary education (percent)	83.0	108 (2007)	100	Goal met
Ratio of girls to boys in secondary education (percent)	52.0	108 (2006)	100	Goal met
Ratio of girls to boys in tertiary education (percent)	37.0	61 (2006)	100	Off track
Share of women employed in the nonagricultural sector (percent)	19.1	14.6 (2005)	50	Off track
Proportion of seats held by women in national parliament (percent)	12.7	18.6 (2009)	33	Off track
<b>MDG 4: Reduce child mortality</b>				<b>Target = reduce 1990 under 5 mortality by two-thirds</b>
<i><b>Target 5: Reduce by two thirds by 2015 the under 5 mortality rate</b></i>				
Under 5 mortality rate (per 1,000)	146.0	65 (2007)	48	On track
Infant mortality rate (per 1,000 live births)	92.0	52 (2007)	31	On track
Immunization, measles (percent of children under 12 months)	54.0	77.2 (2007)	100	On track
<b>MDG 5: Improve maternal health</b>				<b>Target = reduce 1990 maternal mortality by three-fourths</b>
<i><b>Target 6: Reduce by three quarters, by 2015, the maternal mortality ratio</b></i>				
Maternal mortality ratio (per 100,000 live births)	574.0	194	143	On track
Births attended by skilled health staff (percent of total)	9.5	18.0 (2007)	50	Needs Attention
<b>MDG 6: Combat HIV/ AIDS, malaria and other diseases</b>				<b>Target = halt, and begin to reverse</b>

<b>Target 7: Have halted by 2015 and begin to reverse the spread of HIV/AIDS</b>				
Contraceptive Prevalence Rate (% of women ages 15-49)	40	60	72	Needs Attention
HIV prevalence among population (per 100,000 population)	0.005	0.319	Halting	On track
<b>Target 8: Have halted by 2015 and begin to reverse the incidence of malaria and other major diseases</b>				
Prevalence of Malaria per 100,000 population	43 (2000)	59 (2008)	Halting	On track
Death rate associated with Malaria per 100,000 population	0.37 (2000)	0.11(2008)	Halting	On track
Incidence of tuberculosis per 100,000 population	264 (1990)	225(2007)	Halting	On track
Death rate associated with TB per 100,000 population	76 (1990)	45 (2007)	Halving	On track
Detection rate of TB under DOTS, percent	21 (1994)	72 (2008)	Sustain	On track
Cure rate of TB under DOTS, percent	73 (1994)	92 (2008)	Sustain	On track
<b>MDG 7: Ensure environmental sustainability</b>				
<b>Target 9: Integrate the principles of sustainable development into country policies and reverse the loss of environmental resources</b>				
Forest Area as Percentage of Total Area	9.0	19.2 (2007)	20.0	On track
CO2 emissions, metric tons per capita	0.1	0.30 (2007)	..	Needs Attention
Consumption of ozone-depleting CFCs in metric tons	195	155 (2007)	0.0	On track
Proportion of terrestrial and marine areas protected, percent	1.6	1.68 (2007)	5.0	Off track
<b>Target 10: Halve, by 2015, the proportion of people without sustainable access to safe drinking water and sanitation</b>				
Improved water source (percent of population with access)	93	85.2	97	Needs Attention
Improved sanitation facilities (percent of population with access)	15	80	56	On track
<b>Target 11: By 2020, to have achieved a significant improvement in the lives of at least 100 million slum dwellers</b>				
Slum population as percentage of urban (percent)	87.3	70.8	...	Insufficient Data
<b>MDG 8: Develop a global partnership for development</b>				
<b>Target 12: Develop further an open, rule-based, predictable, nondiscriminatory trading and financial system</b>				
<b>Target 13: Deal comprehensively with the debt problems of developing countries through national and international measures to make debt sustainable in the long term</b>				
Net ODA received per capita (current U.S. dollars)	20	8	...	...
Debt service as a percentage of exports of goods and services	11	2.9 (2010)	...	...
<b>Target 14: Make available the benefits of new technologies, especially information and communication</b>				
Telephone lines per 100 population	0.2	0.92 (2008)	...	Off track
Internet users per 100 people	0.0	3.4 (2008)	...	Off track
Cellular subscribers per 100 population	0.0	30.8 (2008)	...	On track

Source: Bangladesh Bureau of Statistics, World Bank, IMF, UNDP and Government of Bangladesh

<b>Table SA3: Trends in CBN Poverty Measures</b>						
	<b>Upper Poverty Line</b>			<b>Lower poverty Line</b>		
	<b>2000</b>	<b>2005</b>	<b>2010</b>	<b>2000</b>	<b>2005</b>	<b>2010</b>
<b>Headcount Rate</b>						
<b>National</b>	<b>48.7</b>	<b>40.0</b>	<b>31.5</b>	<b>33.7</b>	<b>25.1</b>	<b>17.6</b>
Rural	52.2	43.8	35.2	37.4	28.6	21.1
Urban	34.9	28.4	21.3	19.1	14.6	7.7
<b>Poverty Gap</b>						
<b>National</b>	<b>12.8</b>	<b>9.0</b>	<b>6.5</b>	<b>7.3</b>	<b>4.6</b>	<b>3.1</b>
Rural	13.7	9.8	7.4	8.2	5.3	3.7
Urban	9.0	6.5	4.3	3.8	2.6	1.3
<b>Squared Poverty Gap</b>						
<b>National</b>	<b>4.6</b>	<b>2.9</b>	<b>2.0</b>	<b>2.3</b>	<b>1.3</b>	<b>0.8</b>
Rural	4.9	3.1	2.2	2.6	1.5	1.0
Urban	3.3	2.1	1.3	1.2	0.7	0.4

*Source:* Preliminary Report on Household Income and Expenditure Survey 2010 and Report of the Household Income and Expenditure Survey 2005, Bangladesh Bureau of Statistics

**Table SA4a: Gross Domestic Product by Industrial Sector at Current Prices**

(Tk million)

<b>Industrial Origin Sector</b>	<b>FY05</b>	<b>FY06</b>	<b>FY07</b>	<b>FY08</b>	<b>FY09</b>	<b>FY10</b>	<b>FY11</b>	<b>FY12 (P)</b>
<b>Agriculture and Forestry</b>	<b>561,674</b>	<b>622,234</b>	<b>701,242</b>	<b>802,015</b>	<b>894,264</b>	<b>1,005,880</b>	<b>1,135,820</b>	<b>1,238,773</b>
Crops & horticulture	414,819	461,182	524,676	605,784	672,467	753,391	852,379	925,081
Animal farming	86,798	96,821	107,803	121,182	140,022	162,188	184,700	204,936
Forest and related services	60,057	64,231	68,763	75,049	81,775	90,301	98,741	108,756
<b>Fishing</b>	<b>154,564</b>	<b>163,168</b>	<b>177,827</b>	<b>197,901</b>	<b>218,064</b>	<b>242,229</b>	<b>269,962</b>	<b>309,988</b>
<b>Mining and Quarrying</b>	<b>40,411</b>	<b>46,431</b>	<b>53,217</b>	<b>61,517</b>	<b>70,910</b>	<b>81,141</b>	<b>90,631</b>	<b>103,184</b>
Natural gas and crude petroleum	22,948	25,683	28,453	31,641	35,900	40,393	42,624	46,307
Other mining & quarrying	17,463	20,748	24,764	29,876	35,010	40,748	48,007	56,877
<b>Manufacturing</b>	<b>587,952</b>	<b>689,227</b>	<b>811,780</b>	<b>939,008</b>	<b>1,064,453</b>	<b>1,201,081</b>	<b>1,355,505</b>	<b>1,565,903</b>
Large & medium scale	415,350	489,736	576,881	667,587	756,104	848,991	971,208	1,126,253
Small scale	172,602	199,491	234,899	271,421	308,349	352,090	384,297	439,650
<b>Electricity, Water Supply and Gas</b>	<b>49,090</b>	<b>53,915</b>	<b>55,899</b>	<b>60,704</b>	<b>65,421</b>	<b>71,946</b>	<b>82,114</b>	<b>97,729</b>
Electricity	40,654	44,551	45,671	49,551	53,109	58,398	67,751	82,302
Gas	5,320	5,940	6,512	7,162	7,929	8,762	9,078	9,547
Water	3,116	3,424	3,716	3,991	4,383	4,786	5,285	5,880
<b>Construction</b>	<b>290,608</b>	<b>327,970</b>	<b>375,432</b>	<b>438,538</b>	<b>501,253</b>	<b>556,581</b>	<b>639,815</b>	<b>754,647</b>
<b>Wholesale and Retail Trade</b>	<b>502,782</b>	<b>569,842</b>	<b>660,113</b>	<b>782,203</b>	<b>882,764</b>	<b>1,002,946</b>	<b>1,159,586</b>	<b>1,348,600</b>
<b>Hotel and Restaurants</b>	<b>25,117</b>	<b>28,532</b>	<b>32,893</b>	<b>38,889</b>	<b>44,598</b>	<b>51,501</b>	<b>59,975</b>	<b>71,780</b>
<b>Transport, Storage and Communication</b>	<b>382,890</b>	<b>432,056</b>	<b>489,084</b>	<b>569,073</b>	<b>642,804</b>	<b>718,797</b>	<b>854,648</b>	<b>1,000,533</b>
Land transport	293,741	328,407	368,526	428,575	483,648	541,588	660,878	788,546
Water transport	29,942	31,370	33,067	36,211	39,230	42,137	45,322	49,865
Air transport	4,669	5,003	5,094	5,461	5,892	6,491	7,219	8,125
Support transport services, storage	11,712	12,604	14,199	15,689	17,582	19,380	20,699	22,013
Posts and Telecommunication	42,826	54,672	68,198	83,137	96,452	109,201	120,530	131,984
<b>Financial Intermediations</b>	<b>59,343</b>	<b>66,839</b>	<b>77,436</b>	<b>89,548</b>	<b>102,453</b>	<b>122,998</b>	<b>144,843</b>	<b>169,646</b>
Bank (Monetary Intermediation)	44,508	49,948	57,969	66,564	76,135	90,631	106,213	124,296
Insurance	12,590	14,296	16,397	19,300	22,010	27,016	32,310	37,950
Others (Financial Intermediation)	2,245	2,595	3,070	3,684	4,308	5,351	6,320	7,400
<b>Real Estate, Renting and Business Activities</b>	<b>297,443</b>	<b>321,569</b>	<b>349,286</b>	<b>380,580</b>	<b>416,164</b>	<b>456,830</b>	<b>503,373</b>	<b>555,465</b>
<b>Public Administration and Defense</b>	<b>96,374</b>	<b>110,355</b>	<b>127,432</b>	<b>144,270</b>	<b>163,604</b>	<b>187,569</b>	<b>223,806</b>	<b>254,494</b>
<b>Education</b>	<b>87,882</b>	<b>99,345</b>	<b>117,760</b>	<b>135,315</b>	<b>154,940</b>	<b>179,084</b>	<b>213,078</b>	<b>248,092</b>
<b>Health and Social Works</b>	<b>81,043</b>	<b>90,220</b>	<b>103,066</b>	<b>118,191</b>	<b>133,908</b>	<b>151,424</b>	<b>175,822</b>	<b>203,371</b>
<b>Community, Social and Personal Services</b>	<b>338,763</b>	<b>382,832</b>	<b>435,676</b>	<b>502,002</b>	<b>583,643</b>	<b>684,655</b>	<b>778,758</b>	<b>914,852</b>
<b>GDP at current market price</b>	<b>3,707,069</b>	<b>4,157,279</b>	<b>4,724,769</b>	<b>5,458,224</b>	<b>6,147,952</b>	<b>6,943,243</b>	<b>7,967,042</b>	<b>9,147,840</b>
<b>Growth rate</b>	<b>11.3</b>	<b>12.1</b>	<b>13.7</b>	<b>15.5</b>	<b>12.6</b>	<b>12.9</b>	<b>14.7</b>	<b>14.8</b>

Source: Bangladesh Bureau of Statistics (BBS)

R = Revised

**Table SA4b: Sectoral Shares of GDP (%) by Industrial Sector at Current Prices**

<b>Industrial Origin Sector</b>	<b>FY05</b>	<b>FY06</b>	<b>FY07</b>	<b>FY08</b>	<b>FY09</b>	<b>FY10</b>	<b>FY11</b>	<b>FY12 (P)</b>
<b>Agriculture and Forestry</b>	<b>15.2</b>	<b>15.0</b>	<b>14.8</b>	<b>14.7</b>	<b>14.5</b>	<b>14.5</b>	<b>14.3</b>	<b>13.5</b>
Crops & horticulture	11.2	11.1	11.1	11.1	10.9	10.9	10.7	10.1
Animal farming	2.3	2.3	2.3	2.2	2.3	2.3	2.3	2.2
Forest and related services	1.6	1.5	1.5	1.4	1.3	1.3	1.2	1.2
<b>Fishing</b>	<b>4.2</b>	<b>3.9</b>	<b>3.8</b>	<b>3.6</b>	<b>3.5</b>	<b>3.5</b>	<b>3.4</b>	<b>3.4</b>
<b>Mining and Quarrying</b>	<b>1.1</b>	<b>1.1</b>	<b>1.1</b>	<b>1.1</b>	<b>1.2</b>	<b>1.2</b>	<b>1.1</b>	<b>1.1</b>
Natural gas and crude petroleum	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5
Other mining & quarrying	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6
<b>Manufacturing</b>	<b>15.9</b>	<b>16.6</b>	<b>17.2</b>	<b>17.2</b>	<b>17.3</b>	<b>17.3</b>	<b>17.0</b>	<b>17.1</b>
Large & medium scale	11.2	11.8	12.2	12.2	12.3	12.2	12.2	12.3
Small scale	4.7	4.8	5.0	5.0	5.0	5.1	4.8	4.8
<b>Electricity, Water Supply and Gas</b>	<b>1.3</b>	<b>1.3</b>	<b>1.2</b>	<b>1.1</b>	<b>1.1</b>	<b>1.0</b>	<b>1.0</b>	<b>1.1</b>
Electricity	1.1	1.1	1.0	0.9	0.9	0.8	0.9	0.9
Gas	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Water	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
<b>Construction</b>	<b>7.8</b>	<b>7.9</b>	<b>7.9</b>	<b>8.0</b>	<b>8.2</b>	<b>8.0</b>	<b>8.0</b>	<b>8.2</b>
<b>Wholesale and Retail Trade</b>	<b>13.6</b>	<b>13.7</b>	<b>14.0</b>	<b>14.3</b>	<b>14.4</b>	<b>14.4</b>	<b>14.6</b>	<b>14.7</b>
<b>Hotel and Restaurants</b>	<b>0.7</b>	<b>0.7</b>	<b>0.7</b>	<b>0.7</b>	<b>0.7</b>	<b>0.7</b>	<b>0.8</b>	<b>0.8</b>
<b>Transport, Storage and Communication</b>	<b>10.3</b>	<b>10.4</b>	<b>10.4</b>	<b>10.4</b>	<b>10.5</b>	<b>10.4</b>	<b>10.7</b>	<b>10.9</b>
Land transport	7.9	7.9	7.8	7.9	7.9	7.8	8.3	8.6
Water transport	0.8	0.8	0.7	0.7	0.6	0.6	0.6	0.5
Air transport	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Support transport services, storage	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2
Posts and Telecommunications	1.2	1.3	1.4	1.5	1.6	1.6	1.5	1.4
<b>Financial Intermediations</b>	<b>1.6</b>	<b>1.6</b>	<b>1.6</b>	<b>1.6</b>	<b>1.7</b>	<b>1.8</b>	<b>1.8</b>	<b>1.9</b>
Bank (Monetary Intermediation)	1.2	1.2	1.2	1.2	1.2	1.3	1.3	1.4
Insurance	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4
Others (Financial Intermediation)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
<b>Real Estate, Renting and Business Activities</b>	<b>8.0</b>	<b>7.7</b>	<b>7.4</b>	<b>7.0</b>	<b>6.8</b>	<b>6.6</b>	<b>6.3</b>	<b>6.1</b>
<b>Public Administration and Defense</b>	<b>2.6</b>	<b>2.7</b>	<b>2.7</b>	<b>2.6</b>	<b>2.7</b>	<b>2.7</b>	<b>2.8</b>	<b>2.8</b>
<b>Education</b>	<b>2.4</b>	<b>2.4</b>	<b>2.5</b>	<b>2.5</b>	<b>2.5</b>	<b>2.6</b>	<b>2.7</b>	<b>2.7</b>
<b>Health and Social Works</b>	<b>2.2</b>	<b>2.2</b>	<b>2.2</b>	<b>2.2</b>	<b>2.2</b>	<b>2.2</b>	<b>2.2</b>	<b>2.2</b>
<b>Community, Social and Personal Services</b>	<b>9.1</b>	<b>9.2</b>	<b>9.2</b>	<b>9.2</b>	<b>9.5</b>	<b>9.9</b>	<b>9.8</b>	<b>10.0</b>
<b>GDP at current market price</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

P = Provisional

Source: BBS



**Table SA5a: Gross Domestic Product of Bangladesh by Industrial Sector at Constant Prices**

(Base: 1995-96 = 100; Tk million)

Industrial Origin Sector	FY05	FY06	FY07	FY08	FY09	FY10	FY11	FY12 (P)
<b>Agriculture and Forestry</b>	<b>442,298</b>	<b>465,450</b>	<b>487,297</b>	<b>501,567</b>	<b>522,152</b>	<b>551,174</b>	<b>579,226</b>	<b>589,206</b>
Crops & horticulture	320,339	336,439	351,327	360,717	375,200	398,194	420,672	424,626
Animal farming	75,434	80,075	84,470	86,532	89,542	92,568	95,787	99,037
Forest and related services	46,525	48,936	51,500	54,318	57,410	60,412	62,767	65,543
<b>Fishing</b>	<b>128,069</b>	<b>133,083</b>	<b>138,499</b>	<b>144,285</b>	<b>150,287</b>	<b>156,519</b>	<b>164,741</b>	<b>173,607</b>
<b>Mining and Quarrying</b>	<b>29,090</b>	<b>31,783</b>	<b>34,430</b>	<b>37,509</b>	<b>41,199</b>	<b>44,824</b>	<b>46,976</b>	<b>49,911</b>
Natural gas and crude petroleum	17,797	19,492	21,057	22,797	24,884	26,904	27,187	27,989
Other mining & quarrying	11,293	12,291	13,373	14,712	16,315	17,920	19,789	21,922
<b>Manufacturing</b>	<b>422,690</b>	<b>468,197</b>	<b>513,722</b>	<b>550,772</b>	<b>587,539</b>	<b>625,707</b>	<b>684,818</b>	<b>751,645</b>
Large & medium scale	298,605	332,682	365,071	391,572	417,350	442,298	490,699	543,590
Small scale	124,085	135,515	148,651	159,200	170,189	183,409	194,119	208,055
<b>Electricity, Water and Gas</b>	<b>41,915</b>	<b>45,129</b>	<b>46,075</b>	<b>49,193</b>	<b>52,100</b>	<b>55,893</b>	<b>59,597</b>	<b>68,008</b>
Electricity	35,110	37,726	38,133	40,680	42,872	45,964	49,335	57,208
Gas	4,641	5,076	5,450	5,871	6,365	6,843	6,899	7,107
Water	2,164	2,327	2,492	2,642	2,863	3,086	3,363	3,693
<b>Construction</b>	<b>231,195</b>	<b>250,418</b>	<b>267,964</b>	<b>283,177</b>	<b>299,308</b>	<b>317,298</b>	<b>337,952</b>	<b>366,725</b>
<b>Wholesale and Retail Trade</b>	<b>361,552</b>	<b>385,961</b>	<b>416,996</b>	<b>445,434</b>	<b>473,085</b>	<b>500,878</b>	<b>532,493</b>	<b>563,827</b>
<b>Hotels and Restaurants</b>	<b>17,509</b>	<b>18,814</b>	<b>20,228</b>	<b>21,756</b>	<b>23,405</b>	<b>25,186</b>	<b>27,087</b>	<b>29,146</b>
<b>Transport, Storage and Communication</b>	<b>255,521</b>	<b>275,921</b>	<b>298,092</b>	<b>323,566</b>	<b>349,487</b>	<b>376,366</b>	<b>397,783</b>	<b>423,946</b>
Land transport	175,448	182,719	190,365	199,012	209,306	221,828	230,996	244,357
Water transport	23,915	24,382	24,804	25,436	26,062	26,325	26,602	27,107
Air transport	3,090	3,252	3,318	3,524	3,784	4,129	4,470	4,944
Support transport services, storage	8,119	8,616	9,386	10,179	11,161	12,070	12,492	12,927
Posts and Telecommunications	44,949	56,952	70,219	85,415	99,174	112,014	123,223	134,611
<b>Financial Intermediations</b>	<b>43,380</b>	<b>47,068</b>	<b>51,391</b>	<b>55,960</b>	<b>60,993</b>	<b>68,093</b>	<b>74,658</b>	<b>81,766</b>
Bank	32,512	35,175	38,459	41,681	45,454	50,211	54,749	59,902
Insurance	9,223	10,068	10,895	11,988	12,993	14,926	16,655	18,289
Others	1,645	1,825	2,037	2,291	2,546	2,956	3,254	3,575
<b>Real Estate, Renting and Business Activities</b>	<b>208,009</b>	<b>215,687</b>	<b>223,805</b>	<b>232,205</b>	<b>241,062</b>	<b>250,445</b>	<b>260,370</b>	<b>270,910</b>
<b>Public Administration and Defense</b>	<b>68,604</b>	<b>74,198</b>	<b>80,436</b>	<b>85,432</b>	<b>91,423</b>	<b>99,060</b>	<b>108,638</b>	<b>115,237</b>
<b>Education</b>	<b>62,559</b>	<b>68,221</b>	<b>74,331</b>	<b>80,129</b>	<b>86,581</b>	<b>94,578</b>	<b>103,430</b>	<b>112,338</b>
<b>Health and Social Works</b>	<b>57,682</b>	<b>62,174</b>	<b>66,926</b>	<b>71,627</b>	<b>76,782</b>	<b>83,001</b>	<b>89,934</b>	<b>97,074</b>
<b>Community, Social and Personal Services</b>	<b>190,824</b>	<b>198,630</b>	<b>207,725</b>	<b>217,314</b>	<b>227,534</b>	<b>238,265</b>	<b>249,474</b>	<b>261,349</b>
<b>GDP at constant market price</b>	<b>2,669,739</b>	<b>2,846,725</b>	<b>3,029,708</b>	<b>3,217,260</b>	<b>3,401,968</b>	<b>3,608,446</b>	<b>3,850,503</b>	<b>4,093,775</b>

Source: Bangladesh Bureau of Statistics (BBS)

P = Provisional

**Table SA5b: GDP Growth by Industrial Sector at Constant Prices (%)**

Base : 1995-96 = 100

Industrial Origin Sector	FY05	FY06	FY07	FY08	FY09	FY10	FY11	FY12(P)
<b>Agriculture and Forestry</b>	<b>1.8</b>	<b>5.2</b>	<b>4.7</b>	<b>2.9</b>	<b>4.1</b>	<b>5.6</b>	<b>5.1</b>	<b>1.7</b>
Crops & horticulture	0.1	5.0	4.4	2.7	4.0	6.1	5.6	0.9
Animal farming	7.2	6.2	5.5	2.4	3.5	3.4	3.5	3.4
Forest and related services	5.1	5.2	5.2	5.5	5.7	5.2	3.9	4.4
<b>Fishing</b>	<b>3.6</b>	<b>3.9</b>	<b>4.1</b>	<b>4.2</b>	<b>4.2</b>	<b>4.1</b>	<b>5.3</b>	<b>5.4</b>
<b>Mining and Quarrying</b>	<b>8.4</b>	<b>9.3</b>	<b>8.3</b>	<b>8.9</b>	<b>9.8</b>	<b>8.8</b>	<b>4.8</b>	<b>6.2</b>
Natural gas and crude petroleum	9.0	9.5	8.0	8.3	9.2	8.1	1.1	2.9
Other mining & quarrying	7.4	8.8	8.8	10.0	10.9	9.8	10.4	10.8
<b>Manufacturing</b>	<b>8.2</b>	<b>10.8</b>	<b>9.7</b>	<b>7.2</b>	<b>6.7</b>	<b>6.5</b>	<b>9.4</b>	<b>9.8</b>
Large & medium scale	8.3	11.4	9.7	7.3	6.6	6.0	10.9	10.8
Small scale	7.9	9.2	9.7	7.1	6.9	7.8	5.8	7.2
<b>Electricity, Water and Gas</b>	<b>8.9</b>	<b>7.7</b>	<b>2.1</b>	<b>6.8</b>	<b>5.9</b>	<b>7.3</b>	<b>6.6</b>	<b>14.1</b>
Electricity	8.6	7.5	1.1	6.7	5.4	7.2	7.3	16.0
Gas	8.9	9.4	7.4	7.7	8.4	7.5	0.8	3.0
Water	14.4	7.5	7.1	6.0	8.4	7.8	9.0	9.8
<b>Construction</b>	<b>8.3</b>	<b>8.3</b>	<b>7.0</b>	<b>5.7</b>	<b>5.7</b>	<b>6.0</b>	<b>6.5</b>	<b>8.5</b>
<b>Wholesale and Retail Trade</b>	<b>7.1</b>	<b>6.8</b>	<b>8.0</b>	<b>6.8</b>	<b>6.2</b>	<b>5.9</b>	<b>6.3</b>	<b>5.9</b>
<b>Hotels and Restaurants</b>	<b>7.1</b>	<b>7.5</b>	<b>7.5</b>	<b>7.6</b>	<b>7.6</b>	<b>7.6</b>	<b>7.5</b>	<b>7.6</b>
<b>Transport, Storage and Communication</b>	<b>7.9</b>	<b>8.0</b>	<b>8.0</b>	<b>8.5</b>	<b>8.0</b>	<b>7.7</b>	<b>5.7</b>	<b>6.6</b>
Land transport	4.2	4.1	4.2	4.5	5.2	6.0	4.1	5.8
Water transport	2.0	2.0	1.7	2.5	2.5	1.0	1.1	1.9
Air transport	2.5	5.2	2.0	6.2	7.4	9.1	8.3	10.6
Support transport services, storage	2.9	6.1	8.9	8.4	9.6	8.1	3.5	3.5
Posts and Telecommunications	31.8	26.7	23.3	21.6	16.1	12.9	10.0	9.2
<b>Financial Intermediations</b>	<b>8.9</b>	<b>8.5</b>	<b>9.2</b>	<b>8.9</b>	<b>9.0</b>	<b>11.6</b>	<b>9.6</b>	<b>9.5</b>
Bank	9.1	8.2	9.3	8.4	9.1	10.5	9.0	9.4
Insurance	8.3	9.2	8.2	10.0	8.4	14.9	11.6	9.8
Others	8.5	10.9	11.6	12.5	11.1	16.1	10.1	9.9
<b>Real Estate, Renting and Business Activities</b>	<b>3.7</b>	<b>3.7</b>	<b>3.8</b>	<b>3.8</b>	<b>3.8</b>	<b>3.9</b>	<b>4.0</b>	<b>4.0</b>
<b>Public Administration and Defense</b>	<b>8.0</b>	<b>8.2</b>	<b>8.4</b>	<b>6.2</b>	<b>7.0</b>	<b>8.4</b>	<b>9.7</b>	<b>6.1</b>
<b>Education</b>	<b>7.9</b>	<b>9.1</b>	<b>9.0</b>	<b>7.8</b>	<b>8.1</b>	<b>9.2</b>	<b>9.4</b>	<b>8.6</b>
<b>Health and Social Works</b>	<b>7.4</b>	<b>7.8</b>	<b>7.6</b>	<b>7.0</b>	<b>7.2</b>	<b>8.1</b>	<b>8.4</b>	<b>7.9</b>
<b>Community, Social and Personal Services</b>	<b>4.0</b>	<b>4.1</b>	<b>4.6</b>	<b>4.6</b>	<b>4.7</b>	<b>4.7</b>	<b>4.7</b>	<b>4.8</b>
<b>GDP at constant market price</b>	<b>6.0</b>	<b>6.6</b>	<b>6.4</b>	<b>6.2</b>	<b>5.7</b>	<b>6.1</b>	<b>6.7</b>	<b>6.3</b>

P = Provisional

Source: BBS

**Table SA6: GDP Deflator—Industrial Sector**

<b>Industrial Origin Sector</b>	<b>FY05</b>	<b>FY06</b>	<b>FY07</b>	<b>FY08</b>	<b>FY09</b>	<b>FY10</b>	<b>FY11</b>	<b>FY12 (P)</b>
<b>Agriculture and Forestry</b>	<b>127.0</b>	<b>133.7</b>	<b>143.9</b>	<b>159.9</b>	<b>171.3</b>	<b>182.5</b>	<b>196.1</b>	<b>210.2</b>
Crops & horticulture	129.5	137.1	149.3	167.9	179.2	189.2	202.6	217.9
Animal farming	115.1	120.9	127.6	140.0	156.4	175.2	192.8	206.9
Forest and related services	129.1	131.3	133.5	138.2	142.4	149.5	157.3	165.9
<b>Fishing</b>	<b>120.7</b>	<b>122.6</b>	<b>128.4</b>	<b>137.2</b>	<b>145.1</b>	<b>154.8</b>	<b>163.9</b>	<b>178.6</b>
<b>Mining and Quarrying</b>	<b>138.9</b>	<b>146.1</b>	<b>154.6</b>	<b>164.0</b>	<b>172.1</b>	<b>181.0</b>	<b>192.9</b>	<b>206.7</b>
Natural gas and crude petroleum	128.9	131.8	135.1	138.8	144.3	150.1	156.8	165.4
Other mining & quarrying	154.6	168.8	185.2	203.1	214.6	227.4	242.6	259.5
<b>Manufacturing</b>	<b>139.1</b>	<b>147.2</b>	<b>158.0</b>	<b>170.5</b>	<b>181.2</b>	<b>192.0</b>	<b>197.9</b>	<b>208.3</b>
Large & medium scale	139.1	147.2	158.0	170.5	181.2	191.9	197.9	207.2
Small scale	139.1	147.2	158.0	170.5	181.2	192.0	198.0	211.3
<b>Electricity, Water Supply and Gas</b>	<b>117.1</b>	<b>119.5</b>	<b>121.3</b>	<b>123.4</b>	<b>125.6</b>	<b>128.7</b>	<b>137.8</b>	<b>143.7</b>
Electricity	115.8	118.1	119.8	121.8	123.9	127.1	137.3	143.9
Gas	114.6	117.0	119.5	122.0	124.6	128.0	131.6	134.3
Water	144.0	147.1	149.1	151.1	153.1	155.1	157.2	159.2
<b>Construction</b>	<b>125.7</b>	<b>131.0</b>	<b>140.1</b>	<b>154.9</b>	<b>167.5</b>	<b>175.4</b>	<b>189.3</b>	<b>205.8</b>
<b>Wholesale and Retail Trade</b>	<b>139.1</b>	<b>147.6</b>	<b>158.3</b>	<b>175.6</b>	<b>186.6</b>	<b>200.2</b>	<b>217.8</b>	<b>239.2</b>
<b>Hotel and Restaurants</b>	<b>143.5</b>	<b>151.7</b>	<b>162.6</b>	<b>178.8</b>	<b>190.5</b>	<b>204.5</b>	<b>221.4</b>	<b>246.3</b>
<b>Transport, Storage and Communication</b>	<b>149.8</b>	<b>156.6</b>	<b>164.1</b>	<b>175.9</b>	<b>183.9</b>	<b>191.0</b>	<b>214.9</b>	<b>236.0</b>
Land transport	167.4	179.7	193.6	215.4	231.1	244.1	286.1	322.7
Water transport	125.2	128.7	133.3	142.4	150.5	160.1	170.4	184.0
Air transport	151.1	153.8	153.5	155.0	155.7	157.2	161.5	164.3
Support transport services, storage	144.3	146.3	151.3	154.1	157.5	160.6	165.7	170.3
Posts and Telecommunications	95.3	96.0	97.1	97.3	97.3	97.5	97.8	98.0
<b>Financial Intermediations</b>	<b>136.8</b>	<b>142.0</b>	<b>150.7</b>	<b>160.0</b>	<b>168.0</b>	<b>180.6</b>	<b>194.0</b>	<b>207.5</b>
Bank (Monetary Intermediation)	136.9	142.0	150.7	159.7	167.5	180.5	194.0	207.5
Insurance	136.5	142.0	150.5	161.0	169.4	181.0	194.0	207.5
Others (Financial Intermediation)	136.5	142.2	150.7	160.8	169.2	181.0	194.2	207.0
<b>Real Estate, Renting and Business Activities</b>	<b>143.0</b>	<b>149.1</b>	<b>156.1</b>	<b>163.9</b>	<b>172.6</b>	<b>182.4</b>	<b>193.3</b>	<b>205.0</b>
<b>Public Administration and Defense</b>	<b>140.5</b>	<b>148.7</b>	<b>158.4</b>	<b>168.9</b>	<b>179.0</b>	<b>189.3</b>	<b>206.0</b>	<b>220.8</b>
<b>Education</b>	<b>140.5</b>	<b>145.6</b>	<b>158.4</b>	<b>168.9</b>	<b>179.0</b>	<b>189.4</b>	<b>206.0</b>	<b>220.8</b>
<b>Health and Social Works</b>	<b>140.5</b>	<b>145.1</b>	<b>154.0</b>	<b>165.0</b>	<b>174.4</b>	<b>182.4</b>	<b>195.5</b>	<b>209.5</b>
<b>Community, Social and Personal Services</b>	<b>177.5</b>	<b>192.7</b>	<b>209.7</b>	<b>231.0</b>	<b>256.5</b>	<b>287.4</b>	<b>312.2</b>	<b>350.0</b>
<b>GDP Deflator</b>	<b>138.9</b>	<b>146.1</b>	<b>156.0</b>	<b>169.7</b>	<b>180.9</b>	<b>192.5</b>	<b>206.8</b>	<b>223.5</b>

P = Provisional

Source: BBS

Table SA7: Gross Domestic Product by Expenditure Categories (in current prices)

(Tk million)

ITEMS	FY05	FY06	FY07	FY08	FY09	FY10	FY11	FY12 (P)
<b>Net Resource</b>	<b>3,874,361</b>	<b>4,340,318</b>	<b>4,919,048</b>	<b>5,671,036</b>	<b>6,411,306</b>	<b>7,242,816</b>	<b>8,433,996</b>	<b>9,704,073</b>
<b>Consumption</b>	<b>2,965,120</b>	<b>3,315,523</b>	<b>3,763,172</b>	<b>4,349,714</b>	<b>4,912,913</b>	<b>5,547,710</b>	<b>6,430,219</b>	<b>7,376,309</b>
Private	2,759,817	3,085,199	3,502,116	4,061,404	4,589,386	5,174,992	5,969,353	6,858,190
Public	205,303	230,324	261,056	288,310	323,527	372,718	460,866	518,119
<b>Investment</b>	<b>909,241</b>	<b>1,024,795</b>	<b>1,155,876</b>	<b>1,321,322</b>	<b>1,498,393</b>	<b>1,695,106</b>	<b>2,003,777</b>	<b>2,327,764</b>
Private	679,182	775,464	898,618	1,050,900	1,209,417	1,346,905	1,554,436	1,751,041
Public	230,059	249,331	257,258	270,422	288,976	348,201	449,341	576,723
<b>Resource Balance</b>	<b>-239,642</b>	<b>-260,703</b>	<b>-327,225</b>	<b>-459,139</b>	<b>-438,028</b>	<b>-458,953</b>	<b>-693,896</b>	<b>-944,639</b>
Exports	614,681	788,788	934,403	1,110,181	1,194,401	1,277,985	1,824,521	2,286,490
Imports	854,323	1,049,491	1,261,628	1,569,320	1,632,429	1,736,938	2,518,417	3,231,129
<b>Gross Domestic Exp. At m.p.</b>	<b>3,634,719</b>	<b>4,079,615</b>	<b>4,591,823</b>	<b>5,211,897</b>	<b>5,973,278</b>	<b>6,783,863</b>	<b>7,740,100</b>	<b>8,759,434</b>
<b>Gross Domestic Product at m.p.</b>	<b>3,707,070</b>	<b>4,157,279</b>	<b>4,724,742</b>	<b>5,458,224</b>	<b>6,147,952</b>	<b>6,943,242</b>	<b>7,967,039</b>	<b>9,147,842</b>
Statistical discrepancy	72,351	77,664	132,919	246,327	174,674	159,379	226,939	388,408
Net factor income from abroad	189,280	272,075	352,755	483,895	559,012	646,035	725,135	899,385
<b>Gross National Income at m.p.</b>	<b>3,896,350</b>	<b>4,429,354</b>	<b>5,077,497</b>	<b>5,942,119</b>	<b>6,706,964</b>	<b>7,589,277</b>	<b>8,692,174</b>	<b>10,047,227</b>
Net current transfers from abroad	26,808	36,529	39,885	56,713	24,069	42,479	31,015	18,721
<b>Gross Disposable National Income</b>	<b>3,923,158</b>	<b>4,465,883</b>	<b>5,117,382</b>	<b>5,998,832</b>	<b>6,731,033</b>	<b>7,631,756</b>	<b>8,723,189</b>	<b>10,065,948</b>
<b>Gross Domestic Saving</b>	<b>741,950</b>	<b>841,756</b>	<b>961,570</b>	<b>1,108,510</b>	<b>1,235,039</b>	<b>1,395,532</b>	<b>1,536,820</b>	<b>1,771,533</b>
<b>Gross National Saving</b>	<b>885,687</b>	<b>1,072,696</b>	<b>1,221,291</b>	<b>1,402,791</b>	<b>1,643,446</b>	<b>1,924,667</b>	<b>2,066,031</b>	<b>2,301,231</b>
<b>Current Account Balance</b>	<b>-23,554</b>	<b>47,901</b>	<b>65,415</b>	<b>81,469</b>	<b>145,053</b>	<b>229,561</b>	<b>62,254</b>	<b>-26,533</b>
<b>Memo items (% of GDP):</b>								
<b>Consumption</b>	<b>80.0</b>	<b>79.8</b>	<b>79.6</b>	<b>79.7</b>	<b>79.9</b>	<b>79.9</b>	<b>80.7</b>	<b>80.6</b>
Private	74.4	74.2	74.1	74.4	74.6	74.5	74.9	75.0
Public	5.5	5.5	5.5	5.3	5.3	5.4	5.8	5.7
<b>Investment</b>	<b>24.5</b>	<b>24.7</b>	<b>24.5</b>	<b>24.2</b>	<b>24.4</b>	<b>24.4</b>	<b>25.2</b>	<b>25.4</b>
Private	18.3	18.7	19.0	19.3	19.7	19.4	19.5	19.1
Public	6.2	6.0	5.4	5.0	4.7	5.0	5.6	6.3
<b>Resource Balance</b>	<b>-6.5</b>	<b>-6.3</b>	<b>-6.9</b>	<b>-8.4</b>	<b>-7.1</b>	<b>-6.6</b>	<b>-8.7</b>	<b>-10.3</b>
Exports	16.6	19.0	19.8	20.3	19.4	18.4	22.9	25.0
Imports	23.0	25.2	26.7	28.8	26.6	25.0	31.6	35.3
WR	<b>98.0</b>	<b>98.1</b>	<b>97.2</b>	<b>95.5</b>	<b>97.2</b>	<b>97.7</b>	<b>97.2</b>	<b>95.8</b>
<b>Gross Domestic Saving</b>	<b>20.0</b>	<b>20.2</b>	<b>20.4</b>	<b>20.3</b>	<b>20.1</b>	<b>20.1</b>	<b>19.3</b>	<b>19.4</b>
<b>Gross National Saving</b>	<b>23.9</b>	<b>25.8</b>	<b>25.8</b>	<b>25.7</b>	<b>26.7</b>	<b>27.7</b>	<b>25.9</b>	<b>25.2</b>
<b>Current Account Balance</b>	<b>-0.6</b>	<b>1.2</b>	<b>1.4</b>	<b>1.5</b>	<b>2.4</b>	<b>3.3</b>	<b>0.8</b>	<b>-0.3</b>

P = Provisional

Source: BBS

Table SA8: Gross Domestic Product by Expenditure Categories (at constant prices)

(Base: 1995-96 = 100; Tk million)

ITEMS	FY05	FY06	FY07	FY08	FY09	FY10	FY11	FY12 (P)
<b>Domestic demand 1+2</b>	<b>2,699,063</b>	<b>2,846,799</b>	<b>3,035,197</b>	<b>3,167,322</b>	<b>3,357,603</b>	<b>3,570,474</b>	<b>3,816,173</b>	<b>3,998,264</b>
<b>Consumption 1</b>	<b>1,971,299</b>	<b>2,058,716</b>	<b>2,180,383</b>	<b>2,297,081</b>	<b>2,433,535</b>	<b>2,563,998</b>	<b>2,722,851</b>	<b>2,822,998.0</b>
Private	1,825,155	1,903,856	2,015,606	2,126,352	2,252,745	2,367,156	2,509,664	2,597,849.0
General Govt.	146,144	154,860	164,777	170,729	180,790	196,842	213,187	225,149.0
<b>Investment 2</b>	<b>727,764</b>	<b>788,083</b>	<b>854,814</b>	<b>870,241</b>	<b>924,068</b>	<b>1,006,476</b>	<b>1,093,322</b>	<b>1,175,266</b>
Private	541,506	595,067	667,535	689,070	741,309	796,138	843,075	877,335.0
Public	186,258	193,016	187,279	181,171	182,759	210,338	250,247	297,931
<b>Resource balance 3-4</b>	<b>-62,344</b>	<b>-40,074</b>	<b>-63,160</b>	<b>-4,939</b>	<b>12,783</b>	<b>14,600</b>	<b>20,095</b>	<b>9,411</b>
Exports 3	440,317	554,011	625,927	669,978	670,141	676,450	874,921	1,024,912.0
Imports 4	502,661	594,085	689,087	674,917	657,358	661,850	854,826	1,015,501
<b>Gross Domestic Exp. at m.p.</b>	<b>2,636,719</b>	<b>2,806,725</b>	<b>2,972,037</b>	<b>3,162,383</b>	<b>3,370,386</b>	<b>3,585,074</b>	<b>3,836,268</b>	<b>4,007,675</b>
<b>Gross Domestic Product at m.p.</b>	<b>2,669,740</b>	<b>2,846,725</b>	<b>3,029,709</b>	<b>3,217,260</b>	<b>3,401,969</b>	<b>3,608,445</b>	<b>3,850,504</b>	<b>4,093,775</b>
Statistical discrepancy 6	33,021	40,000	57,672	54,877	31,583	23,371	14,236	86,100.00
Net factor income from abroad	136,315	186,305	226,200	285,224	309,329	335,748	350,461	402,486
<b>Gross National Income at m.p.</b>	<b>2,806,055</b>	<b>3,033,030</b>	<b>3,255,909</b>	<b>3,502,484</b>	<b>3,711,298</b>	<b>3,944,193</b>	<b>4,200,965</b>	<b>4,496,261</b>
Net current transfers from abroad 9	19,306	25,013	25,576	33,429	13,319	22,077	14,990	8,378
<b>Gross Disposable National Income 10=8+9</b>	<b>2,825,361</b>	<b>3,058,043</b>	<b>3,281,485</b>	<b>3,535,913</b>	<b>3,724,617</b>	<b>3,966,270</b>	<b>4,215,955</b>	<b>4,504,639.0</b>
<b>Gross Domestic Saving 11=5-1</b>	<b>698,441</b>	<b>788,009</b>	<b>849,326</b>	<b>920,179</b>	<b>968,434</b>	<b>1,044,447</b>	<b>1,127,653</b>	<b>1,270,777</b>
<b>Gross National Saving 12=3-4+2+7+9</b>	<b>821,041</b>	<b>959,327</b>	<b>1,043,430</b>	<b>1,183,955</b>	<b>1,259,499</b>	<b>1,378,901</b>	<b>1,478,868</b>	<b>1,595,541</b>
<b>Current Account Balance 13=12-2</b>	<b>93,277</b>	<b>171,244</b>	<b>188,616</b>	<b>313,714</b>	<b>335,431</b>	<b>372,425</b>	<b>385,546</b>	<b>420,275</b>
GDP deflator	138.9	146.0	156.0	168.4	180.7	192.4	206.9	223.5
<b>(Implicit deflators : base=1995-96)</b>								
H.H final consumption expenditure	151.2	162.1	173.8	191.0	203.7	218.6	237.2	264.0
General govt. final consumption expt.	140.5	148.7	158.4	168.9	179.0	189.4	202.5	230.1
Other construction (kutcha)	128.3	130.3	146.1	167.5	176.9	186.7	202.1	215.1
Construction material price index	124.9	129.8	138.9	152.9	165.9	173.5	182.2	204.2
Machinery equipments	112.6	119.9	126.0	132.5	132.8	139.0	151.8	160.1
Transport equipments	159.9	163.8	174.8	180.1	193.3	203.2	221.0	234.0
Other capital goods	98.8	109.4	145.8	155.1	157.0	167.0	174.0	182.7
Unit price of export of goods & services	139.6	142.4	149.3	165.7	178.2	188.9	208.5	223.1
Unit price of import of goods & services	170.0	176.7	183.1	232.5	248.3	262.4	294.6	318.2
<b>(Annual percentage change )</b>								
Household final consumption exp.	3.9	4.3	5.9	5.5	5.9	5.1	6.0	3.5
General govt. final consumption exp.	7.8	6.0	6.4	3.6	5.9	8.9	8.3	5.6
Gross capital formation	10.7	8.3	8.5	1.8	6.2	8.9	8.6	7.5
Exports of goods and services	15.6	25.8	13.0	7.0	0.0	0.9	29.3	17.1
Imports of goods and services	19.1	18.2	16.0	-2.1	-2.6	0.7	29.2	18.8
Gross Domestic Saving	11.4	12.8	7.8	8.3	5.2	7.8	8.0	12.7
Gross National Saving	7.3	16.8	8.8	13.5	6.4	9.5	7.2	7.9

P = Provisional

Source: BBS

**Table SA9: Revenue and Expenditure of the Central Government**  
(Tk billion)

	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11 (E)
<b>Total revenue</b>	<b>229.0</b>	<b>276.8</b>	<b>309.8</b>	<b>339.0</b>	<b>389.2</b>	<b>443.7</b>	<b>490.6</b>	<b>620.0</b>	<b>641.0</b>	<b>759.1</b>	<b>912.0</b>
Tax	193.0	210.3	248.3	274.3	314.1	354.2	389.9	494.8	528.7	624.9	795.0
Non-tax	36.0	66.5	61.5	64.7	75.1	89.5	100.7	125.3	112.3	134.2	117.0
<b>Total expenditure</b>	<b>-356.0</b>	<b>-403.6</b>	<b>-411.5</b>	<b>-434.7</b>	<b>-513.9</b>	<b>-585.3</b>	<b>-635.9</b>	<b>-819.0</b>	<b>-880.6</b>	<b>-1016.0</b>	<b>-1253.3</b>
Current expenditure	-194.0	-218.2	-244.5	-258.6	-312.5	-350.5	-424.7	-520.5	-611.0	-670.1	-763.0
Food account surplus/deficit	-2.0	-2.1	2.7	-3.5	-0.6	1.2	-3.1	-8.1	-0.6	8.5	0.0
Annual Development Program	-166.0	-152.3	-163.0	-167.9	-185.8	-194.7	-180.2	-185.2	-193.7	-255.5	-328.3
Non ADP capital & net lending	-12.0	-17.2	-6.6	-16.0	-24.2	-41.3	-27.9	-88.24	-74.1	-96.5	-148.0
Structural adjustment	0.0	0.0	-12.3	-7.8	-1.9	0.0	0.0	0.0	0.0	0.0	0.0
Extraordinary Expenditure	18.0	-13.8	12.2	19.1	11.1	0.0	0.0	-17.0	-1.2	-2.4	-14.0
<b>Overall budget deficit</b>	<b>-127.0</b>	<b>-126.8</b>	<b>-101.7</b>	<b>-95.7</b>	<b>-124.7</b>	<b>-141.6</b>	<b>-145.3</b>	<b>-199.0</b>	<b>-239.6</b>	<b>-256.9</b>	<b>-341.3</b>
<b>Net foreign financing <sup>1</sup></b>	<b>50.0</b>	<b>58.1</b>	<b>64.2</b>	<b>35.9</b>	<b>60.9</b>	<b>49.3</b>	<b>48.7</b>	<b>89.0</b>	<b>47.0</b>	<b>92.5</b>	<b>100.1</b>
<b>Privatization receipts</b>	<b>0.0</b>	<b>0.6</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
<b>(As Percent of GDP)</b>											
<b>Total revenue</b>	<b>9.0</b>	<b>10.1</b>	<b>10.3</b>	<b>10.2</b>	<b>10.5</b>	<b>10.7</b>	<b>10.4</b>	<b>11.4</b>	<b>10.4</b>	<b>10.9</b>	<b>11.6</b>
Tax revenue	7.6	7.7	8.3	8.2	8.5	8.5	8.3	9.1	8.6	9.0	10.1
Non-tax revenue	1.4	2.4	2.0	1.9	2.0	2.2	2.1	2.3	1.8	1.9	1.5
<b>Total expenditure</b>	<b>14.0</b>	<b>14.7</b>	<b>13.7</b>	<b>13.1</b>	<b>13.9</b>	<b>14.1</b>	<b>13.5</b>	<b>15.0</b>	<b>14.3</b>	<b>14.6</b>	<b>15.9</b>
Current expenditure	7.7	8.0	8.1	7.8	8.4	8.4	9.0	9.5	9.9	9.7	9.7
ADP	6.5	5.6	5.4	5.0	5.0	4.7	3.8	3.4	3.2	3.7	4.2
<b>Overall budget deficit</b>	<b>5.0</b>	<b>4.6</b>	<b>3.4</b>	<b>2.9</b>	<b>3.4</b>	<b>3.4</b>	<b>3.1</b>	<b>3.6</b>	<b>3.9</b>	<b>3.7</b>	<b>4.3</b>
<b>Net foreign financing</b>	<b>2.0</b>	<b>2.1</b>	<b>2.1</b>	<b>1.1</b>	<b>1.6</b>	<b>1.2</b>	<b>1.0</b>	<b>1.6</b>	<b>0.8</b>	<b>1.3</b>	<b>1.3</b>
<b>Net domestic financing</b>	<b>3.0</b>	<b>2.5</b>	<b>1.2</b>	<b>1.8</b>	<b>1.7</b>	<b>2.2</b>	<b>2.0</b>	<b>2.0</b>	<b>3.1</b>	<b>2.4</b>	<b>3.3</b>
Bank	1.5	0.8	-0.4	0.4	0.9	1.6	1.1	1.6	2.2	-0.3	2.6
Non-Bank	1.6	1.7	1.6	1.4	0.8	0.7	0.9	0.5	0.9	2.7	0.7
<b>GDP Mkt. Prices (Billion Taka)</b>	<b>2535.5</b>	<b>2737.3</b>	<b>3005.8</b>	<b>3329.7</b>	<b>3707.1</b>	<b>4157.3</b>	<b>4724.8</b>	<b>5458.0</b>	<b>6148.0</b>	<b>6943.2</b>	<b>7875.0</b>

1/ Including foreign grants.

E = Estimate

Source: Ministry of Finance, IMF-WB Staff Estimates

**Table SA10: Monetary Survey**

(Tk billion : end of period)

	Net Foreign Asset	Net Domestic Assets	Total Domestic credit	Credit to:				Other Items Net	Money (M1)	Broad Money (M2)	Reserve Money
				Central Govt.	Other Public Sector	Total Public Sector	Private Sector				
<b>FY01</b>	68.7	797.5	841.1	176.8	73.6	250.4	590.7	-38.1	223.5	871.7	189.3
<b>FY02</b>	95.9	890.2	949.8	201.6	72.4	274.1	675.7	-59.6	241.6	986.2	235.3
<b>FY03</b>	139.7	1000.2	1,106.5	190.3	75.9	266.2	840.3	-106.2	267.4	1,139.9	243.1
<b>FY04</b>	163.3	1133.9	1,267.9	219.0	90.2	309.2	958.7	-134.0	304.5	1,297.2	262.0
<b>FY05</b>	186.7	1327.8	1,488.4	255.8	112.4	368.2	1,120.2	-160.6	354.0	1,514.5	294.1
<b>FY06</b>	220.1	1586.6	1,790.9	316.2	151.5	467.7	1,323.2	-204.2	426.5	1,806.7	373.8
<b>FY07</b>	328.9	1786.2	2,056.7	360.4	174.6	535.0	1,521.8	-270.6	501.7	2,115.0	440.7
<b>FY08</b>	378.5	2109.5	2,487.7	470.0	116.3	586.3	1,901.4	-378.2	593.1	2,487.9	527.9
<b>FY09</b>	479.3	2485.7	2,885.1	581.9	123.9	706.2	2,179.3	-400.2	664.3	2,965.0	693.9
<b>FY10</b>	670.7	2959.6	3,401.8	543.9	150.2	694.2	2,707.6	-442.1	879.9	3,630.3	805.1
<b>FY11</b>	706.2	3699.0	4,334.2	733.7	193.4	927.1	3,407.0	-634.4	1,031.0	4,405.2	897.3
<b>Annual % Change</b>											
<b>FY01</b>	-16.6	19.9	17.7	19.7	19.2	19.5	16.9	-23.4	12.4	16.6	10.9
<b>FY02</b>	39.6	11.6	12.9	14.1	-1.6	9.5	14.4	56.5	8.1	13.1	24.3
<b>FY03</b>	45.6	12.4	16.5	-5.6	4.8	-2.9	24.4	78.4	10.7	15.6	3.3
<b>FY04</b>	16.9	13.4	14.6	15.1	18.8	16.1	14.1	26.1	13.9	13.8	7.8
<b>FY05</b>	14.3	17.1	17.4	16.8	24.6	19.1	16.8	19.9	16.3	16.7	12.2
<b>FY06</b>	17.9	19.5	20.3	23.6	34.8	27.0	18.1	27.2	20.5	19.3	27.1
<b>FY07</b>	49.4	12.6	14.8	14.0	15.3	14.4	15.0	32.5	17.6	17.1	17.9
<b>FY08</b>	15.1	18.1	21.0	30.4	-33.4	9.6	24.9	39.8	18.2	17.6	19.8
<b>FY09</b>	26.6	17.8	16.0	23.8	6.6	20.5	14.6	5.8	12.0	19.2	31.4
<b>FY10</b>	39.9	19.1	17.9	-6.5	21.2	-1.7	24.2	10.5	32.5	22.4	16.0
<b>FY11</b>	5.3	25.0	27.4	34.9	28.7	33.6	25.8	43.5	17.2	21.3	11.5

Source: Bangladesh Bank

**Table SA11a: Merchandise Exports**  
(US\$ million)

	Raw Jute	Jute Goods	Leather	Tea	Frozen Food	Woven Garments	Knitwear	Home Textile	Other Manufactured Goods <sup>1</sup>	Engineering Products <sup>2</sup>	Pharmaceuticals	Other Chemical Products <sup>3</sup>	Agricultural Products <sup>4</sup>	Other	Total
<b>FY01</b>	67.1	230.8	253.2	27.0	364.6	3,364.3	1,495.6	...	522.0	3.0	...	97.0	18.0	25.0	6,467.5
<b>FY02</b>	61.1	243.5	207.3	17.4	276.4	3,125.5	1,458.9	74.9	477.0	1.0	...	67.0	23.0	-46.5	5,986.4
<b>FY03</b>	82.4	257.5	191.2	15.5	321.8	3,258.3	1,653.8	71.4	529.0	13.0	...	100.0	25.0	29.5	6,548.4
<b>FY04</b>	79.7	245.6	211.4	15.8	390.3	3,538.1	2,148.0	135.5	633.0	42.0	...	121.0	41.0	1.7	7,603.0
<b>FY05</b>	96.2	307.5	220.9	15.8	420.7	3,598.2	2,819.5	156.1	652.0	85.0	...	197.0	82.0	3.5	8,654.5
<b>FY06</b>	148.3	361.0	257.3	11.9	459.1	4,083.8	3,817.0	165.3	377.6	199.2	27.5	180.9	94.5	343.0	10,526.2
<b>FY07</b>	147.2	320.8	266.1	6.9	515.3	4,657.6	4,553.6	257.0	517.1	236.9	28.2	187.1	87.8	396.4	12,177.9
<b>FY08</b>	165.1	318.3	284.4	14.9	534.1	5,167.3	5,532.5	291.4	489.8	219.7	43.0	172.8	120.1	757.4	14,110.8
<b>FY09</b>	148.2	269.3	177.3	12.3	454.5	5,918.5	6,429.3	313.5	510.5	189.5	45.7	233.9	122.3	740.5	15,565.2
<b>FY10</b>	196.3	540.2	226.1	5.7	445.2	6,013.4	6,483.3	539.3	1,104.6	311.1	41.0	61.9	236.7	0.0	16,204.7
<b>FY11</b>	357.3	757.7	297.8	3.2	625.0	8,432.4	9,482.1	788.8	1,435.1	309.6	44.3	60.5	330.7	0.0	22,924.4
<b>Growth (Percent)</b>															
<b>FY01</b>	-6.3	-12.8	30.3	276.6	5.8	9.7	18.3	...	48.7	-62.5	...	3.2	0.0	-63.3	12.4
<b>FY02</b>	-9.0	5.5	-18.1	-35.4	-24.2	-7.1	-2.4	...	-8.6	-66.7	...	-30.9	27.8	-286.5	-7.4
<b>FY03</b>	34.9	5.8	-7.7	-11.3	16.5	4.2	13.4	-4.7	10.9	1200.0	...	49.3	8.7	-163.4	9.4
<b>FY04</b>	-3.3	-4.6	10.5	2.2	21.3	8.6	29.9	89.8	19.7	223.1	...	21.0	64.0	-94.3	16.1
<b>FY05</b>	20.8	25.2	4.5	0.3	7.8	1.7	31.3	15.2	3.0	102.4	...	62.8	100.0	109.6	13.8
<b>FY06</b>	54.1	17.4	16.4	-24.9	9.1	13.5	35.4	5.8	-42.1	134.3	...	-8.2	15.2	9610.3	21.6
<b>FY07</b>	-0.8	-11.1	3.4	-41.6	12.2	14.1	19.3	55.5	37.0	18.9	2.5	3.4	-7.0	15.6	15.7
<b>FY08</b>	12.2	-0.8	6.9	114.6	3.6	10.9	21.5	13.4	-5.3	-7.3	52.8	-7.6	36.8	91.1	15.9
<b>FY09</b>	-10.2	-15.4	-37.7	-17.5	-14.9	14.5	16.2	7.6	4.2	-13.7	6.2	35.4	1.8	-2.2	10.3
<b>FY10</b>	32.5	100.6	27.5	-54.0	-2.1	1.6	0.8	72.0	116.4	64.2	-10.3	-73.5	93.6	-100.0	4.1
<b>FY11</b>	82.0	40.3	31.7	-43.4	40.4	40.2	46.3	46.3	29.9	-0.5	8.1	-2.3	39.7	...	41.5

Source: Export Promotion Bureau, Bangladesh

1/ includes melamine tableware, camera parts, leather bags & purses & others; 2/ includes bicycle, iron chains & others; 3/ includes chemical fertilizer & others; 4/ includes vegetables, tobacco & others.



**Table SA11b: Value of Exports by Principal Country of Destination**  
(US\$ million)

	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11
<b>USA</b>	2500.9	2211.6	2153.1	1966.6	2418.7	3030.2	3441.0	3590.6	4052.0	3950.5	5107.5
<b>EU</b>	2960.4	2855.5	2840.7	3683.0	3909.7	4602.6	5271.6	6223.4	6798.1	6753.1	9681.9
<b>Germany</b>	789.0	681.6	820.0	1298.5	1353.8	1764.1	1955.4	2174.7	2269.8	2187.4	3438.7
<b>UK</b>	594.8	648.2	777.1	898.2	943.2	1048.6	1174.0	1374.0	1501.2	1508.5	2065.4
<b>Italy</b>	295.5	262.4	258.7	315.9	369.2	425.8	515.7	579.2	615.5	623.9	866.4
<b>France</b>	366.0	413.9	417.9	553.0	626.2	677.5	731.8	953.1	1031.1	1025.9	1538.0
<b>Belgium</b>	253.5	212.6	289.5	327.0	325.4	359.2	435.8	488.4	409.8	390.5	666.2
<b>Netherlands</b>	327.9	283.5	277.7	290.4	291.9	327.4	459.0	653.9	970.8	1016.9	1107.1
<b>Iran</b>	37.7	38.3	45.9	34.8	48.7	38.1	50.2	55.3	46.5	77.4	97.2
<b>Japan</b>	107.4	96.1	108.0	118.2	122.4	137.8	147.5	172.6	202.6	330.6	434.1
<b>Singapore</b>	39.3	24.6	46.4	42.6	64.1	97.4	91.6	102.1	70.5	80.0	113.4
<b>India</b>	62.3	50.3	84.1	89.3	144.2	225.5	289.4	358.1	276.6	304.6	512.5
<b>China</b>	11.6	18.9	19.5	45.5	57.8	64.4	93.0	107.0	97.1	178.6	319.7
<b>Pakistan</b>	32.1	28.6	31.5	45.1	63.1	57.7	61.1	71.0	76.2	77.7	86.8
<b>Others</b>	1049.6	1015.5	1219.2	1573.4	1832.3	2272.5	2732.6	3430.8	3945.7	4452.1	6571.4
<b>Total</b>	6467.3	5986.0	6548.4	7598.5	8654.4	10526.2	12177.9	14110.8	15565.2	16204.7	22924.4
<b>Percent of Total</b>											
<b>USA</b>	38.7	36.9	32.9	25.9	27.9	28.8	28.3	25.4	26.0	24.4	22.3
<b>EU</b>	45.8	47.7	43.4	48.5	45.2	43.7	43.3	44.1	43.7	41.7	42.2
<b>Germany</b>	12.2	11.4	12.5	17.1	15.6	16.8	16.1	15.4	14.6	13.5	15.0
<b>UK</b>	9.2	10.8	11.9	11.8	10.9	10.0	9.6	9.7	9.6	9.3	9.0
<b>Italy</b>	4.6	4.4	4.0	4.2	4.3	4.0	4.2	4.1	4.0	3.9	3.8
<b>France</b>	5.7	6.9	6.4	7.3	7.2	6.4	6.0	6.8	6.6	6.3	6.7
<b>Belgium</b>	3.9	3.6	4.4	4.3	3.8	3.4	3.6	3.5	2.6	2.4	2.9
<b>Netherlands</b>	5.1	4.7	4.2	3.8	3.4	3.1	3.8	4.6	6.2	6.3	4.8
<b>Iran</b>	0.6	0.6	0.7	0.5	0.6	0.4	0.4	0.4	0.3	0.5	0.4
<b>Japan</b>	1.7	1.6	1.6	1.6	1.4	1.3	1.2	1.2	1.3	2.0	1.9
<b>Singapore</b>	0.6	0.4	0.7	0.6	0.7	0.9	0.8	0.7	0.5	0.5	0.5
<b>India</b>	1.0	0.8	1.3	1.2	1.7	2.1	2.4	2.5	1.8	1.9	2.2
<b>China</b>	0.2	0.3	0.3	0.6	0.7	0.6	0.8	0.8	0.6	1.1	1.4
<b>Pakistan</b>	0.5	0.5	0.5	0.6	0.7	0.5	0.5	0.5	0.5	0.5	0.4
<b>Others</b>	16.2	17.0	18.6	20.7	21.2	21.6	22.4	24.3	25.3	27.5	28.7
<b>Total</b>	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Export Promotion Bureau, Bangladesh

**Table SA12: Country-wise Monthly Remittance Earnings**  
(US\$ million)

	KSA	U.A.E.	Kuwait	Qatar	Oman	Bahrain	USA	UK	Germany	Japan	Singapore	Malaysia	Libya	Iran	Others	Total	Annual Growth of Total
<b>FY91</b>	265.0	81.0	9.0	59.0	50.0	16.0	57.0	69.0	7.0	90.0	...	0.0	4.0	3.0	54.0	764.0	...
<b>FY92</b>	316.0	80.0	67.0	48.0	61.0	20.0	55.0	57.0	11.0	69.0	...	0.0	3.0	3.0	58.0	848.0	11.0
<b>FY93</b>	399.0	80.0	124.0	54.0	60.0	22.0	68.0	48.0	15.0	39.0	...	0.0	2.0	1.0	32.0	944.0	11.3
<b>FY94</b>	443.1	88.1	185.2	56.2	73.0	27.3	78.7	48.5	13.0	31.6	2.3	10.2	1.9	0.5	29.1	1088.8	15.3
<b>FY95</b>	476.9	88.3	174.7	72.2	81.3	33.7	102.2	47.0	8.1	31.4	3.0	50.0	1.0	0.3	27.4	1197.6	10.0
<b>FY96</b>	498.2	83.7	174.3	53.3	81.7	30.1	115.4	41.3	4.9	23.0	4.0	74.4	0.2	0.1	32.6	1217.1	1.6
<b>FY97</b>	587.2	89.6	211.5	53.2	94.5	31.5	157.4	56.2	3.1	25.6	6.7	94.5	0.5	0.5	63.7	1475.4	21.2
<b>FY98</b>	589.3	106.9	213.2	57.8	87.6	32.4	203.1	65.1	2.5	20.1	7.7	78.1	0.5	0.9	60.3	1525.4	3.4
<b>FY99</b>	685.5	125.3	230.2	63.9	91.9	38.9	239.4	54.0	5.1	39.4	13.1	67.5	0.1	0.2	50.9	1705.7	11.8
<b>FY00</b>	916.0	129.9	245.0	63.7	93.0	41.8	241.3	71.8	4.7	34.6	11.6	54.0	0.0	0.0	41.9	1949.3	14.3
<b>FY01</b>	917.0	145.0	246.0	63.0	84.0	44.0	226.0	56.0	3.0	12.0	42.2	31.0	0.1	0.0	51.0	1882.1	-3.4
<b>FY02</b>	1148.0	233.5	285.8	90.6	103.3	54.1	356.2	103.3	6.1	14.1	14.3	46.9	0.0	0.0	45.0	2501.1	32.9
<b>FY03</b>	1254.3	327.4	338.6	113.6	114.1	63.7	458.1	220.2	9.6	18.2	31.1	41.4	0.2	0.2	71.4	3062.0	22.4
<b>FY04</b>	1386.0	373.5	361.2	113.6	118.5	61.1	467.8	297.5	12.1	18.7	32.4	37.1	0.1	0.4	89.0	3369.2	10.0
<b>FY05</b>	1510.4	442.2	406.8	136.4	131.3	67.2	557.3	375.8	10.1	16.0	47.7	25.5	0.3	0.5	121.9	3848.3	14.2
<b>FY06</b>	1696.9	561.4	494.4	175.6	164.9	67.3	760.7	555.7	11.9	9.4	64.8	20.8	0.2	1.9	215.9	4801.9	24.8
<b>FY07</b>	1734.7	804.8	680.7	233.2	196.5	80.0	930.3	886.9	14.9	10.2	80.2	11.8	2.6	2.4	309.7	5978.9	24.5
<b>FY08</b>	2324.2	1135.1	863.7	289.8	220.6	138.2	1380.1	896.1	26.9	16.3	130.1	92.4	0.4	3.2	397.5	7914.8	32.4
<b>FY09</b>	2859.1	1756.9	970.8	343.4	290.1	157.4	1575.2	789.7	19.3	14.1	165.1	282.2	1.3	3.3	461.5	9689.3	22.4
<b>FY10</b>	3427.1	1890.3	1019.2	360.9	349.1	170.1	1451.9	827.5	16.5	14.7	193.5	587.1	1.5	4.5	673.6	10987.4	13.4
<b>FY11</b>	3290.0	2002.6	1075.8	319.4	334.3	185.9	1848.5	889.6	25.7	15.3	202.3	703.7	5.2	2.3	749.8	11650.3	6.0

Source: Bangladesh Bank

**Table SA12: Balance of Payments**

(US\$ million)

Items	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11	FY12
<b>Trade balance</b>	<b>-2,887</b>	<b>-1,768</b>	<b>-2,215</b>	<b>-2,319</b>	<b>-3,297</b>	<b>-2,889</b>	<b>-3,458</b>	<b>-5,330</b>	<b>-4,710</b>	<b>-5,155</b>	<b>-7,744</b>	<b>-7,928</b>
Merchandise export f.o.b. (inc. EPZ)	6477	5,929	6,492	7,521	8,573	10,412	12,053	14,151	15,581	16,233	22,592	23,992
Merchandise import f.o.b.(inc. EPZ)	-9364	-7,697	-8,707	-9,840	-11,870	-13,301	-15,511	-19,481	-20,291	-21,388	-30,336	-31,920
<b>Services (net)</b>	<b>51</b>	<b>-499</b>	<b>-691</b>	<b>-874</b>	<b>-870</b>	<b>-1,023</b>	<b>-1,255</b>	<b>-1,525</b>	<b>-1,616</b>	<b>-1,233</b>	<b>-2,369</b>	<b>-2,559</b>
Receipts	772	865	887	924	1,177	1,340	1,484	1,891	1,832	2,478	2,573	2,684
Payments	-721	-1,364	-1,578	-1,798	-2,047	-2,363	-2,739	-3,416	-3,448	-3,711	-4,942	-5,243
<b>Income (net)</b>	<b>-266</b>	<b>-402</b>	<b>-358</b>	<b>-374</b>	<b>-680</b>	<b>-702</b>	<b>-905</b>	<b>-994</b>	<b>-1,484</b>	<b>-1,484</b>	<b>-1,454</b>	<b>-1,508</b>
Receipts	97	50	64	63	116	136	244	217	95	52	124	195
Payments	-363	-452	-422	-437	-796	-838	-1,149	-1,211	-1,579	-1,536	-1,578	-1,703
<b>Current transfers</b>	<b>2,296</b>	<b>2,826</b>	<b>3,440</b>	<b>3,743</b>	<b>4,290</b>	<b>5,438</b>	<b>6,554</b>	<b>8,529</b>	<b>10,226</b>	<b>11,596</b>	<b>12,452</b>	<b>13,699</b>
Official	196	69	82	61	37	125	97	127	72	127	103	105
Private	2100	2,757	3,358	3,682	4,253	5,313	6,457	8,402	10,154	11,469	12,349	13,594
Of which: Workers' remittance	1885	2,501	3,062	3,372	3,848	4,802	5,979	7,915	9,689	10,987	11,650	12,843
<b>CURRENT ACCOUNT BALANCE</b>	<b>-806</b>	<b>157</b>	<b>176</b>	<b>176</b>	<b>-557</b>	<b>824</b>	<b>936</b>	<b>680</b>	<b>2,416</b>	<b>3,724</b>	<b>885</b>	<b>1,704</b>
<b>Capital account (net)</b>	<b>177</b>	<b>410</b>	<b>428</b>	<b>196</b>	<b>163</b>	<b>375</b>	<b>490</b>	<b>576</b>	<b>451</b>	<b>512</b>	<b>642</b>	<b>469</b>
Capital transfers	177	410	428	196	163	375	490	576	451	512	642	469
<b>Financial account</b>	<b>594</b>	<b>391</b>	<b>413</b>	<b>-31</b>	<b>784</b>	<b>-141</b>	<b>762</b>	<b>-457</b>	<b>-825</b>	<b>-746</b>	<b>-1,920</b>	<b>-955</b>
Foreign direct investment ( net )	166	391	376	276	800	743	793	748	961	818	775	995
Portfolio investment (net)	3	-6	2	6	0	32	106	47	-159	-117	-28	198
<b>Other investment</b>	<b>425</b>	<b>6</b>	<b>35</b>	<b>-313</b>	<b>-16</b>	<b>-916</b>	<b>-137</b>	<b>-1,252</b>	<b>-1,627</b>	<b>-1,447</b>	<b>-2,667</b>	<b>-2,148</b>
MLT loans (excludes suppliers credit)	957	733	918	544	940	1,023	1,037	1,338	1,204	1,589	1,032	1,460
MLT amortization payments	-414	-435	-452	-397	-449	-488	-525	-580	-641	-687	-739	-789
Other long term loans (net)	5	-42	-20	-41	-46	-37	-24	-6	-70	-151	-101	-57
Other short term loans (net)	-123	63	142	13	241	-256	493	-160	-169	62	531	242
Other Assets*		-87	-125	-125	-182	-495	-535	-603	-650	-902	-661	-1,606
Trade Credit (net)**		-253	-499	-321	-320	-898	-481	-1,108	-1,277	-1,043	-2,569	-1,450
<b>Commercial Bank</b>	<b>0</b>	<b>27</b>	<b>71</b>	<b>14</b>	<b>-200</b>	<b>235</b>	<b>-102</b>	<b>-133</b>	<b>-24</b>	<b>-315</b>	<b>-160</b>	<b>52</b>
Assets		-90	217	86	-91	31	-86	-146	-129	-410	-452	443
Liabilities		117	-146	-72	-109	204	-16	13	105	95	292	495
<b>Errors and omissions</b>	<b>-291</b>	<b>-550</b>	<b>-202</b>	<b>-170</b>	<b>-323</b>	<b>-720</b>	<b>-695</b>	<b>-468</b>	<b>16</b>	<b>-625</b>	<b>-263</b>	<b>-724</b>
<b>OVERALL BALANCE</b>	<b>-326</b>	<b>408</b>	<b>815</b>	<b>171</b>	<b>67</b>	<b>338</b>	<b>1,493</b>	<b>331</b>	<b>2,058</b>	<b>2,865</b>	<b>-656</b>	<b>494</b>
<b>Reserve Assets</b>	<b>326</b>	<b>-408</b>	<b>-815</b>	<b>-171</b>	<b>-67</b>	<b>-338</b>	<b>-1,493</b>	<b>-331</b>	<b>-2,058</b>	<b>-2,865</b>	<b>656</b>	<b>-494</b>
<b>Bangladesh Bank</b>	<b>326</b>	<b>-408</b>	<b>-815</b>	<b>-171</b>	<b>-67</b>	<b>-338</b>	<b>-1,493</b>	<b>-331</b>	<b>-2,058</b>	<b>-2,865</b>	<b>656</b>	<b>-494</b>
Assets	226	-276	-887	-235	-225	-554	-1,593	-799	-1,883	-3,616	-481	293
Liabilities	100	-132	72	64	158	216	100	468	-175	751	175	-201

Source: Bangladesh Bank

**Table SA12: Cumulative Merchandise Imports**

(US\$ million)

		FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11	FY12
<b>A.</b>	<b>Food Grains</b>	<b>349</b>	<b>186</b>	<b>409</b>	<b>430</b>	<b>574</b>	<b>417.9</b>	<b>581</b>	<b>1410</b>	<b>882</b>	<b>837</b>	<b>1911</b>	<b>897</b>
1	Rice	172	15	211	144	262	117.2	180	874	239	75	830	288
2	Wheat	177	171	198	287	312	300.7	401	537	643	761	1081	609
<b>B.</b>	<b>Other Food Items</b>	<b>411</b>	<b>423</b>	<b>632</b>	<b>865</b>	<b>1,034</b>	<b>954.6</b>	<b>1337</b>	<b>2082</b>	<b>1830</b>	<b>2395</b>	<b>2404</b>	<b>3591</b>
1	Milk & Cream	62	59	61	61	86	72.7	83	137	96	106	161	221
2	Spices	15	13	32	30	42	31.7	76	80	62	109	127	138
3	Oil Seeds	64	72	64	73	86	90.1	106	136	159	130	103	177
4	Edible Oil	218	251	364	470	440	472.8	583	1006	865	1050	1067	1640
5	Pulses				120	159	163.5	195	327	234	350	292	239
6	Sugar	46	23	104	110	220	123.8	294	396	413	650	654	1177
<b>C.</b>	<b>Consumer &amp; Intermediate Goods</b>	<b>3,487</b>	<b>2,994</b>	<b>3,291</b>	<b>4,497</b>	<b>5,970</b>	<b>6903</b>	<b>7782</b>	<b>9615</b>	<b>10283</b>	<b>10182</b>	<b>15741</b>	<b>16750</b>
7	Cement/clinker	44	6	2	139	170	210.3	240	347	314	333	446	502
8	Crude Petroleum	273	242	267	252	350	604.1	524	695	584	535	923	987
9	POL	566	481	620	770	1,252	1399.5	1709	2058	1997	2021	3186	3922
10	Chemicals	339	335	353	406	510	580.3	668	890	960	972	1254	1206
11	Pharmaceutical Products	33	39	45	45	41	49.9	49	62	80	103	116	119
12	Fertilizer	129	107	109	150	332	341.6	357	632	955	717	1241	1381
13	Dyeing, Tanning, etc.	91	87	86	109	132	148.2	161	218	259	275	333	374
14	Plastics, rubber, etc.				367	477	522.8	643	808	840	966	1302	1363
15	Raw Cotton	360	312	393	583	666	741.7	859	1213	1291	1439	2689	2070
16	Yarn	322	283	270	323	393	501.0	582	691	792	718	1391	1378
17	Textile & Articles Thereof	1,291	1,063	1,106	1,295	1,571	1728.2	1892	1892	2099	1986	2680	3021
18	Staple Fibre	39	39	41	57	75	75.5	97	110	112	118	180	427
<b>D.</b>	<b>Capital Goods &amp; Others</b>	<b>4,403</b>	<b>4,310</b>	<b>4,599</b>	<b>4,224</b>	<b>4,617</b>	<b>5409</b>	<b>6312</b>	<b>5520</b>	<b>6194</b>	<b>6538</b>	<b>8567</b>	<b>9247</b>
19	Iron, Steel & Other Base Metals	464	413	455	479	680	980	985	1180	1502	1453	2004	2218
20	Capital Goods/Machinery	2,515	2,617	2,660	2,875	1,211	1458	1929	1664	1420	1595	2325	1998
21	Other capital goods	1,424	1,280	1,484	870	2,727	2971	3397	2676	3273	3491	4239	5031
<b>E.</b>	<b>Others n.i.e</b>								<b>1708</b>	<b>2017</b>	<b>2373</b>	<b>2894</b>	<b>2842</b>
	<b>Total</b>	<b>8,650</b>	<b>7,913</b>	<b>8,931</b>	<b>10,017</b>	<b>12,195</b>	<b>13685</b>	<b>16012</b>	<b>20335</b>	<b>21205</b>	<b>22325</b>	<b>31517</b>	<b>33327</b>
	<b>Imports by EPZ</b>	<b>685</b>	<b>627</b>	<b>727</b>	<b>887</b>	<b>952</b>	<b>1062</b>	<b>1144</b>	<b>1294</b>	<b>1302</b>	<b>1413</b>	<b>2140</b>	<b>2114</b>
	<b>Grand Total</b>	<b>9,335</b>	<b>8,540</b>	<b>9,658</b>	<b>10,903</b>	<b>13,147</b>	<b>14746</b>	<b>17157</b>	<b>21629</b>	<b>22507</b>	<b>23738</b>	<b>33658</b>	<b>35441</b>
	<i>Growth Rate (%)</i>	<i>11.5</i>	<i>-8.5</i>	<i>13.1</i>	<i>12.9</i>	<i>20.6</i>	<i>12.2</i>	<i>16.3</i>	<i>26.1</i>	<i>4</i>	<i>5.5</i>	<i>41.8</i>	<i>5.3</i>

Source: Statistics Department, Bangladesh Bank





## THE WORLD BANK

### HEADQUARTER

1818 H Street, N.W.  
Washington, D.C.,  
20433, USA  
Tel: 1-202-473-1000  
Fax: 1-202-477-6391  
[www.worldbank.org](http://www.worldbank.org)

### DHAKA OFFICE

Plot: E-32, Agargaon,  
Sher-e-Bangla Nagar,  
Dhaka 1207, Bangladesh  
Tel: 880-2-8159001-28  
Fax: 880-2-8159029-30  
[www.worldbank.org.bd](http://www.worldbank.org.bd)