





# Will Bangladesh miss out on first demographic dividend?



Muhammd Moshiur Rahman and Bazlul Khondker South Asian Network on Economic Modeling (SANEM)

Presented at 11th Global Meeting of the NTA Network

June 20-24, 2016

Lamantin Beach Hotel, Saly, Senegal

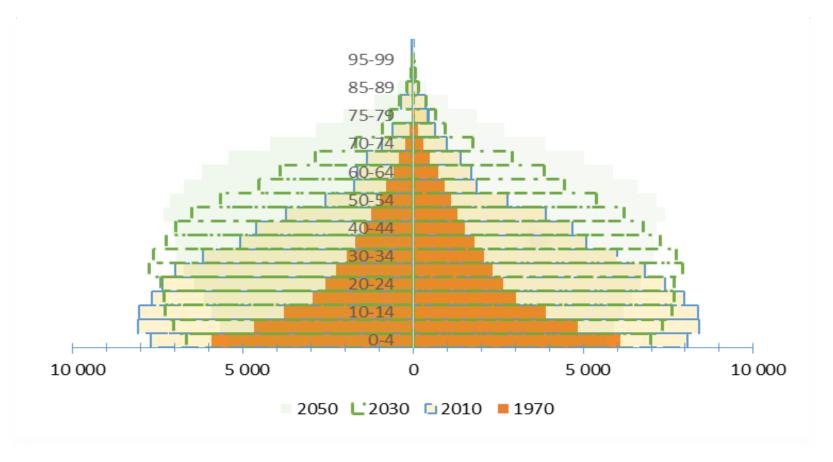
#### **Presentation Outline**

- Demographic transition
- Economic growth and structure
- Key features of labor market
- Bangladesh NTA profiles
- NTA gender perspective
- Some estimates of the first demographic dividend
- Policy recommendation

#### Demographic transition

- Demographic and age structure transition in Bangladesh
- CBR, CDR, and population growth in Bangladesh

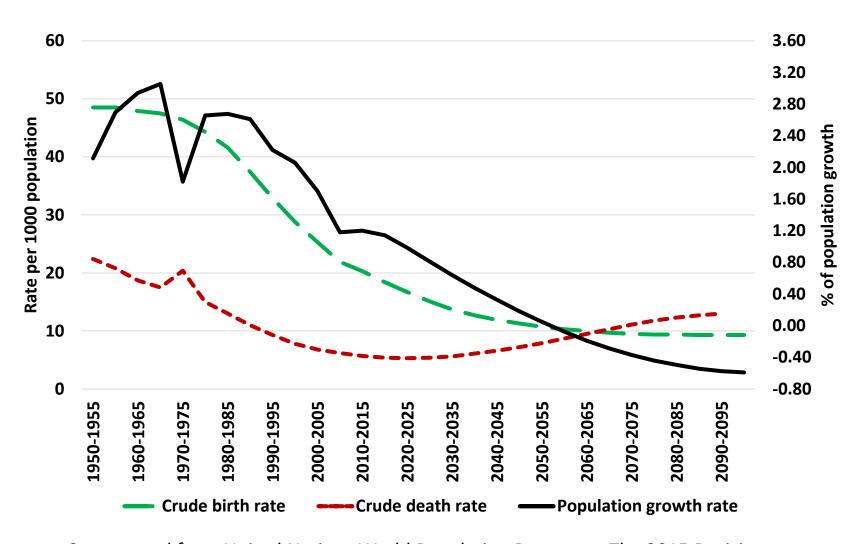
### Demographic and age structure transition in Bangladesh



*Population in thousands* 

Constructed from United Nations World Population Prospects: 2015

#### CBR, CDR, and population growth

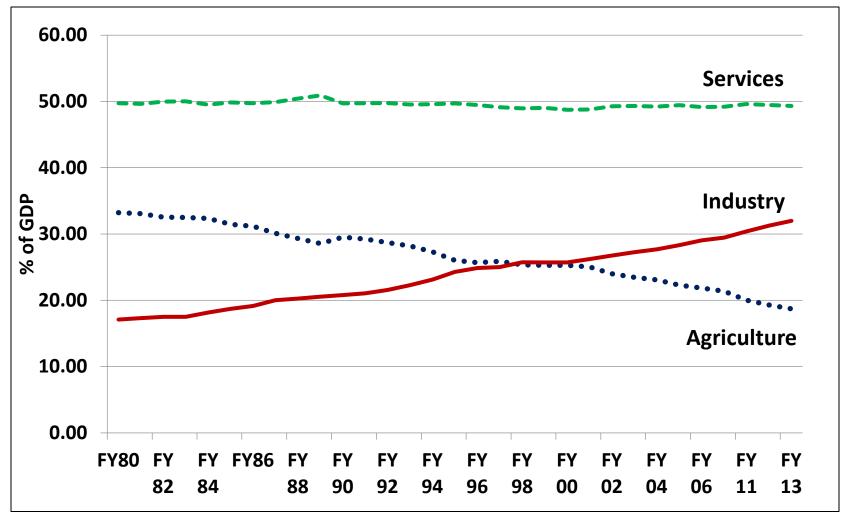


Constructed from United Nations World Population Prospects: The 2015 Revision (United Nations 2015)

#### GDP growth rates

Period	Sector GDP			
	year)			GDP
	Agriculture	Manufacturing	Services	Growth (%)
1960-70 (average)				3.9
1972-90 (average)				3.6
1990-95(average)	1.55	8.08	4.43	4.15
1995-00(average)	4.88	5.59	5.29	5.23
2000-01	3.14	6.87	6.00	5.41
2001-02	0.01	5.42	5.93	4.36
2002-03	3.08	6.78	5.83	5.33
2003-04	4.09	7.13	6.13	5.82
2004-05	2.21	8.20	6.72	5.93
2005-06	4.94	10.67	6.72	7.02
2006-07	4.56	9.63	6.80	6.83
2007-08	3.21	7.32	6.38	5.88
2008-09	4.12	6.88	6.22	5.90
2009-10	5.24	6.65	6.42	6.22
2010-11	5.13	9.14	6.27	6.59
2011-12	3.11	9.26	6.37	6.28
2012-13	2.17	9.45	6.17	6.06
2013-14	4.37	8.16	5.62	6.15
2014-15	3.04	9.60	5.83	6.49

## Structural transformation of Bangladesh Economy

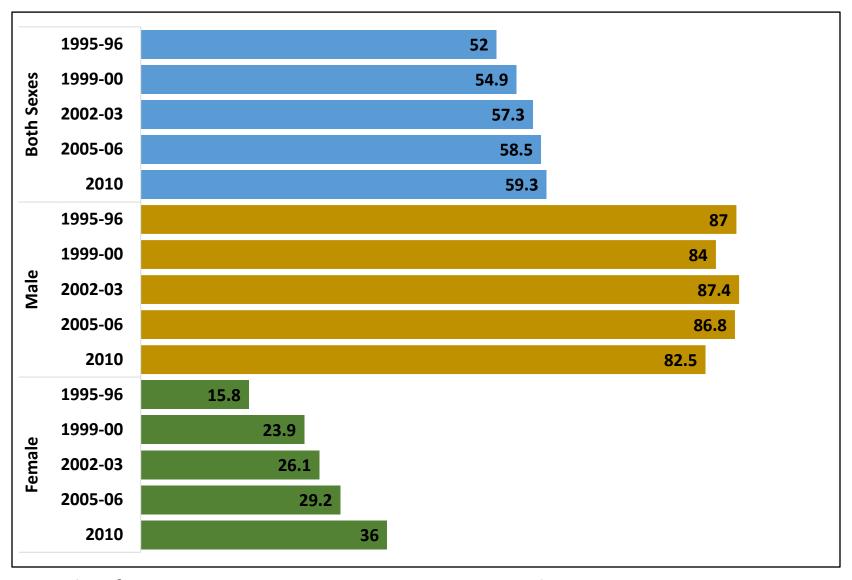


Bangladesh of Bureau Statistics

#### Key features of labor market

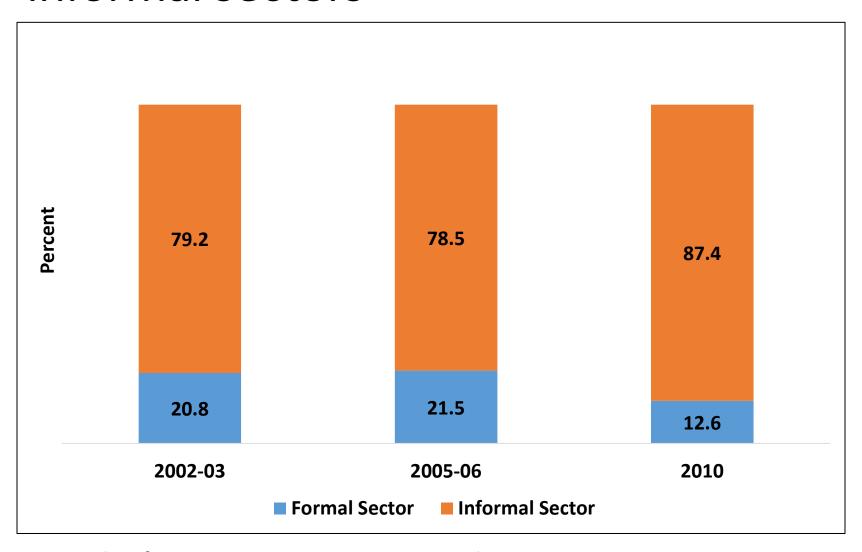
- Labor-force participation rate in Bangladesh (%)
- Percentage of employed persons age 15 years and above by formal and informal sector
- Employment sector male and female
- Mean wage

#### Labour force participation rate



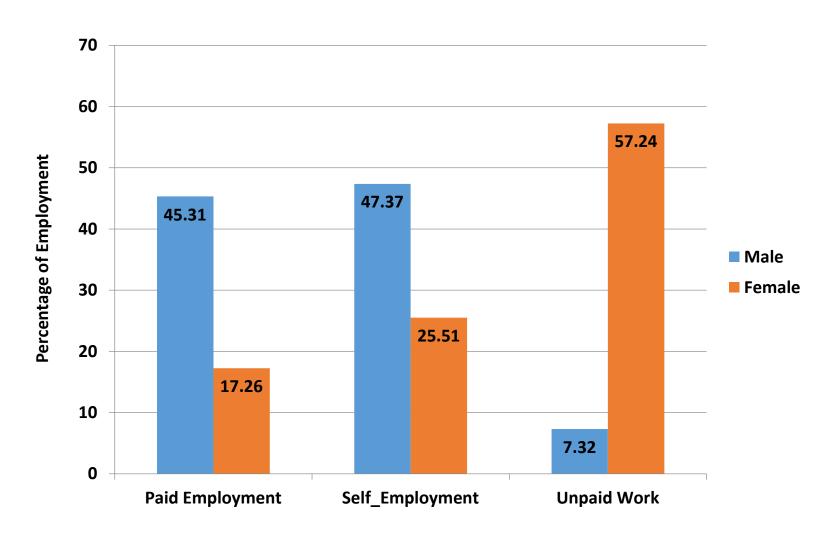
Labor force survey 1999-00, 2002-03, 2005-06 and 2010

### Labor Force participation –formal and informal sectors

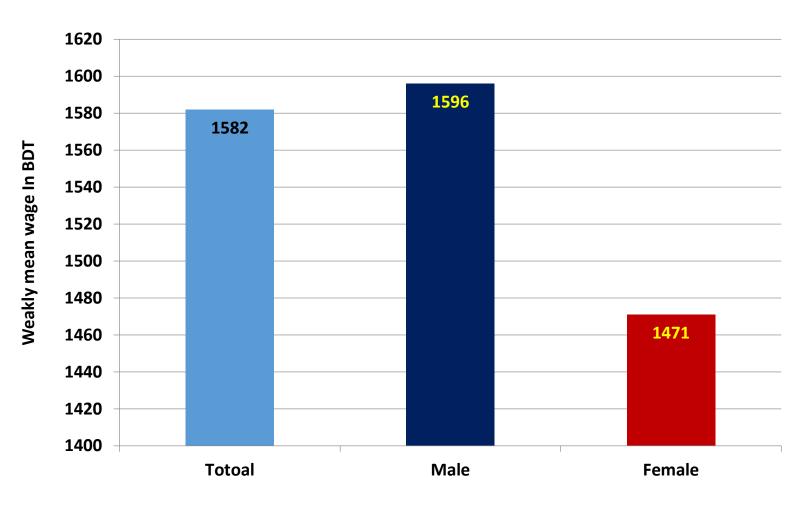


Labor force survey 2002-03, 2005-06 and 2010

#### Employment pattern (2010)



#### Mean wage (2010)



LFS 2010

#### Summary

- Population growth rate is declining. Demographic transition has been rapid, with rising share of working age population and elderly
- GDP growth rate has been increasing with structural change in favor of industry at the expense of agriculture. In fact, Bangladesh is one of the rising stars maintaining a growth rate of more than 6% consistently over the past 6/7 years.
- Steady (moderate) economic growth and falling population growth have led to sharp decline in poverty (reduced from 50% in 1990 to around 24% in 2015)
- Attained lower-middle-income status
- Major concerns:
  - Failure to create adequate decent jobs for new entrants
  - Dominance of informal employment
  - Low female labour force participation

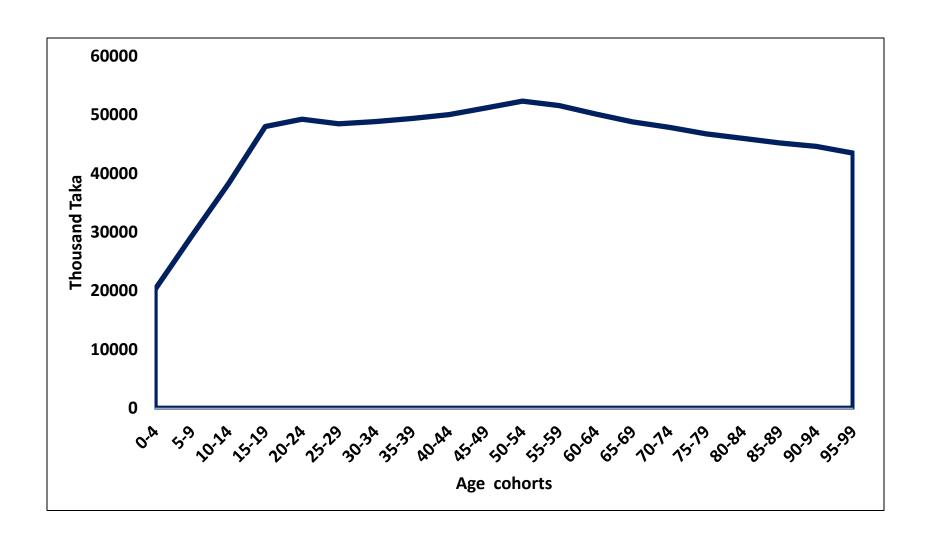
#### Bangladesh NTA profiles, 2010

- Data set for Bangladesh NTA
- Per capita consumption profile
- Per capita labor income profile
- Per capita lifecycle deficit profile

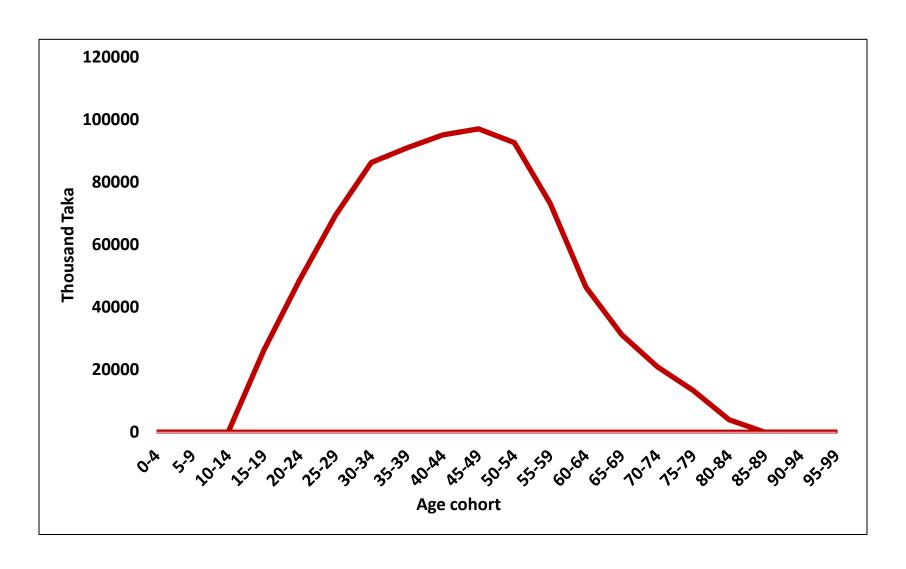
#### Data set for Bangladesh NTA

- Bangladesh NTA has been constructed for 2010. The data sets for Bangladesh NTA include:
  - 1. Household Income and Expenditure Survey (HIES), 2010, produced by the Bangladesh Bureau of Statistics (BBS)
  - 2. Labor Force Survey (LFS), 2010, produced by the Bangladesh Bureau of Statistics (BBS)
  - 3. UNFPA population prospectus data
  - 4. National Accounts Statistics (SNA), produced by the Bangladesh Bureau of Statistics (BBS)

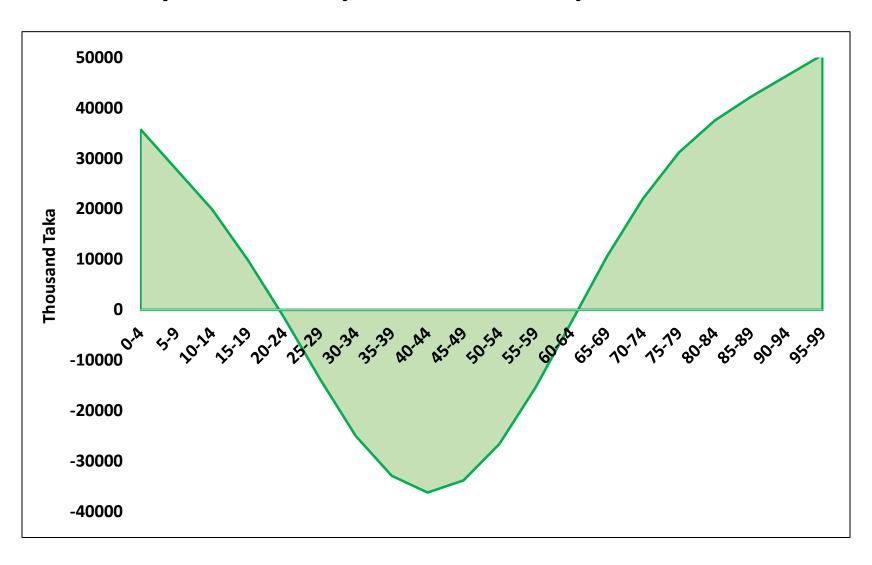
#### Per capita consumption profile, 2010



#### Per capita labor income profile, 2010



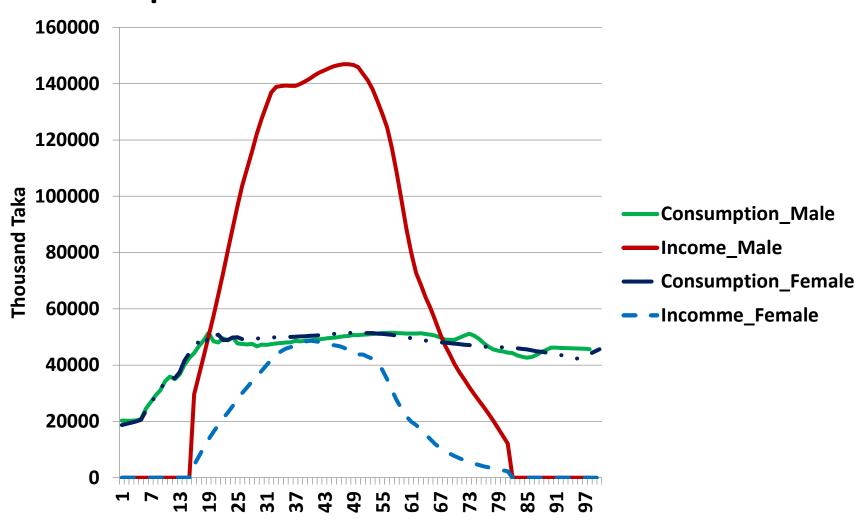
#### Per capita lifecycle deficit profile, 2010



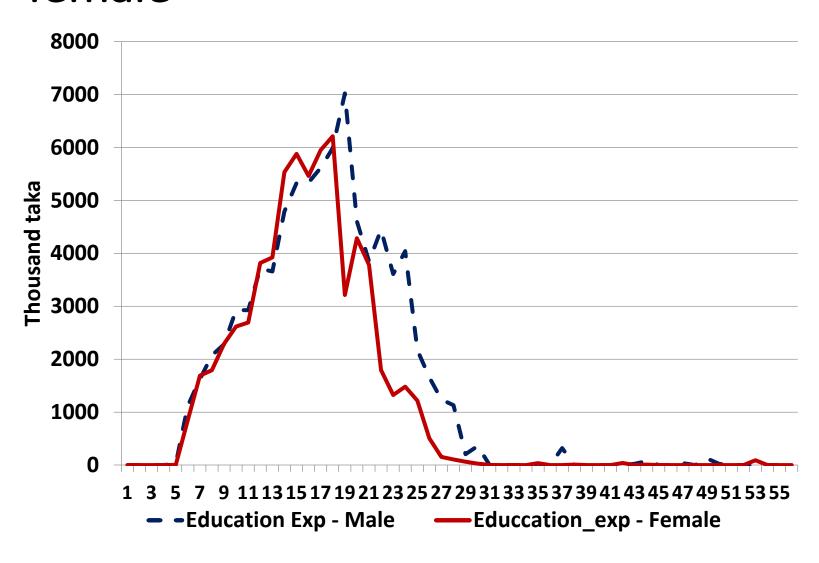
#### Gender perspective

- Per capita consumption and income male and female
- Per capita educational expenditure male and female
- Per capita health expenditure male and female
- Per capita other expenditure male and female

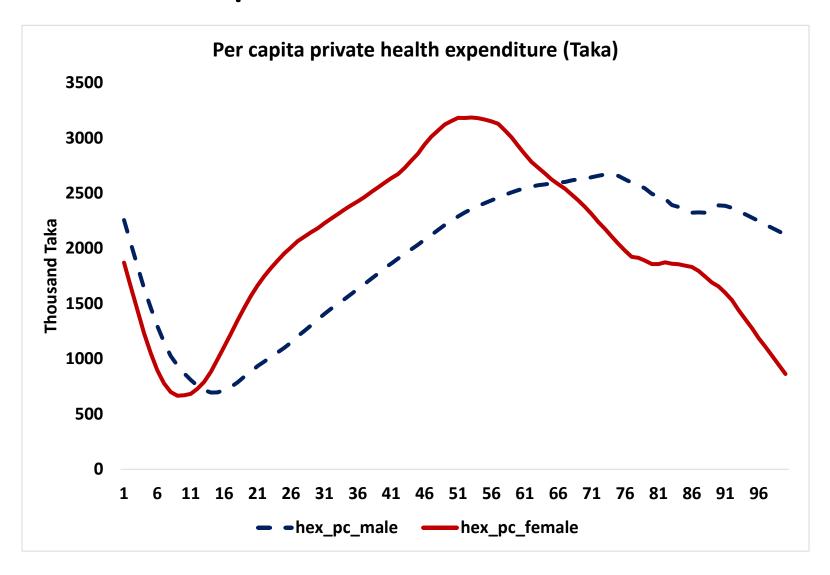
## Male-female per capita income and consumption



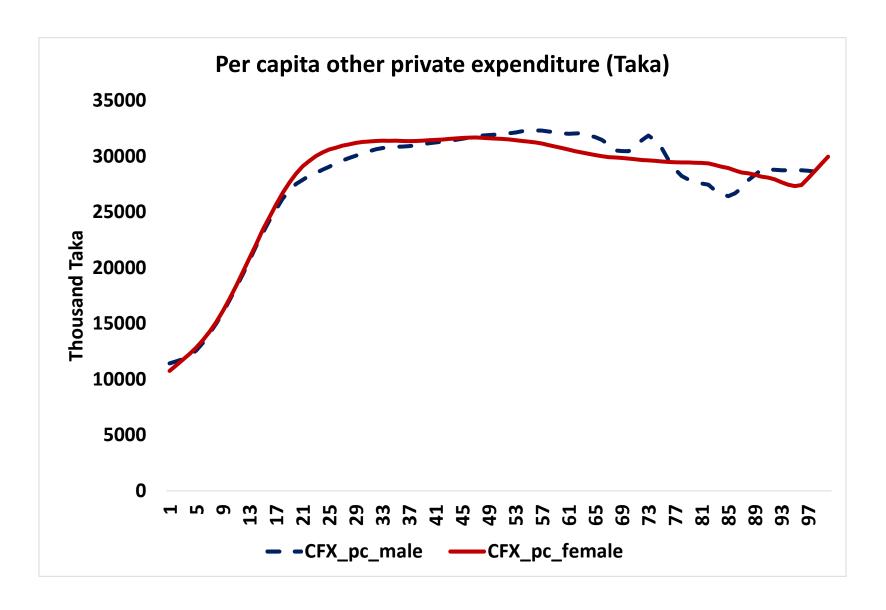
### Educational expenditure – male and female



#### Health expenditure – male and female



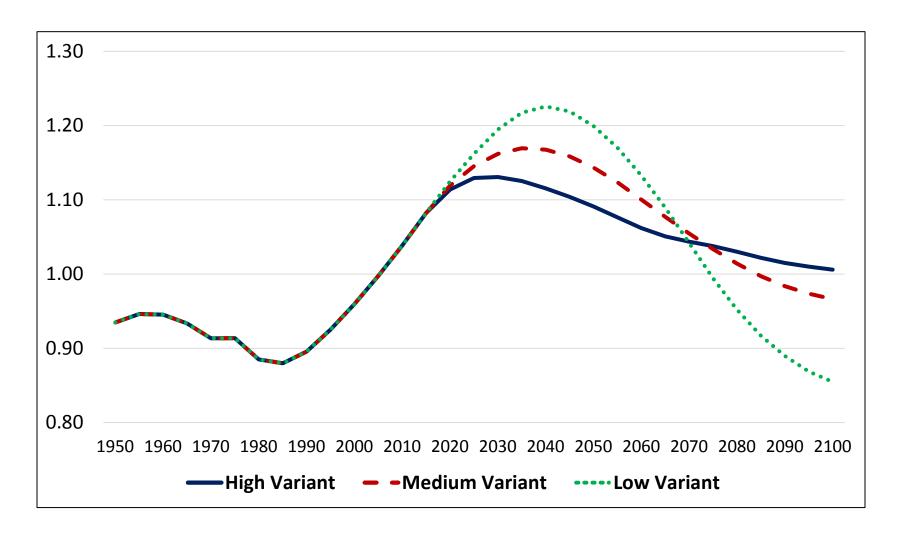
#### Other expenditure – male and female



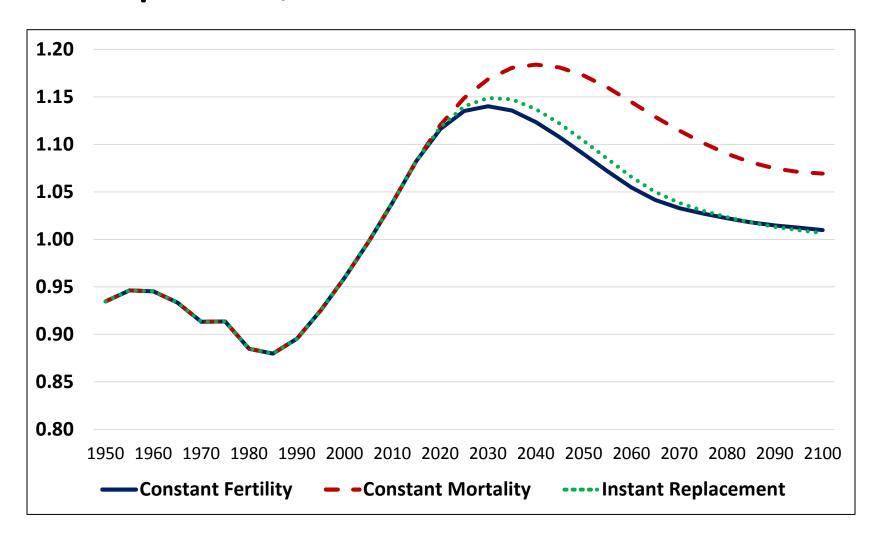
#### Demographic dividend

- 7FYP set growth targets of 8% relying on investment and exploiting favorable age structure
- 7FYP could not the express time of the window of opportunity, is not strengthened by observational confirmation
- Proof of the extent of the demographic dividend is needed to formulate human-resource and capital investment strategies that will help realize the economic advantages of the dividend
- Here we present observational confirmation on the timing and extent of the demographic dividend in Bangladesh. Analysis include:
  - Economic support ratio, based on NTA profile, 2010
  - Estimated first demographic dividend under various assumptions of population projection (8 variants)
  - Gender ESR

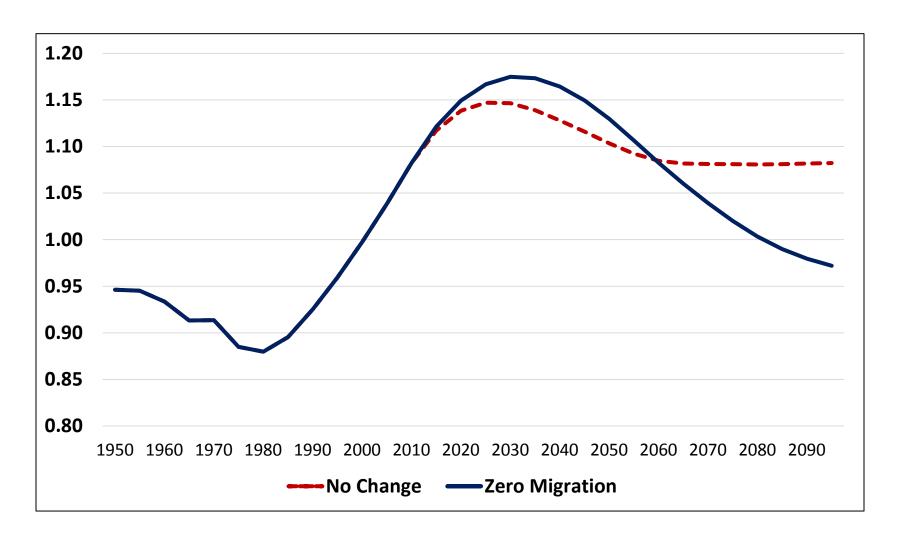
### Economic support ratio, based on NTA profile, 2010



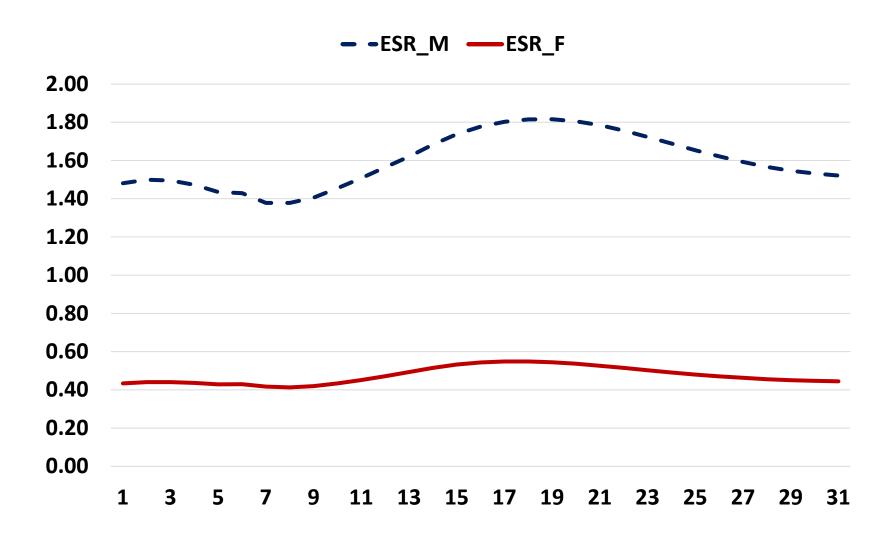
# Economic support ratio, based on NTA profile, 2010



# Economic support ratio, based on NTA profile, 2010



#### Gender ESR



### Estimated first demographic dividend under various population projections

Population with						
various		Range of First				
Assumptions	Year of Highest ESR	Demographic	Years left from 2015			
Fertility assumptions: convergence toward total fertility below replacement level						
High Variant	2030	1990-2030	15			
Medium Variant	2035	1990-2035	20			
Low Variant	2040	1990-2040	25			
<b>Constant Fertility</b>	2030	1990-2030	15			
Instant	2030	1990-2030				
Replacement			15			
Mortality assumptions						
<b>Constant Mortality</b>	2040	1990-2040	25			
Constant Fertility and Mortality assumption						
No Change	2035	1990-2035	20			
International migration assumptions						
Zero Migration	2040	1990-2040	25			

#### Will Bangladesh miss the first dividend?

- Comparing ESR estimates against the classifications of GMR may suggest that Bangladesh is inching towards the phase of late dividend
- Bangladesh should have implemented policies those were relevant for the early phase of demographic dividend during 1990s. Bangladesh could not make adequate investment for creating employment (i.e., investment as percent of GDP has remained short by about 3 to 4 percentage points) and in human capital including vocational and technical training (education investment 2% of GDP)
- Very low female labour force participation (i.e., 36% in 2010 compared to 82% male participation) indicates barriers to female labor force participation
- Efforts to strengthen conditions conducive to savings and job creation found insufficient – a national saving rate of 30% and underemployment rate of more than 20%
- Since Bangladesh did not take appropriate policies at the right time,
   Bangladesh may miss the first dividend

### Key interventions for reaping first dividend

- a. Higher investment (i.e., 3-4 percentage points higher) for creating employment for new entrants (*7FYP priority*)
- b. Increased investment in education, training, and human development (7FYP aims to increase 2.3% from current level of 2% seems inadequate)
- vocational training and skills development should have priority and adequate allocation (*7FYP calls for private-sector* involvement)
- d. Enhance female labor-force participation including greater opportunities for wage employment and self-employment
  - a. Release of women from care activities
  - b. Stop child marriage
  - c. Secure and enabling work environment







#### Question & Answer



11th Global Meeting of the NTA Network
June 20-24, 2016
Lamantin Beach Hotel, Saly, Senegal