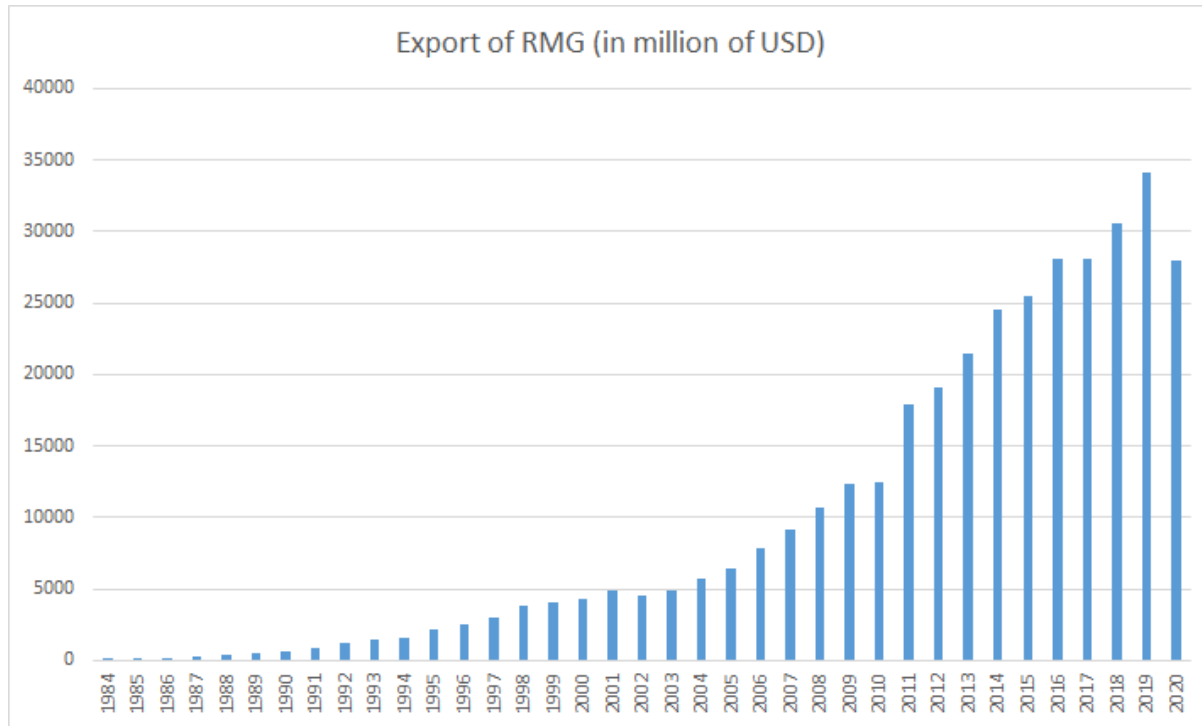


Read Made Garments (RMG) and Women in Bangladesh

SM Shihab Siddiqui

14 January, 2022

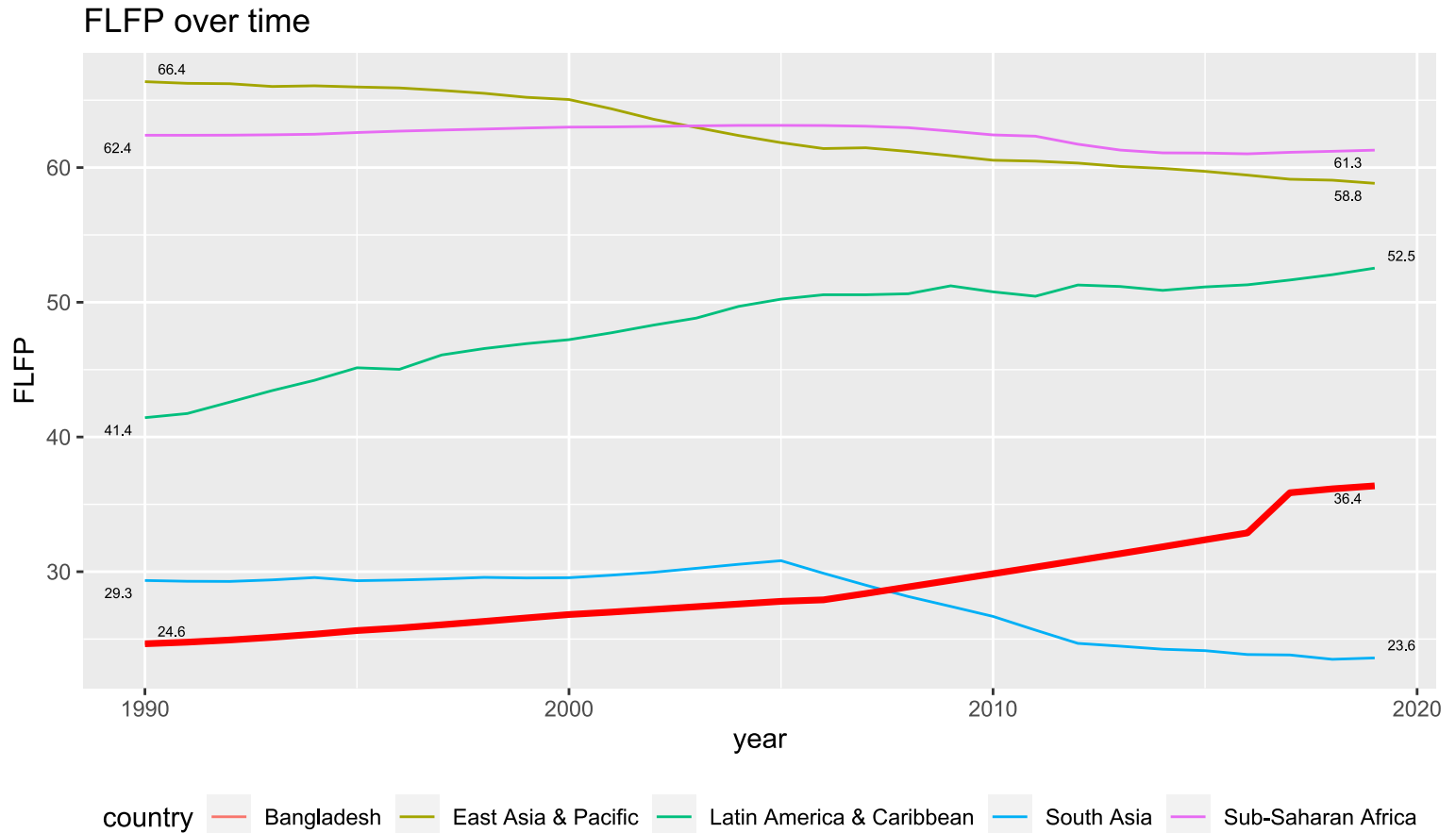
Four big changes: RMG Expansion



- **60% of workers** in export oriented RMG industry are women.
- Representing **1.7 million workers** at a given time.
- **54% manufacturing employment of female**

Four big changes

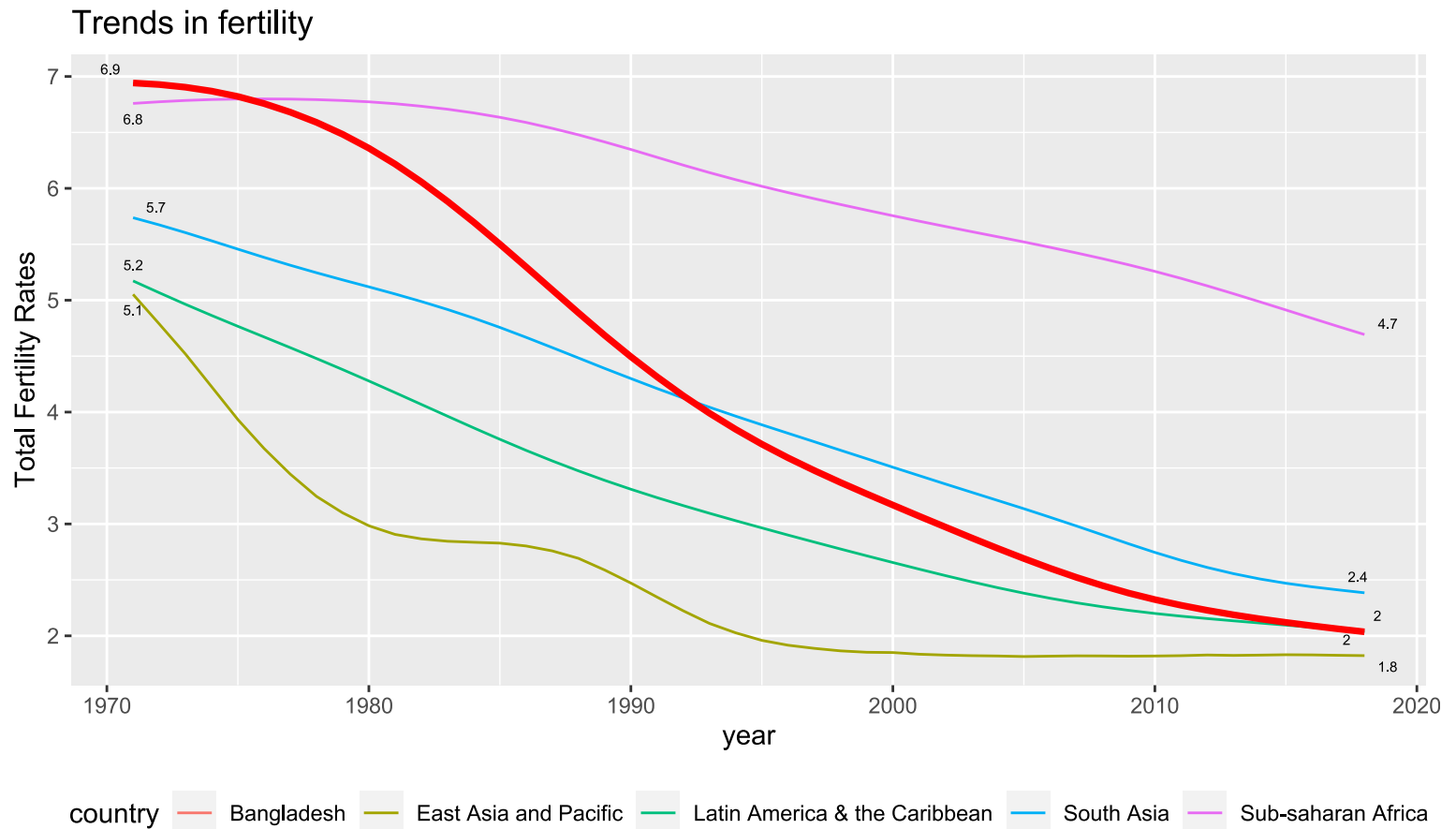
Trends in FLFP



World Bank (2021)

Four big changes

Fertility over time



World Bank (2021)

Four big changes:

Women at school

Lower secondary (about middle school) completion rates in total female population completion rate of **4.4% in 1981** to **41% in 2019**. (World Bank, 2020)

Literacy among **15-24 age group exceeds 96 percentage in 2019**. (World Bank, 2020)

Tying them together

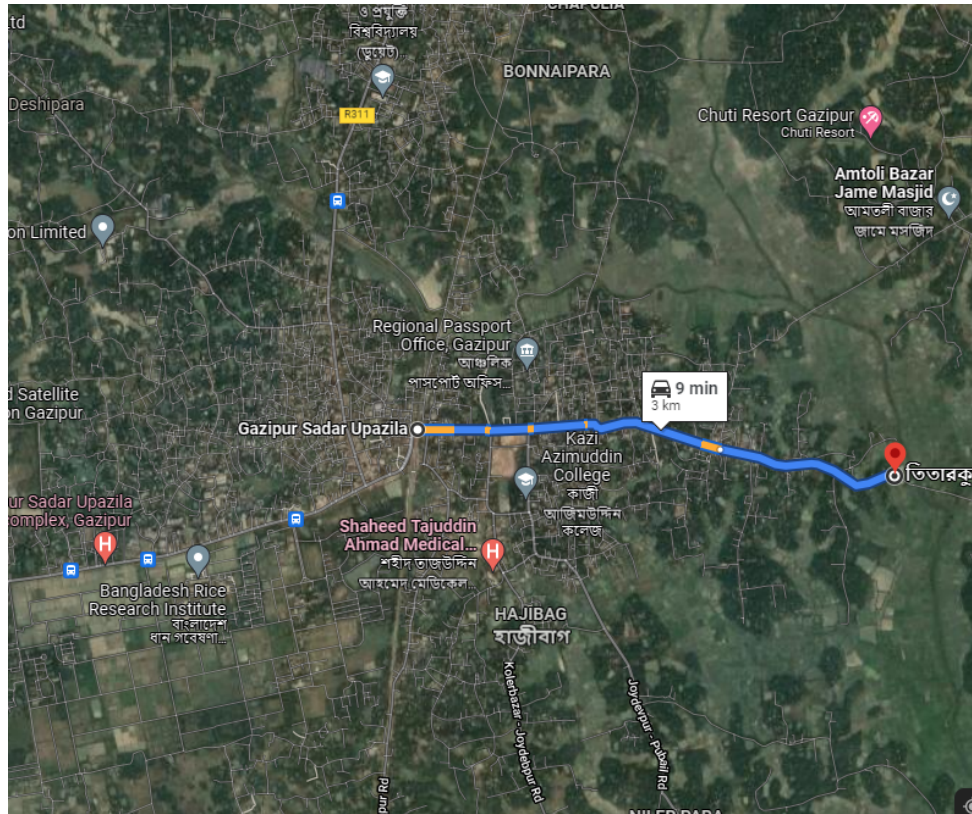
- In my estimates, at least **11 million women** have been exposed to export oriented RMG manufacturing.
 - About 14 % of all Bangladeshi women.
- **True exposure is likely much higher.**
 - Does not take into account **supporting industries, exposure through peer effects, and movement of people.**
- In other contexts, exposure to manufacturing jobs at the onset of development have been well documented to increase woman's education, autonomy and reduced fertility.

Prior research

Heath and Mobarak (2015, JDE)

- Survey of 1395 households in 60 regions, 44 in garments commuting zones 16 away.
 - Average distance from capital is 1.8 KM for garment commuting zones, 6.8 KM for non-garments commuting zones.
- They find that girls exposed to the garment sector
 - Decline in fertility by 29 pp
 - Increases FLFP by 15 pp
 - reduces gender education gap by 1.5 years.

Bangladesh is dense



- Dhaka district density is 23,234 / sq. KM. Portland's density is 1,888.
- Most garments workers commute <1.7 KM to work.

My contributions

- Provide alternative estimates of the labor demand shock that rely on exploiting variation in knit versus woven specialization of a RMG producing region, and variation in aggregate knit and woven exports over time.
 - Controls for spatial development patterns better.
- Greater geographic and temporal coverage of data.
- Explore additional topics related to lives of women in Bangladesh.

Identification strategy

Bartik style exposure measures

$$Y_{i,r,t} = \beta_z Z_{i,r,t} + \beta X_{r,t} + \delta_t + \text{Birth Year}_{i,r,t} + \epsilon_{i,r,t}$$

Where,

$$X_{r,t} = \text{Export Shock}_{r,t}$$

$$\text{where } \text{Export Shock}_{r,t} = \frac{\alpha_{r,t}^{\text{knit}} * \Delta \text{Knit Export}_{t-T} + (1 - \alpha_{r,t}^{\text{knit}}) * \Delta \text{Woven Export}_{t-T}}{\text{Population}_{r,t}}$$

$$\text{and } \alpha_{r,t}^{\text{knit}} = \frac{\text{Workers}_{r,\text{knit},t}}{\text{Workers}_{\text{BD},t}}$$

- $T = 3$ in baseline specification, and
- Shares are instrumented with 5-year lags.

Overview of (preliminary) results

One thousand dollars worth of export shock per person:

- 17-18 percentage point (pp) increase in RMG and adjacent occupations
- 12 - 13 pp increase in non-traditional, low skilled occupations (which contains RMG adjacent occupations)
- A decline of 1 - 1.4 pp of FLFP in traditional sectors
- No change in high skilled occupations
- No changes in fertility
- *In future, I will extend analysis to explore impact on education of woman, marriage age, and changes in preferences for fertility, and woman's autonomy.*