The Age and Gender Profiles of Demographic Dividend in Nigeria

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Background

- Demographic dividend (DD) is accompanied with drop in fertility rate which leads to changes in family size and structure occur.

- The gender mix of the Nigerian population is about fifty-fifty (equal distribution of male and female)

- However, labour force participation rate differs across gender.

- This has implication for observable differences in labour income, production, consumption and the net balance by gender.

- Leading to differences in the gender landscape of economic lifecycle

Background

- Lifecycle is described as a longitudinal conceptualization of the economic passage through life of an individual or a generation (Lee and Mason, 2008).

- The two sides of a lifecycle coin: Income (Inflows) and Consumption (Outflows).

- Individual economic lifecycle: Difference in labour income and consumption of an individual over the age period he/she lived.

Background

- Lifecycle income: Labour income, asset income, and transfer inflows.

- Economic landscape of Nigeria is made up of the formal and informal (predominant) sectors.

- Gender peculiarity of lifecycle and components over the lifecycle of Nigerians, drawing from the 2016 National Transfer Accounts (NTA) estimates for the country.

Age Distribution of Nigeria's Population, 2016
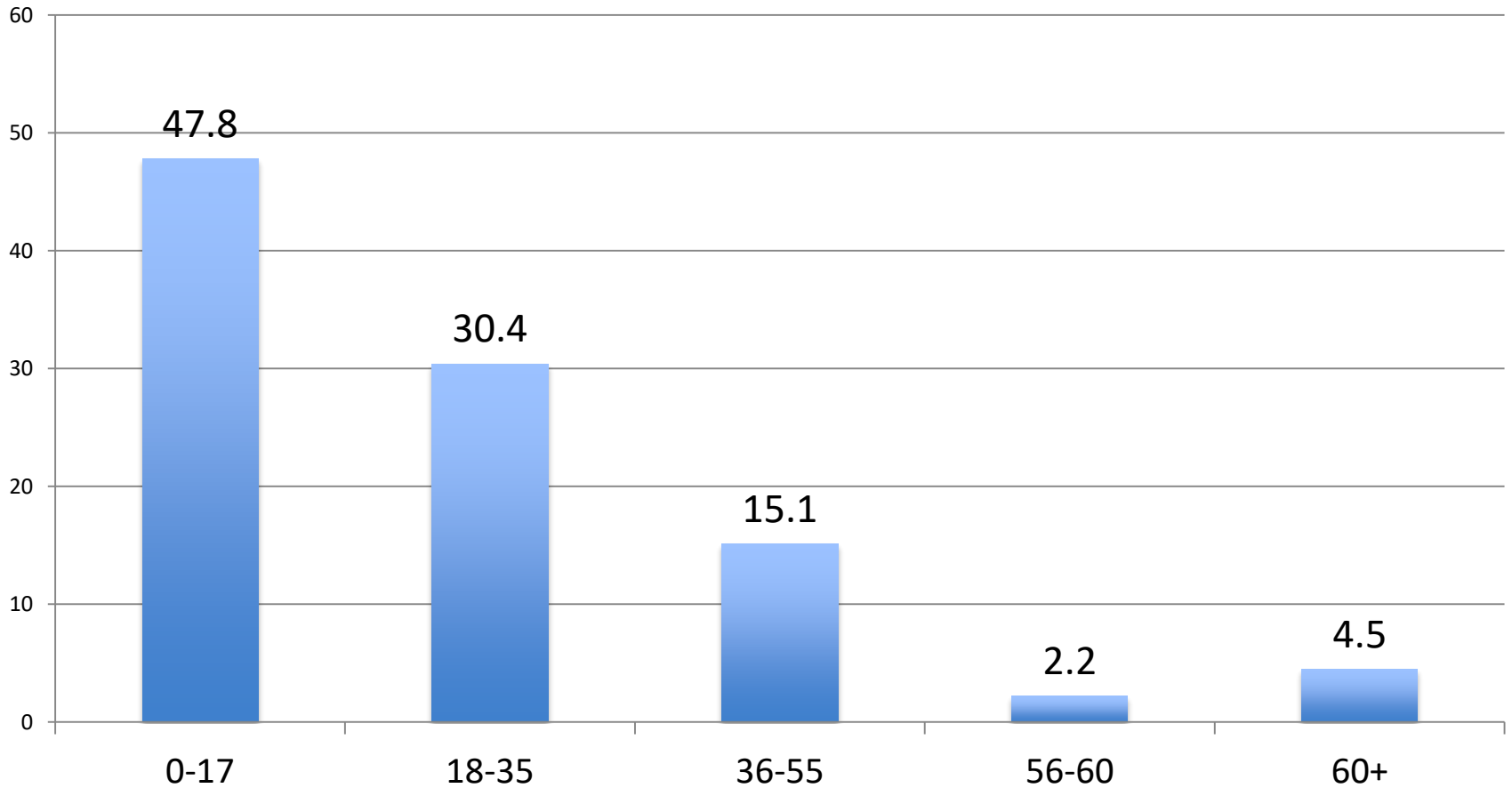
Methodology

- Followed the NTA methodology description in the NTA Manual (UN, 2014)
  - Concept is defined as "a system of macroeconomic accounts that measures current economic flows by age in a manner consistent with the United Nations System of National Accounts (SNA)
- The estimation procedure combines the elements of household survey data and aggregates data from the national accounts as control.

Economic Lifecycle Account

- **Inflows**
  - Labor Income
  - Asset Income
  - Transfer Inflows

- **Outflows**
  - Consumption
  - Saving
 - Transfer Outflows

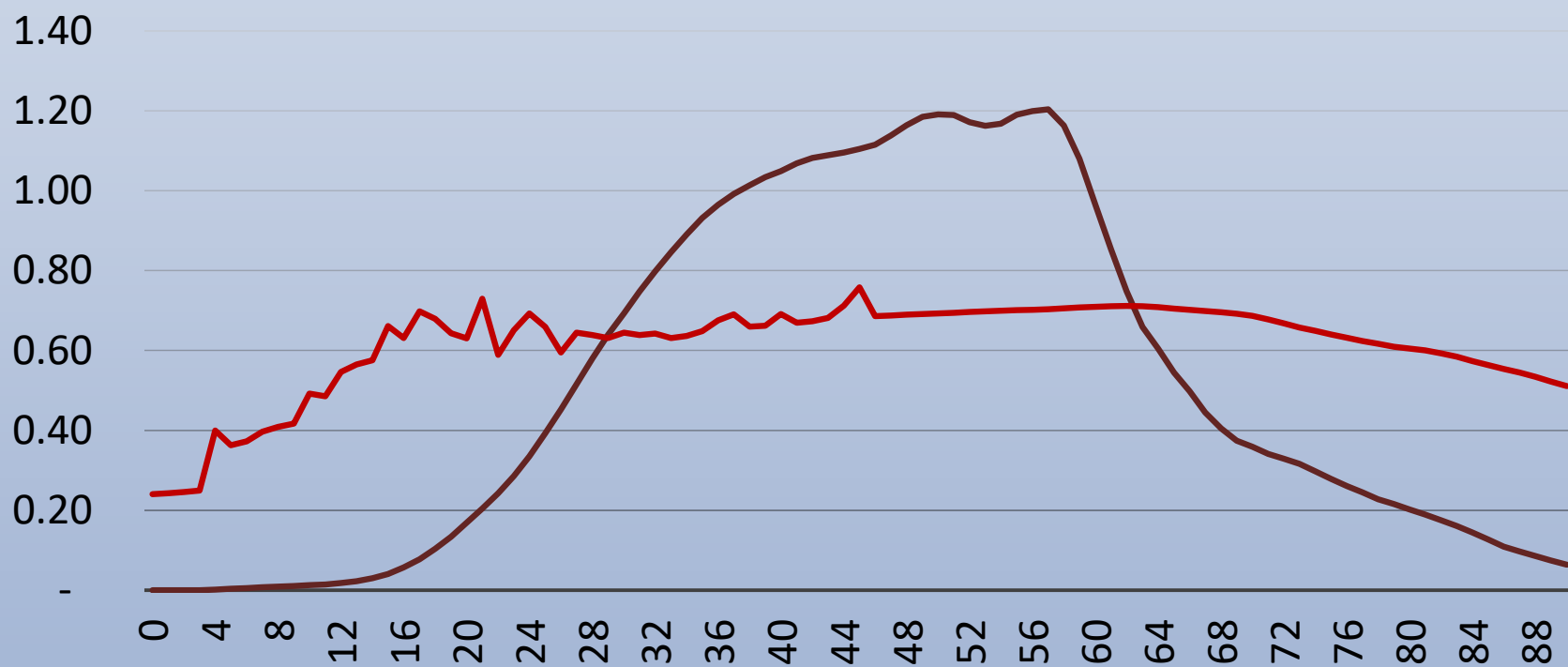**Lifecycle Deficit = Consumption- Labour Income**

Methodology

- The Labour income provides a comprehensive measure of production.

- Labour income is recognized as all compensation to workers, which include:
    - labour income of employees (earnings),
    - self-employment income)
    - employer-provided benefits (fringe benefits), and
    - taxes paid to the government by employers on behalf of employees (Lee and Ogawa, 2011).

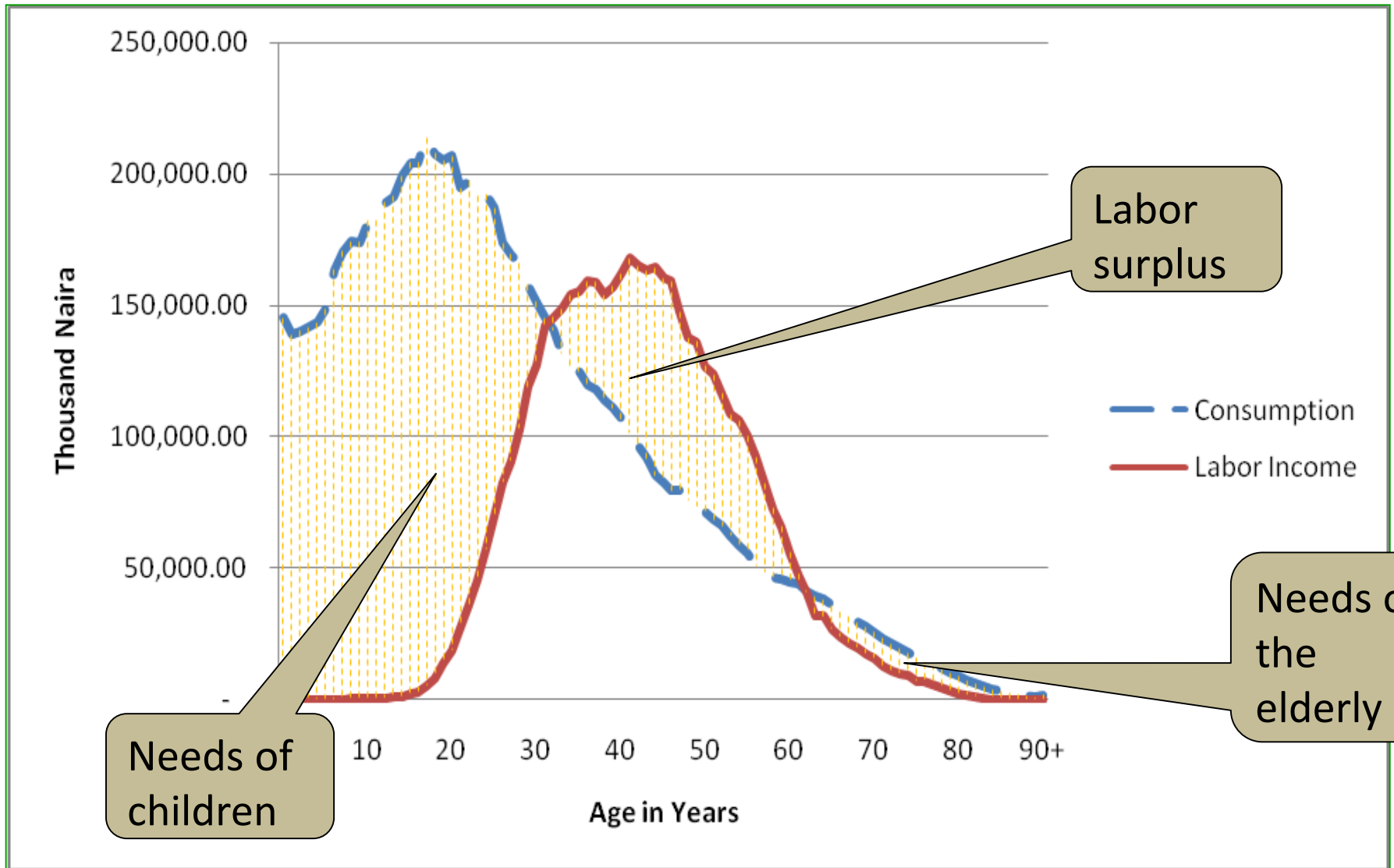# Per Capita Age profile of Income and Consumption Needs, Nigeria
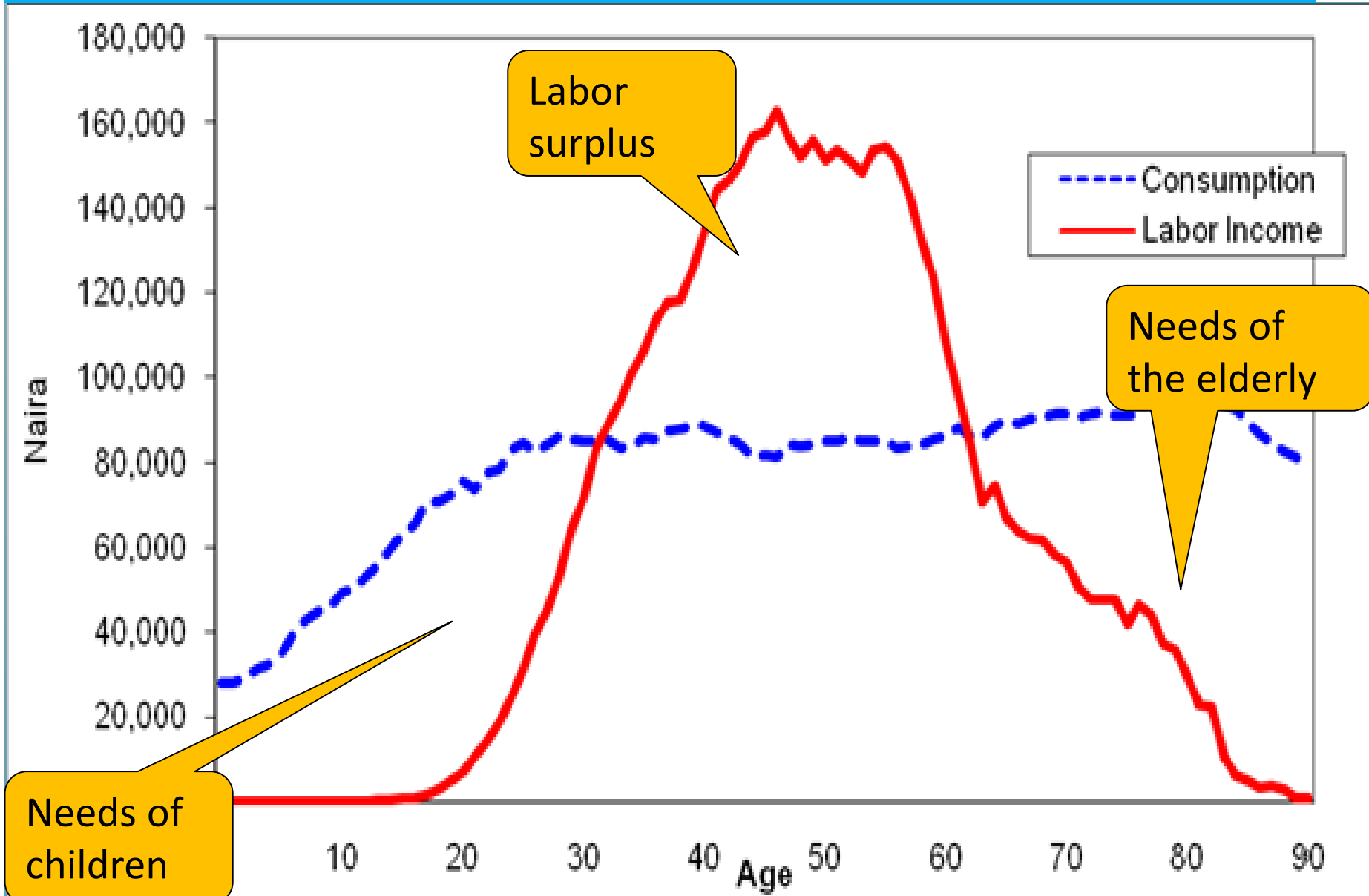
Age Profile of Per Capita Labour Income and Consumption in Nigeria, 2016
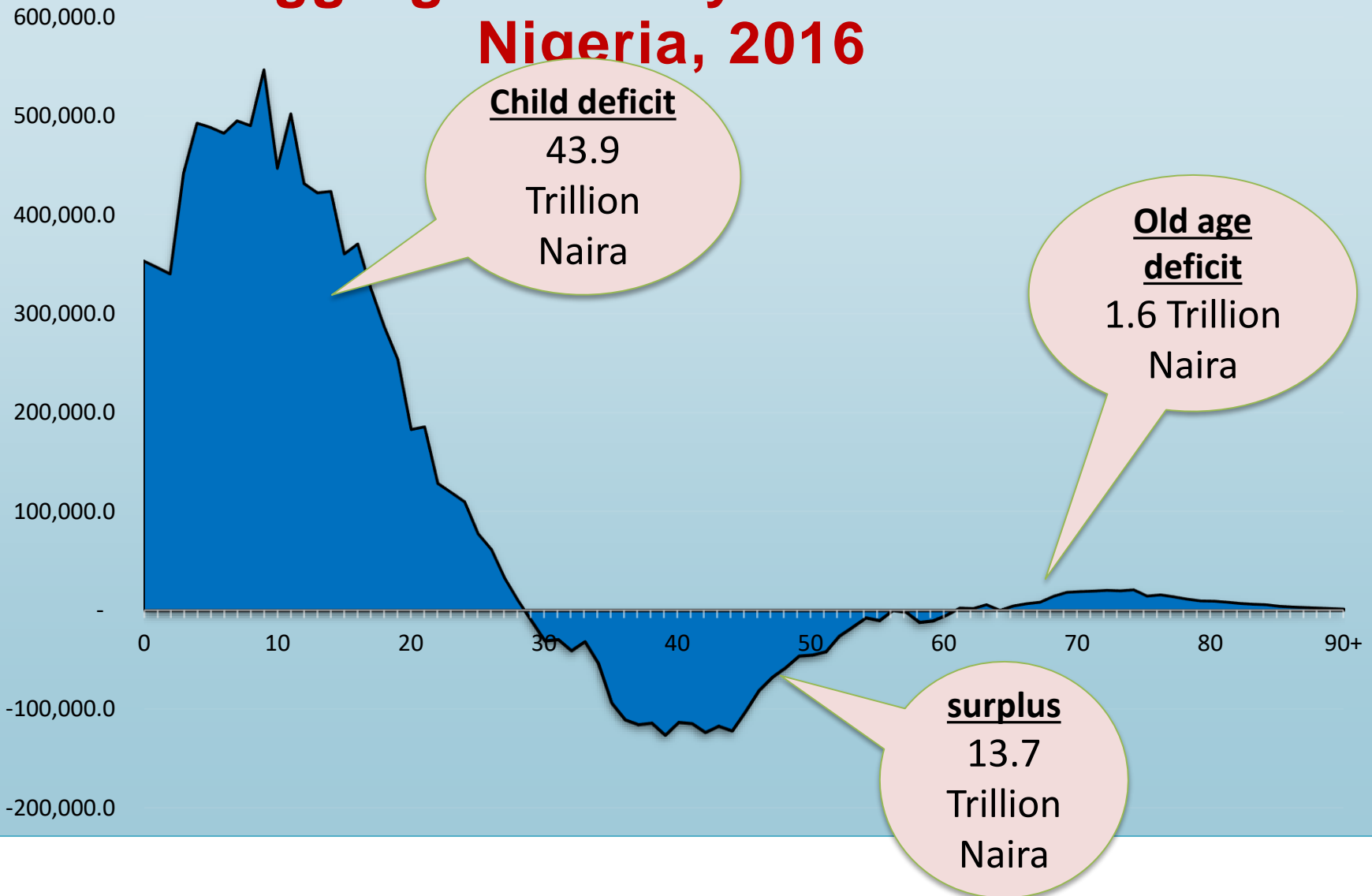

Legend: Labor Income 2016 — Consumption 2016

Per Capita Age profile of Income and Consumption Needs, Nigeria

Aggregate Lifecycle Deficit in Nigeria, 2016

Economic Lifecycle Deficit by Gender

Fig 6.23a: Profile of per Capita Consumption and Labour Income for Male in Nigeria, 2016 ('000)
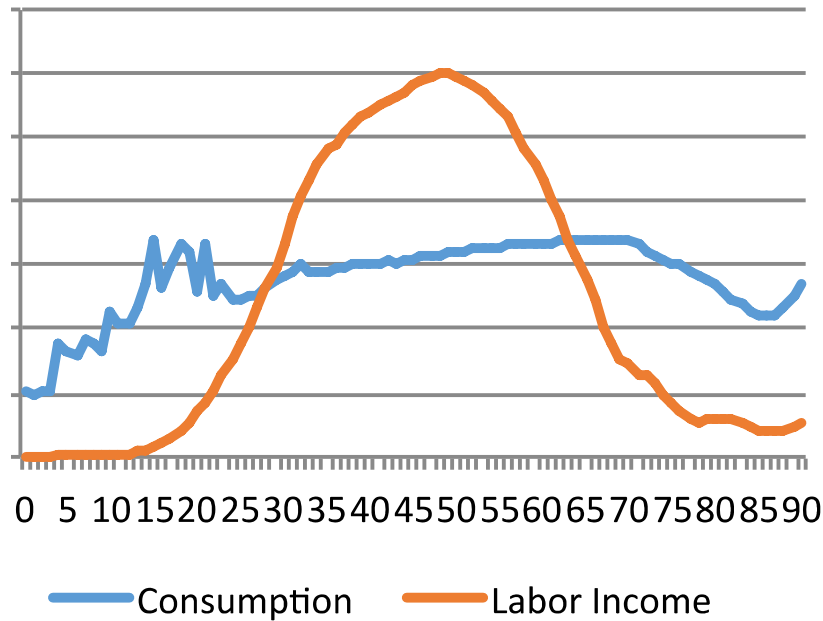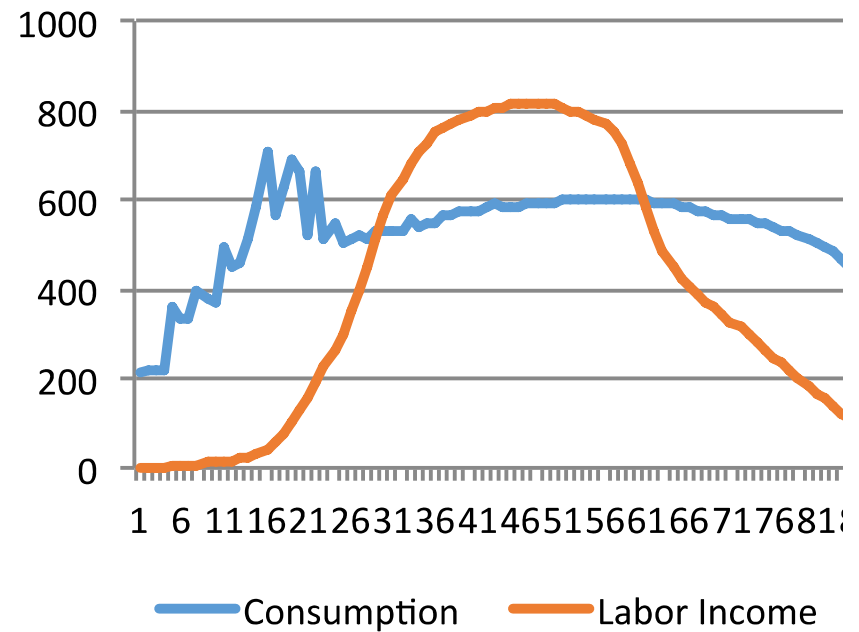
Fig 6.23b: Profile of per Capita Consumption and Labour Income for Female in Nigeria, 2016 ('000)

# Commencement and Length of Lifecycle Surplus in Nigeria

	Age of Entry into Surplus (years)	Age of Exit from Surplus (years)	Duration of Surplus (years)
Nigeria	29	62	33
Male	27	63	36
Female	30	59	29

Estimate Results

- Age profile of the per capita consumption profile is not significantly different for male and female.

- The consumption profile rose from per capita amount of around #200,000

- The peak for male: #698,000

- The peak for female: #731,000)

Figure 7: Age Profile of per Capita Consumption by Gender in Nigeria, #'000
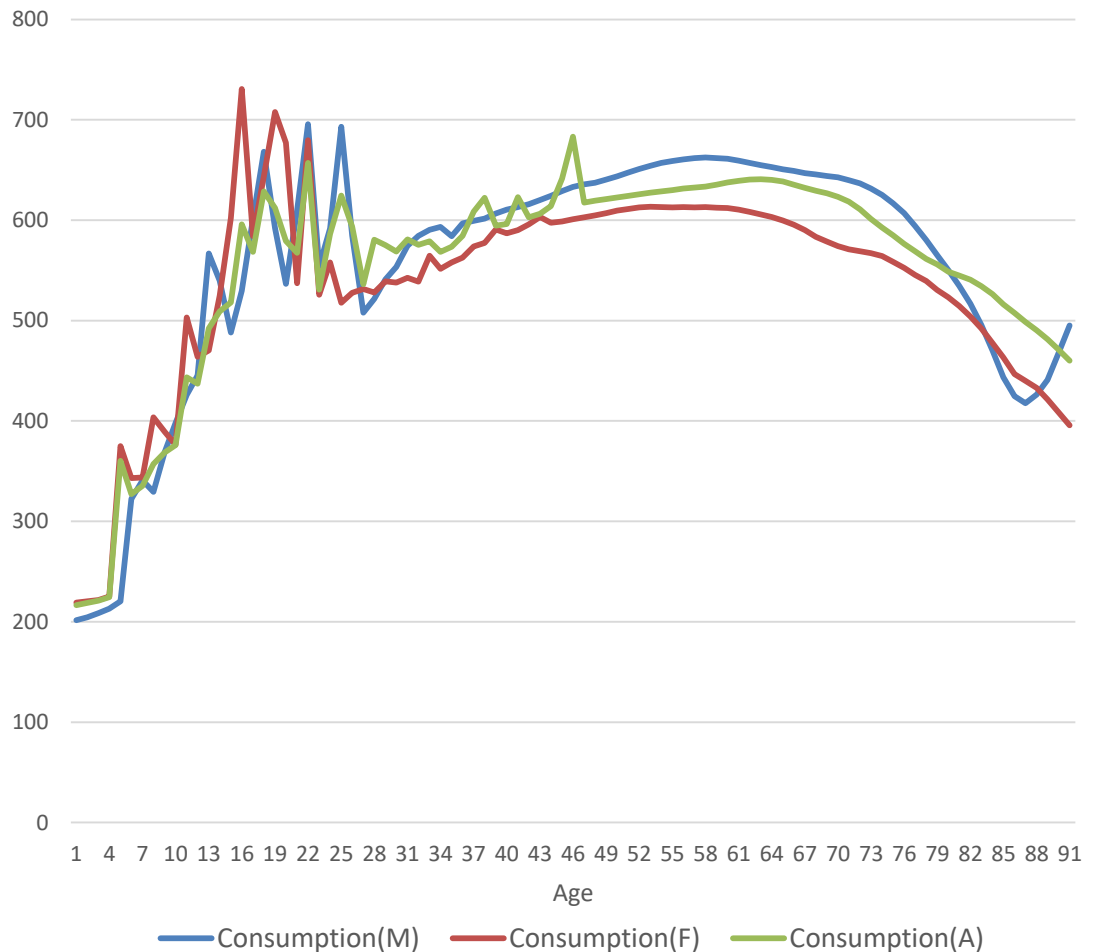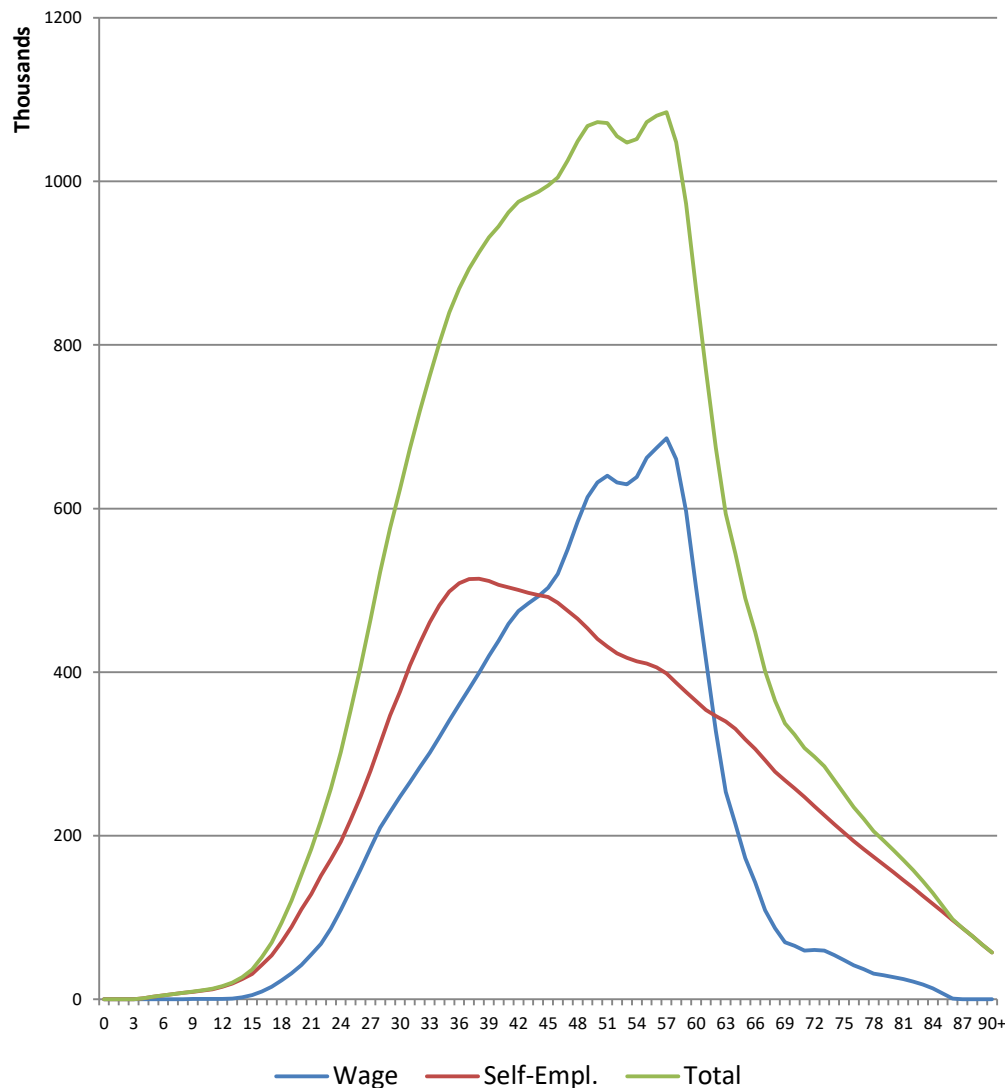
Estimation Results

- Labour income was not significantly different from zero in the first 12 years

- Peaked at #1.08million at age 55years.

- The driver of the total labour income differs over the ages.

- The per capita self-employment income was initially at the onset greater than wage income up till age 45 years.

- The per capita wage income remained higher till age 62 years,

- Self-employment income remains significant after the wage income appears to have ended.

Figure 8: Per capita Age Distribution of Labour Income and components for Nigeria, (Naira)

Estimate Results

- The variations observed in the final lifecycle are accounted for by differences in the profile for male and female.

- The shape of the labour income profile for male and female is similar, but reached their peak at different years for different values.

- The per capita labour income for the male became significantly higher relative to female up until around age 68 years.

- The female between age 69 and 86 years generated a per capita amount higher than for male.

Figure 9: Age Profile of per Capita Labor Income by Gender in Nigeria, #'000
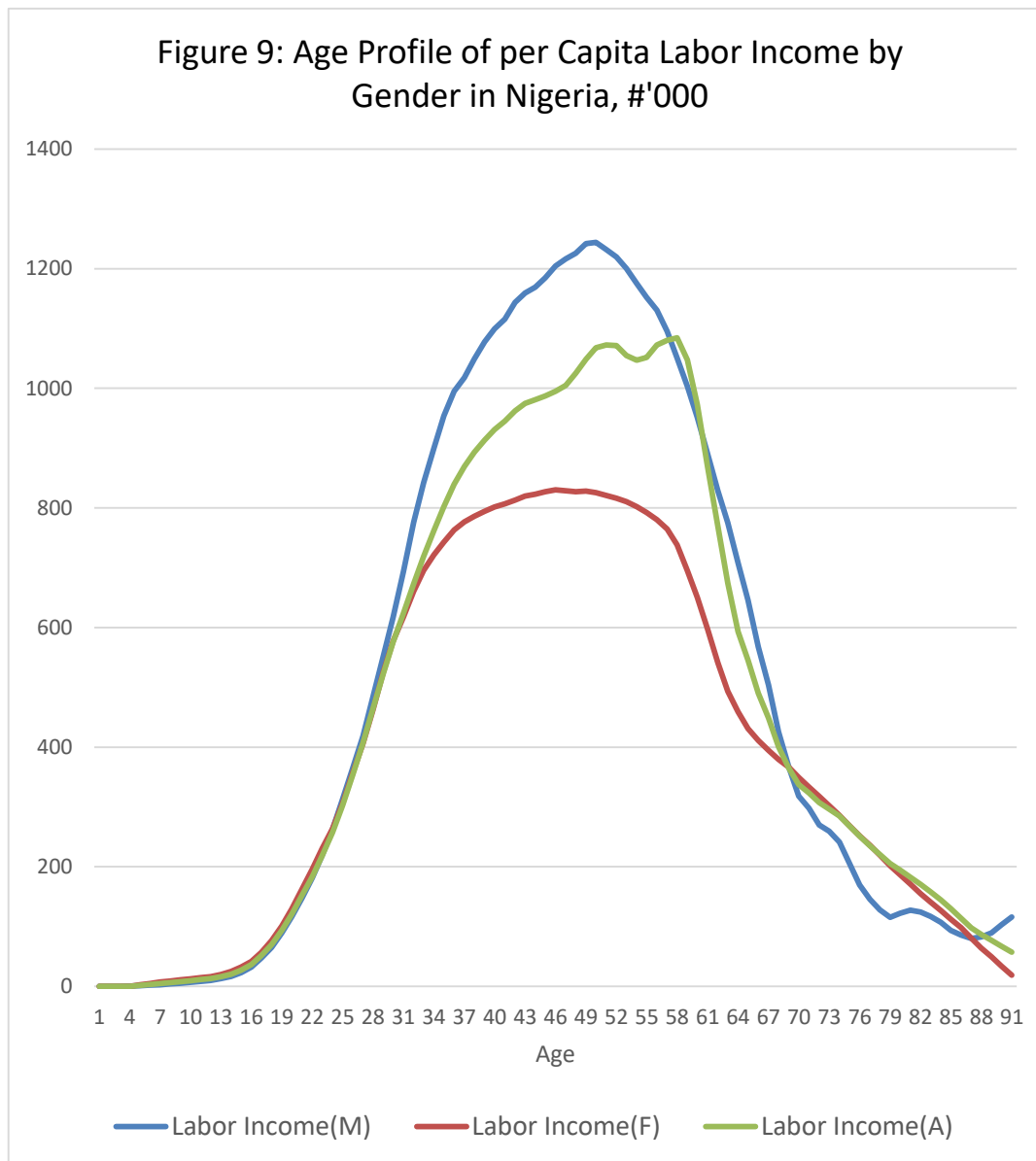
- Existence of gender discrimination in the formal labour market
  Female dominates the self-employed sector
  Male dominates the wage earning (formal) sector
  Self-employed: easy combination of household responsibilities with market activity
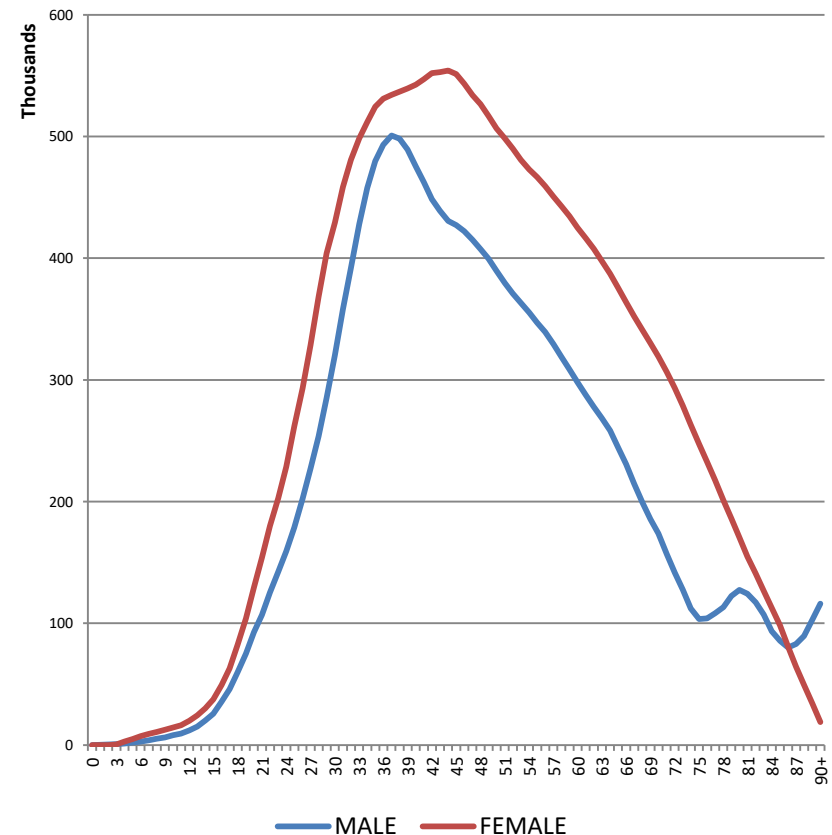
Wage Earnings Income

Fig. 10: Age Profile of Per Capita Wage Earnings Income by Gender for Nigeria, (#'000)
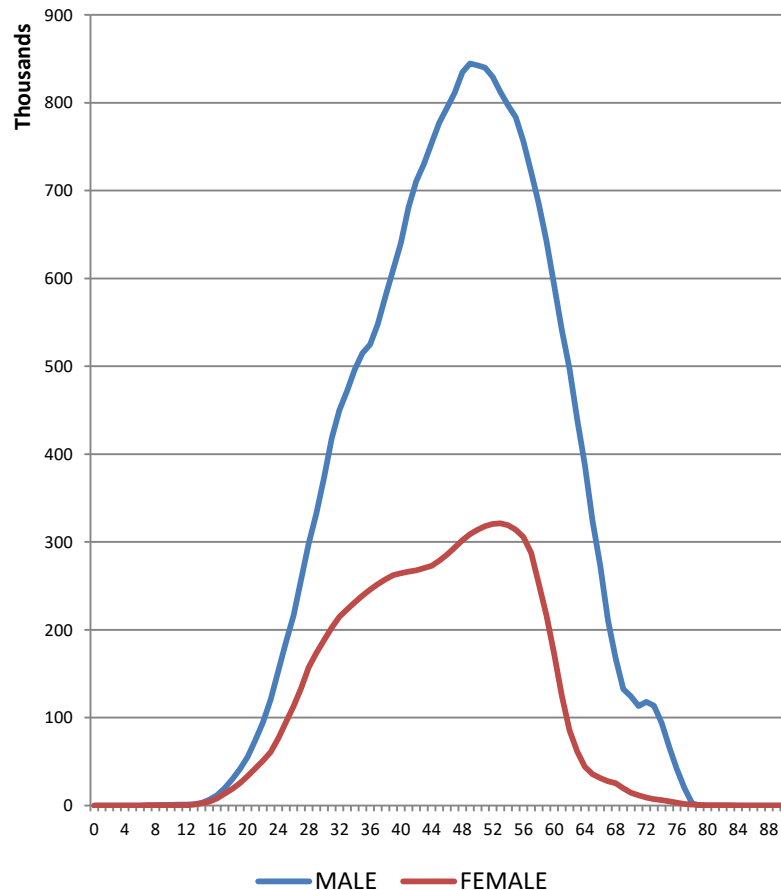
Self-Employment Income

Fig. 11: Age Profile of Per Capita Self-Employment Income by Gender for Nigeria, (#'000)

Results

- Initial LCD lasted for the first 29 years.

- Resumed @ age 62years.

- Per capita LCD peaked @ #517,000

- *Male:* Initial LCD lasted for the first 27 years

- Resumed @ age 63 years

- Per capita LCD peaked @ #554,000

- *Female*: Initial LCD lasted for the first 30 years

- Resumed @ age 59 years

- Per capita LCD peaked @ #689,000.

Fig. 12: Age Profile of Per Capita Lifecycle Deficit by Gender in Nigeria, (#'000)

Lifecycle Deficit (m) — Lifecycle Deficit (f) — Lifecycle Deficit(A)
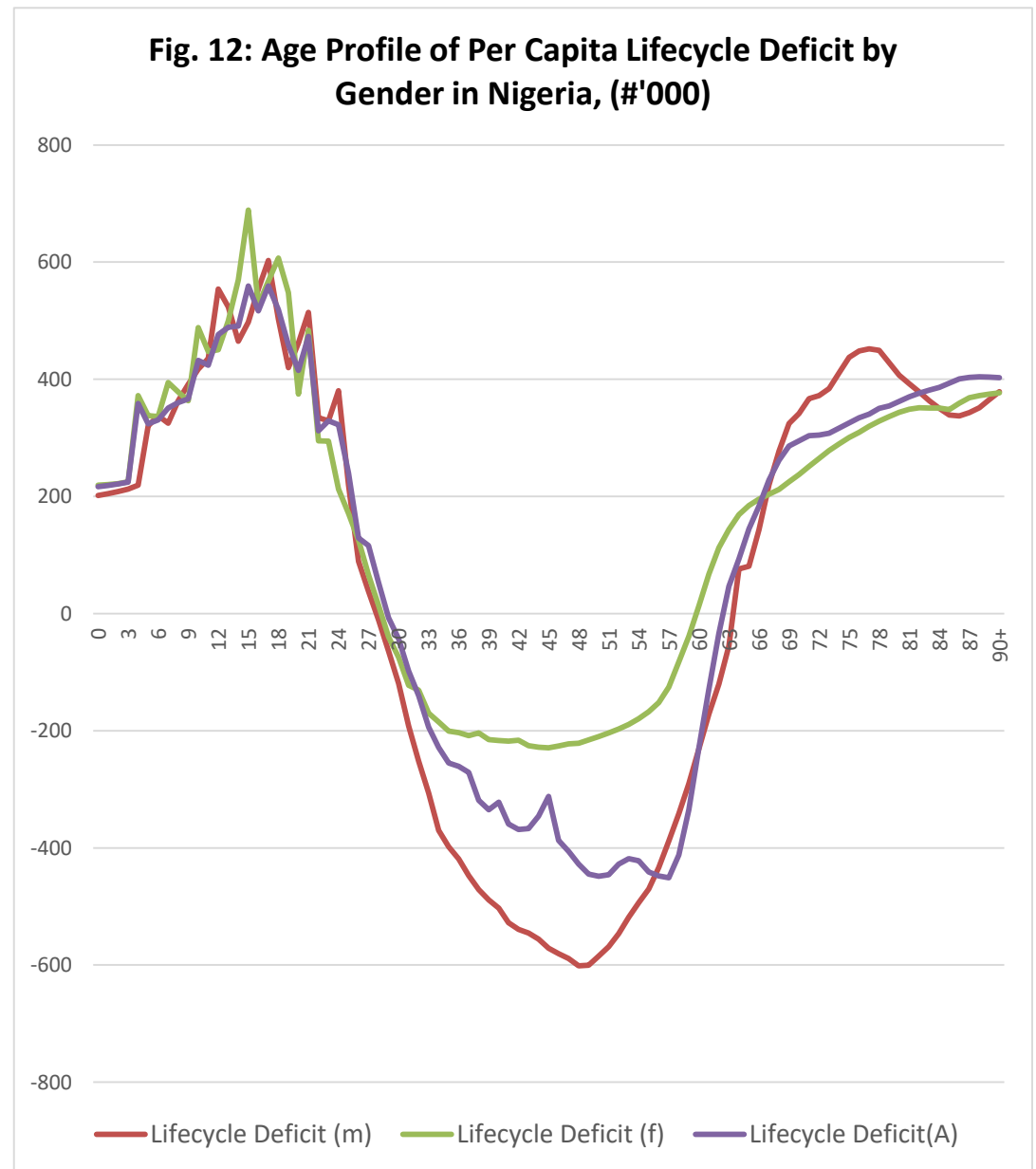
Aggregate Share of Lifecycle Deficit by Age Group

	Age- Group	0-17	18-35	36-60	60+
Lifecycle Deficit	**Aggregate #'m**	**31.98**	**9.72**	**-11.36**	**1.52**
Consumption	**Aggregate (/%)**	**33.17 (37.2)**	**31.77 (35.6)**	**19.32 (21.7)**	**4.93 (5.5)**
Labour Income	**Aggregate (%)**	**1.19 (2.1)**	**22.05 (38.3)**	**30.68 (54.9)**	**3.41 (%)**
Wage Income	**Aggregate (/%)**	**0.15 (0.6)**	**8.34 (32.3)**	**16.11 (62.4)**	**1.21 (4.7)**
Self-employed Income	**Aggregate (/%)**	**1.04 (3.3)**	**13.71 (43.5)**	**14.57 (46.2)**	**2.20 (7.0)**

Lifecycle Deficit Components by Gender Proportion

	Gender	0-17	18-35	36-60	60+
Lifecycle Deficit	Male	49.3%	46.1%	72.1%	43.6%
	Female	50.7%	53.9%	27.9%	56.4%
Consumption	Male	49.0%	51.4%	51.3%	49.7%
	Female	51.0%	48.6%	48.7%	50.3%
Labour Income	Male	42.5%	53.3%	58.8%	52.8%
	Female	57.5%	46.7%	41.2%	47.2%
Wage Income	Male	61.2%	67.3%	72.0%	86.0%
	Female	38.8%	32.7%	28.0%	14.0%
Self-employed Income	Male	39.7%	43.9%	45.0%	36.0%
	Female	60.3%	56.1%	55.0%	64.0%

- The support ratio is the proportion of the effective number of producers to the effective number of consumers (United Nations, 2013).

- Support ratio for male is generally higher for male than for female

- The turning point to positive slope was reached around year 2003 for both Male and Female

- The Economic Support Ratio for Male ranged between 0.68 and 0.95, while for Female is between 0.54 and 0.75
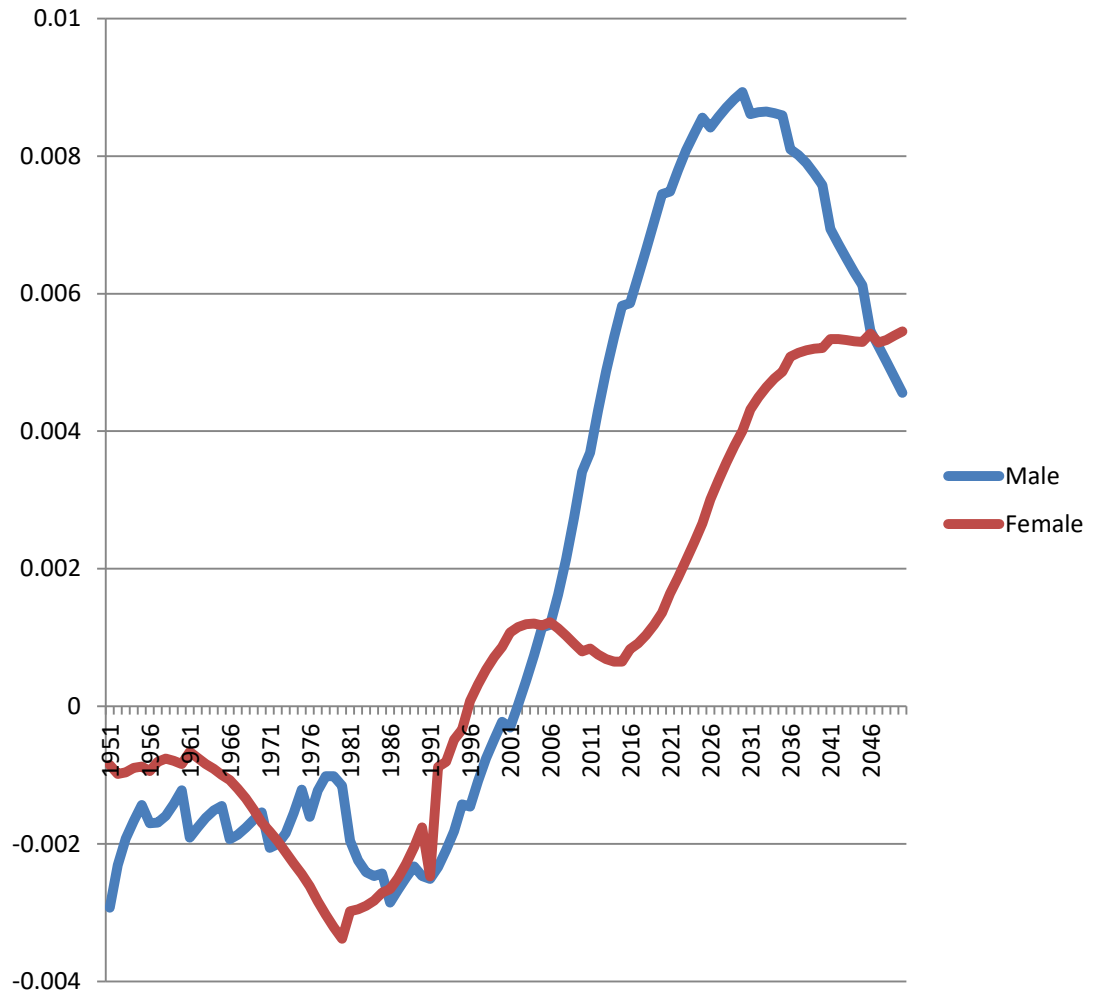
Economic Support Ratio by Gender in Nigeria
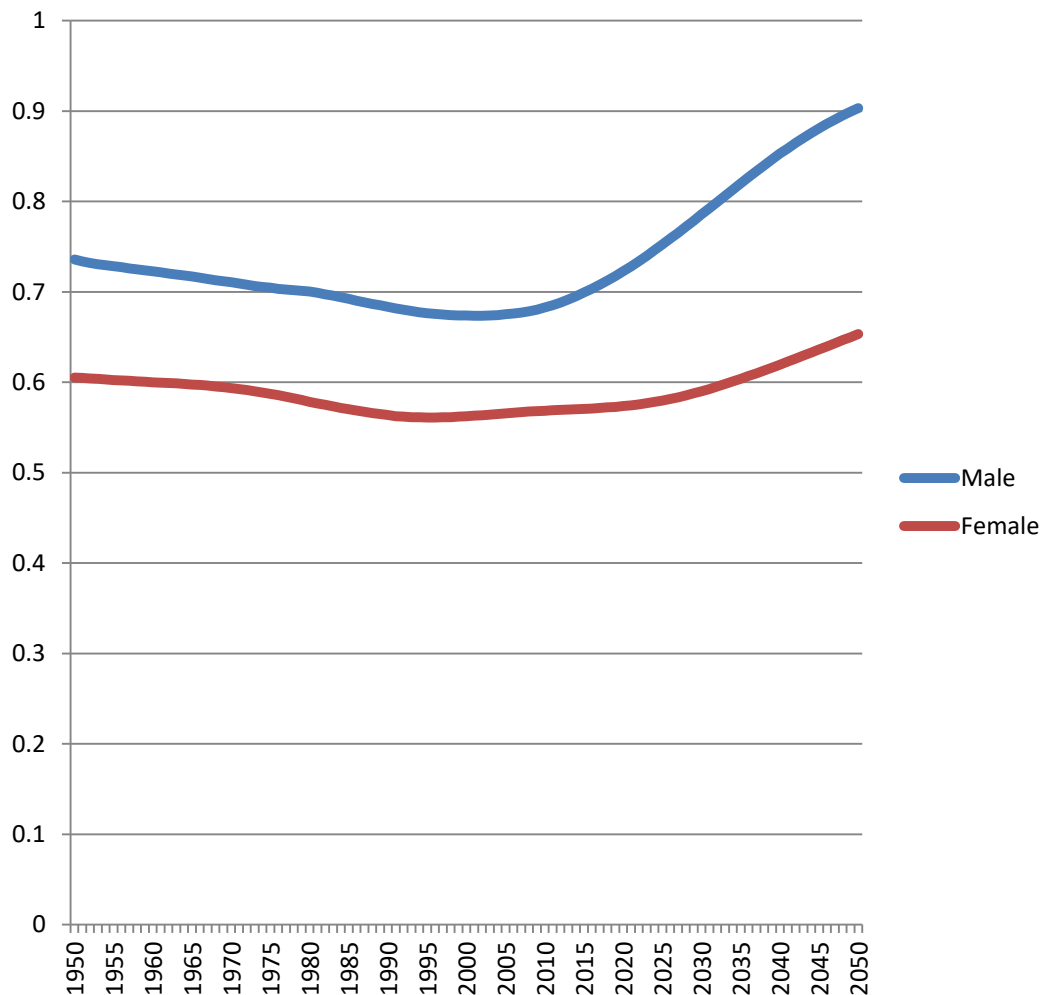
- The DD for Male and Female commenced around year 2003.

- The negative section of the DD for Female is more than for Male

- The positive section of the DD is higher for Male than for Female

Demographic Dividend by Gender, Nigeria 1950-2050

Conclusion

- This paper draws from the 2016 NTA estimates for Nigeria to describe the age and gender dynamics of lifecycle deficit and components (Consumption and Labour income).

- Difference in the relative extent of economic participation for male and female.

- Female accounts for more of the lifecycle deficit, arising from female's generation of relatively lower per capita labour income.

- Per capita lifecycle surplus from male is far more than from female.

Conclusion

- Male generates more of the age profile and share of labour income on the aggregate

- Female are more prominent in the self-employment income compared to the male counterpart.

- Male dominate in the wage income-earning sector.

- Wage income dominates on the aggregate, but last for shorter period compared to self-employment income stream.

THANK YOU FOR YOUR ATTENTION