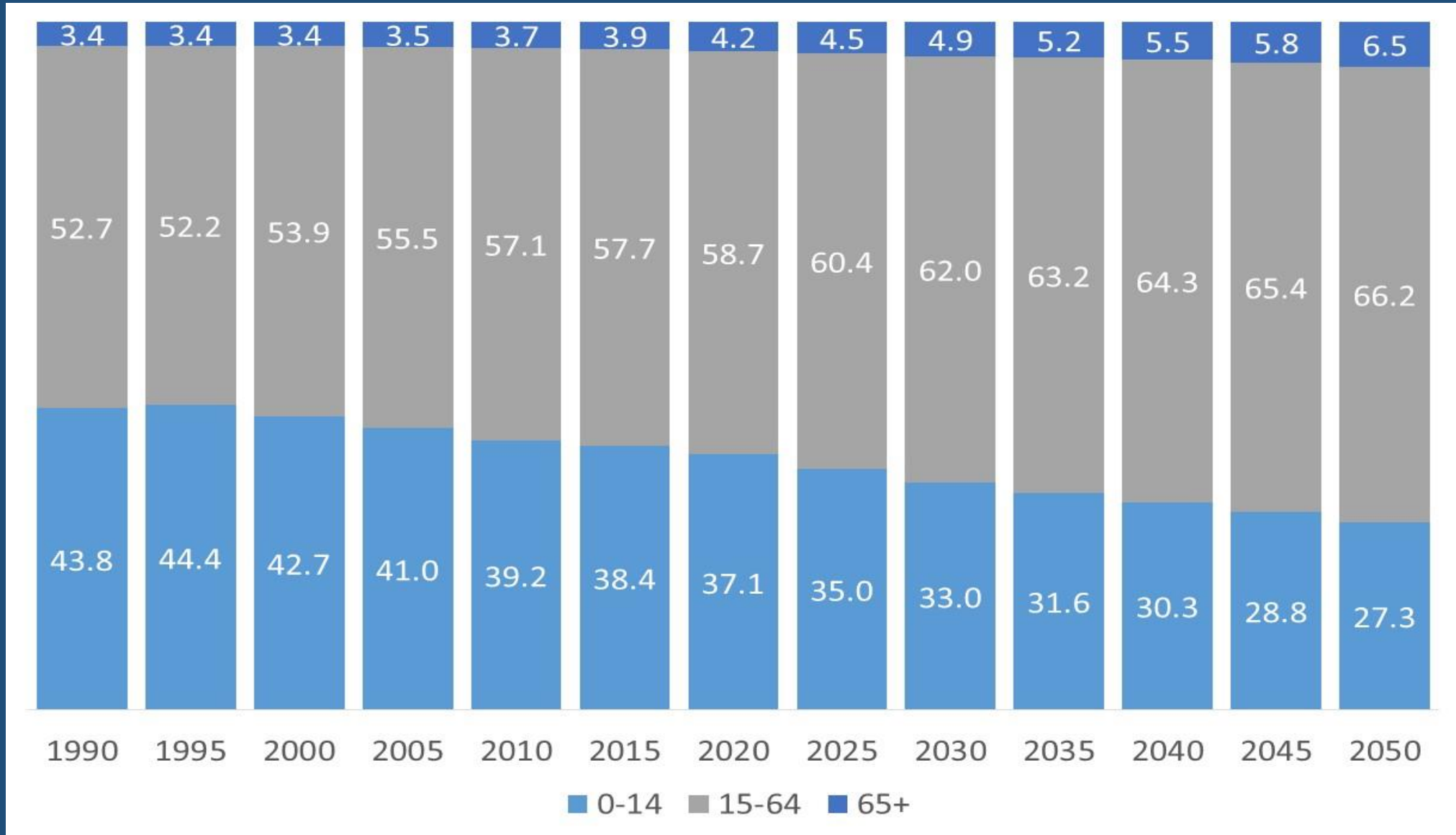


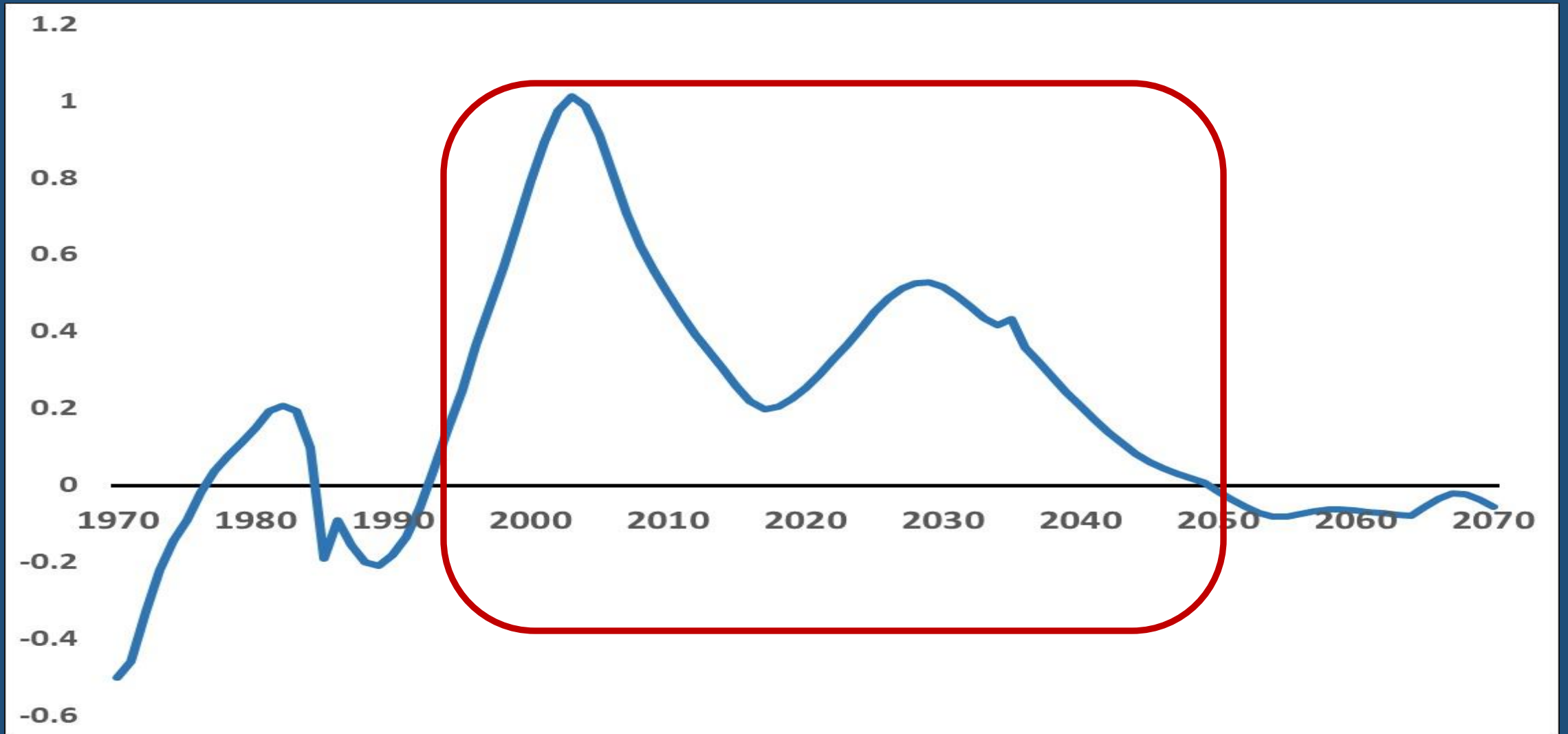
**DEMOGRAPHY MEETS ECONOMICS:
UNVEILING THE HIDDEN VALUE OF WOMEN'S
WORK IN DEVELOPING ECONOMIES**

NES, October 9, 2024

AGE STRUCTURE: 1990 TO 2050



TIMING AND DURATION OF THE OPPORTUNITY



WHY IS ESTIMATING INTERGENERATIONAL ECONOMY IMPORTANT?

- Strengthen our understanding of the linkages between population dynamics and development.
- Provide an opportunity to look at the economic indicators through the perspective of age, taking into account population size and structure.
- Help design public policies ranging from healthcare, education and social protection to economic, social and political implications of youth bulge, population ageing and generational equity.

NATIONAL TRANSFER ACCOUNTS (NTA) TELLS US ABOUT...

- How much people earn and consume at every age
- How do people, especially the young and the old who consume more than they produce, support themselves
- Whether it is through the private or public sources that any existing deficit is met

CONCEPTUAL FRAMEWORK-II

$$\underbrace{C - y^l}_{\text{Life-Cycle Deficit}} = \underbrace{y^A - S}_{\text{Asset Reallocations}} + \underbrace{\tau_g^+ - \tau_g^-}_{\text{Net Public Transfers}} + \underbrace{\tau_f^+ - \tau_f^-}_{\text{Net Private Transfers}}$$

$\underbrace{\hspace{10em}}_{\text{Net Transfers}}$

$\underbrace{\hspace{10em}}_{\text{Age Reallocations}}$

Where:

C = Total consumption
 y^l = Labour income
 y^A = Total asset income
 S = Total savings

τ_g^+ = Public transfer inflows
 τ_g^- = Public transfer outflows
 τ_f^+ = Private transfer inflows
 τ_f^- = Private transfer outflows

METHODOLOGY

The NTA consists of 3 accounts:

- Life-cycle account
- Public age reallocation account- *transfers and asset-based reallocations*
- Private age reallocation account- *transfers and asset-based reallocations*

Calculated in three steps:

- Step 1: Estimate per capita age profiles from household surveys then smooth the results
- Step 2: Use population data to construct a preliminary aggregate age-profile
- Step 3: Adjust the aggregate per capita age profile to match a macro control taken from the national accounts.

A SNAPSHOT OF PAKISTAN'S NTA

$$\underbrace{\frac{C - y^l}{2,856,342.60}}_{7,114,713.62 - 4,258,371.02} = \underbrace{\frac{y^A - S}{2,554,958.99}}_{4,153,992.63 - 1,599,033.63} + \underbrace{\frac{\tau_g^+ - \tau_g^-}{301,383.6}}_{4,020,705.35 - 4,200,849.87} + \underbrace{\frac{\tau_f^+ - \tau_f^-}{301,383.6}}_{622,901.00 - 141,372.87}$$

C (total consumption) = 7,114,713.62

y^l (labour income) = 4,258,371.02

$C - y^l$ (life-cycle deficit) = 2,856,342.60

y^A (total asset income) = 4,153,922.63

S (total savings) = 1,599,033.63

$y^A - S$ (asset reallocations) = 2,554,958.99

$(\tau_g^+ - \tau_g^-) + (\tau_f^+ - \tau_f^-)$ (net transfers) = 301,383.6

τ_g^+ (public transfer inflows) = 4,020,705.35

τ_g^- (public transfer outflows) = 4,200,849.87

$\tau_g^+ - \tau_g^-$ (net public transfers) = -180,144.53

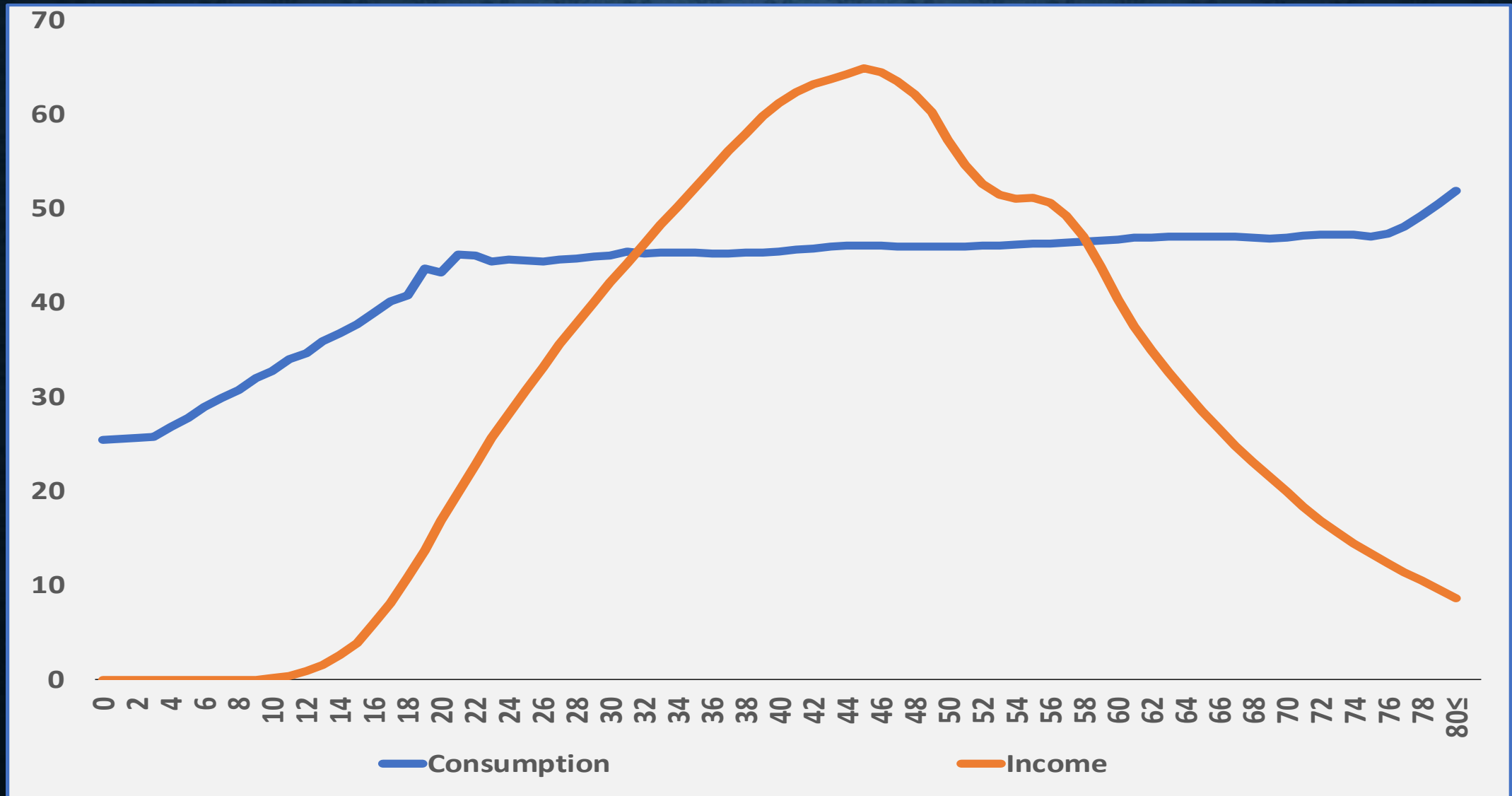
τ_f^+ (private transfer inflows) = 622,901.00

τ_f^- (private transfer outflows) = 141,372.87

$\tau_f^+ - \tau_f^-$ (net private transfers) = 481,528.13

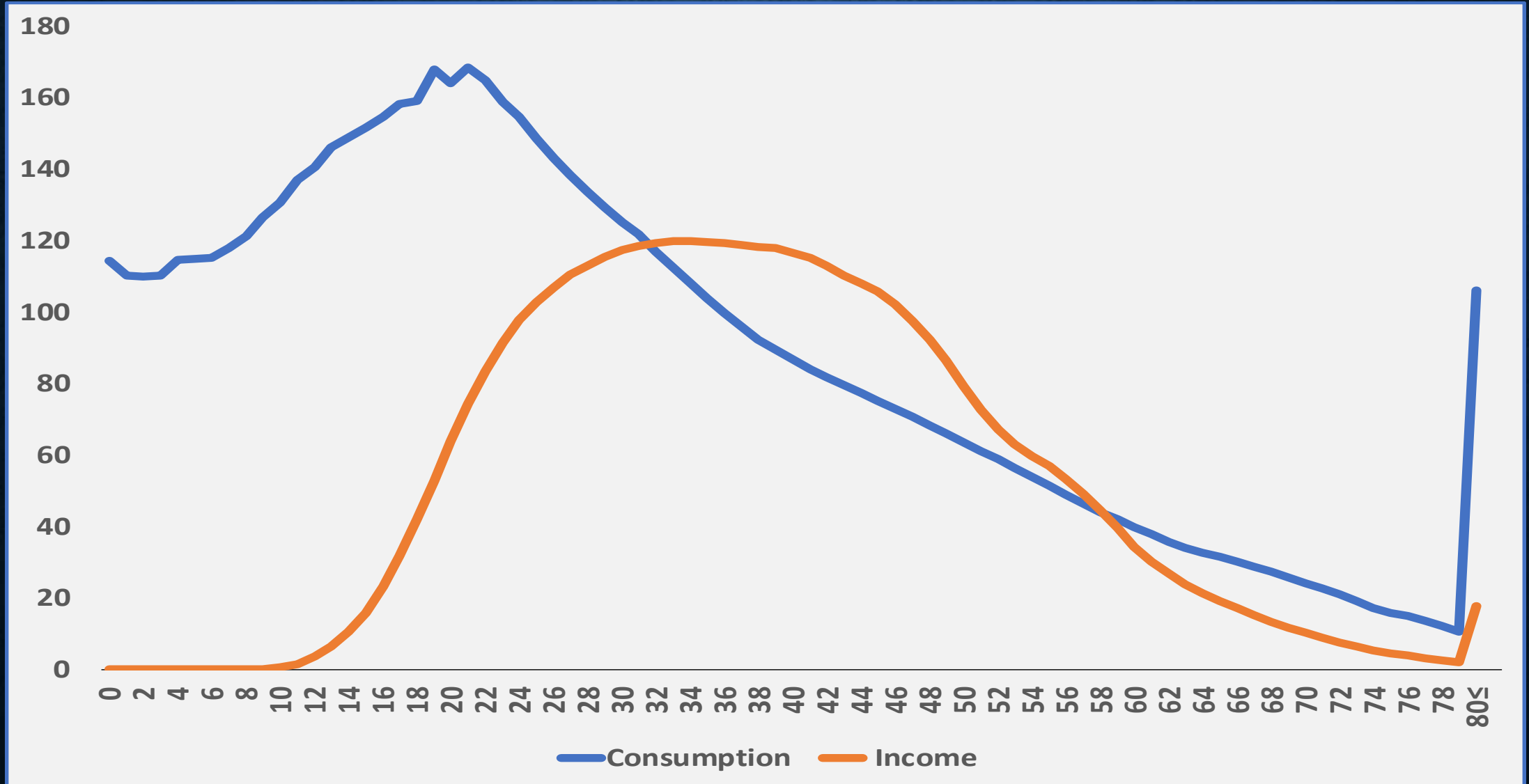
LIFE-CYCLE DEFICIT-I

PER CAPITA LABOUR INCOME AND CONSUMPTION ('000 RUPEES)

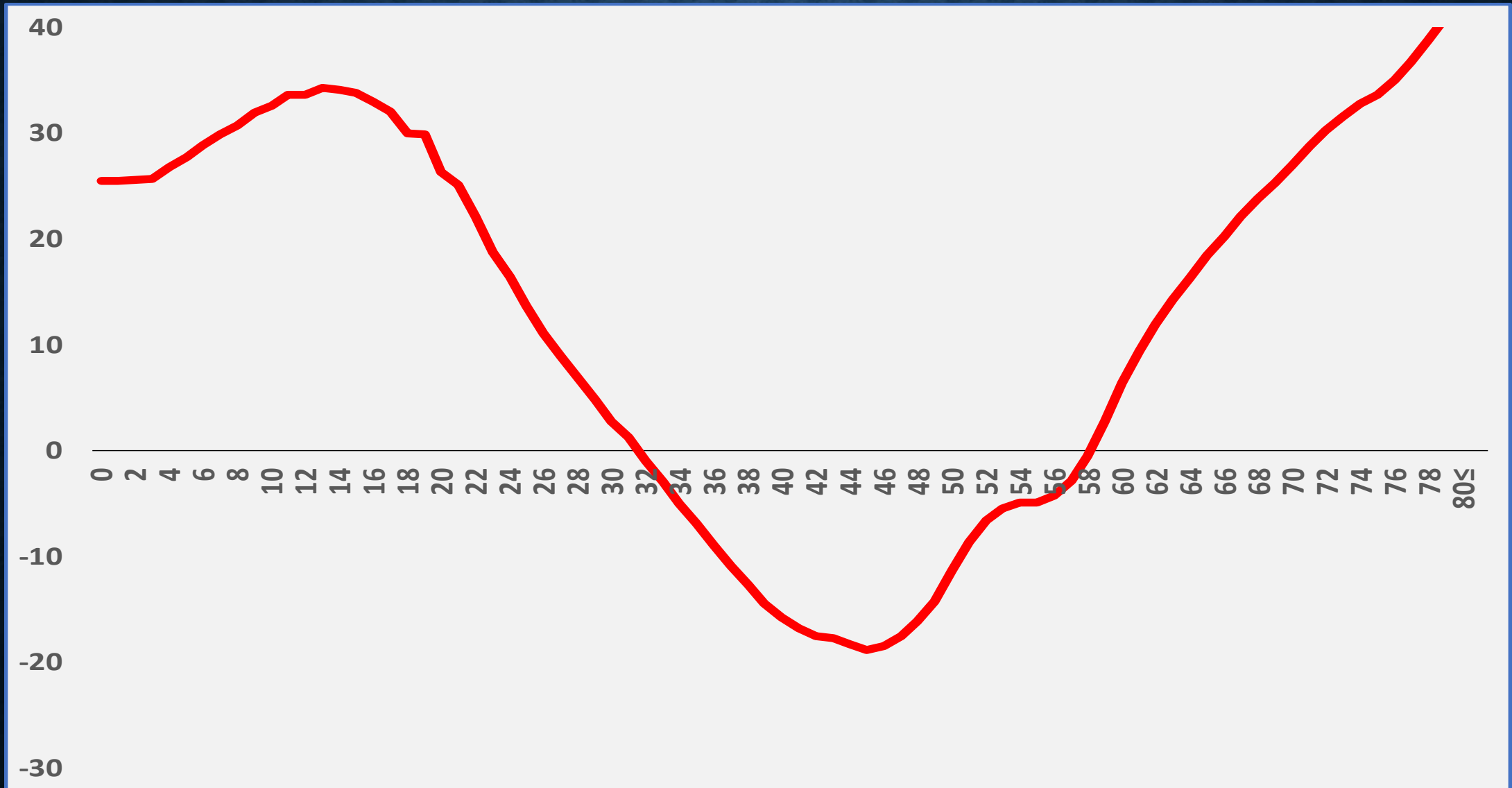


LIFE-CYCLE DEFICIT-II

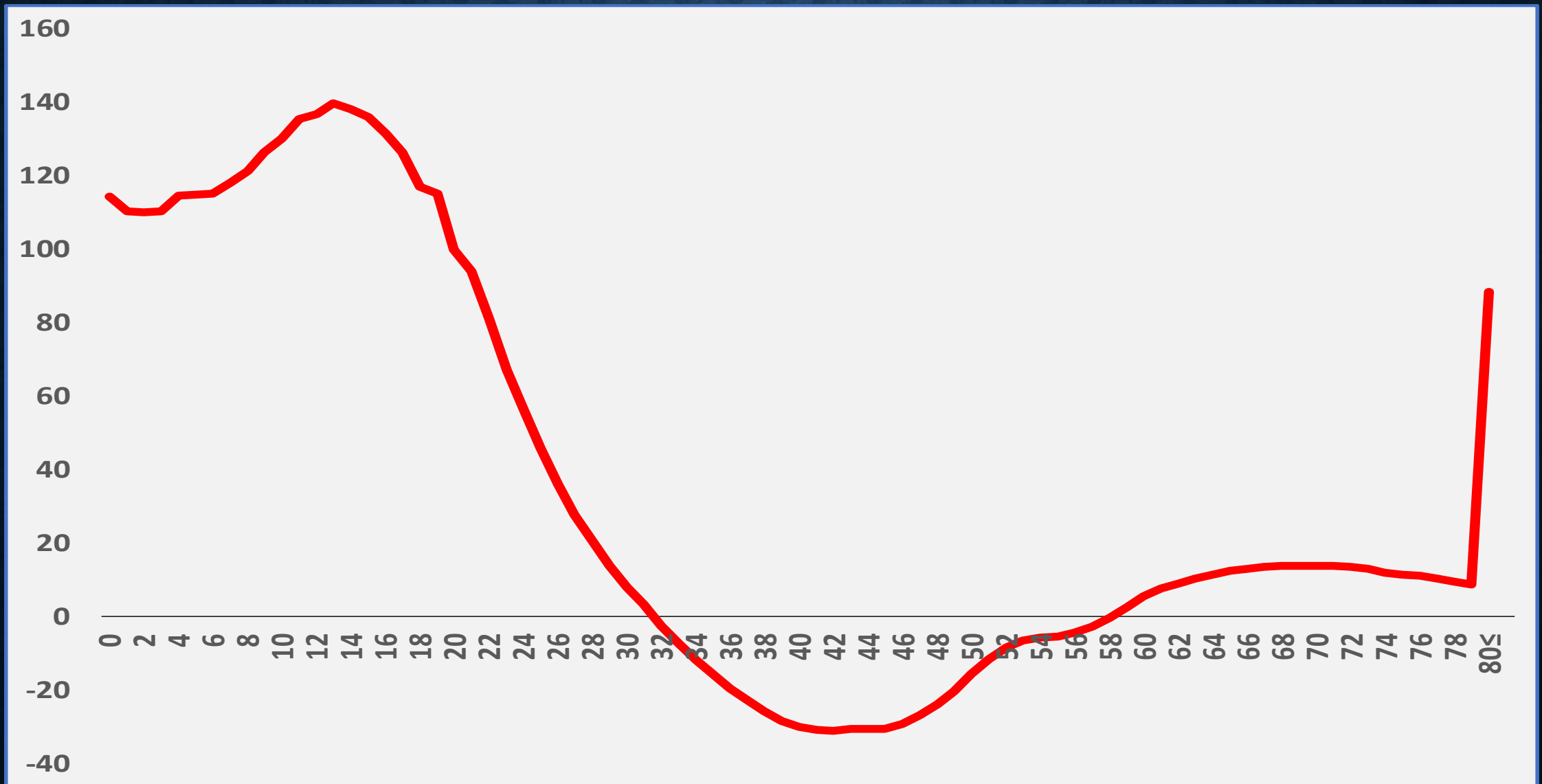
AGGREGATE LABOUR INCOME AND CONSUMPTION BY AGE (BILLION RUPEES)



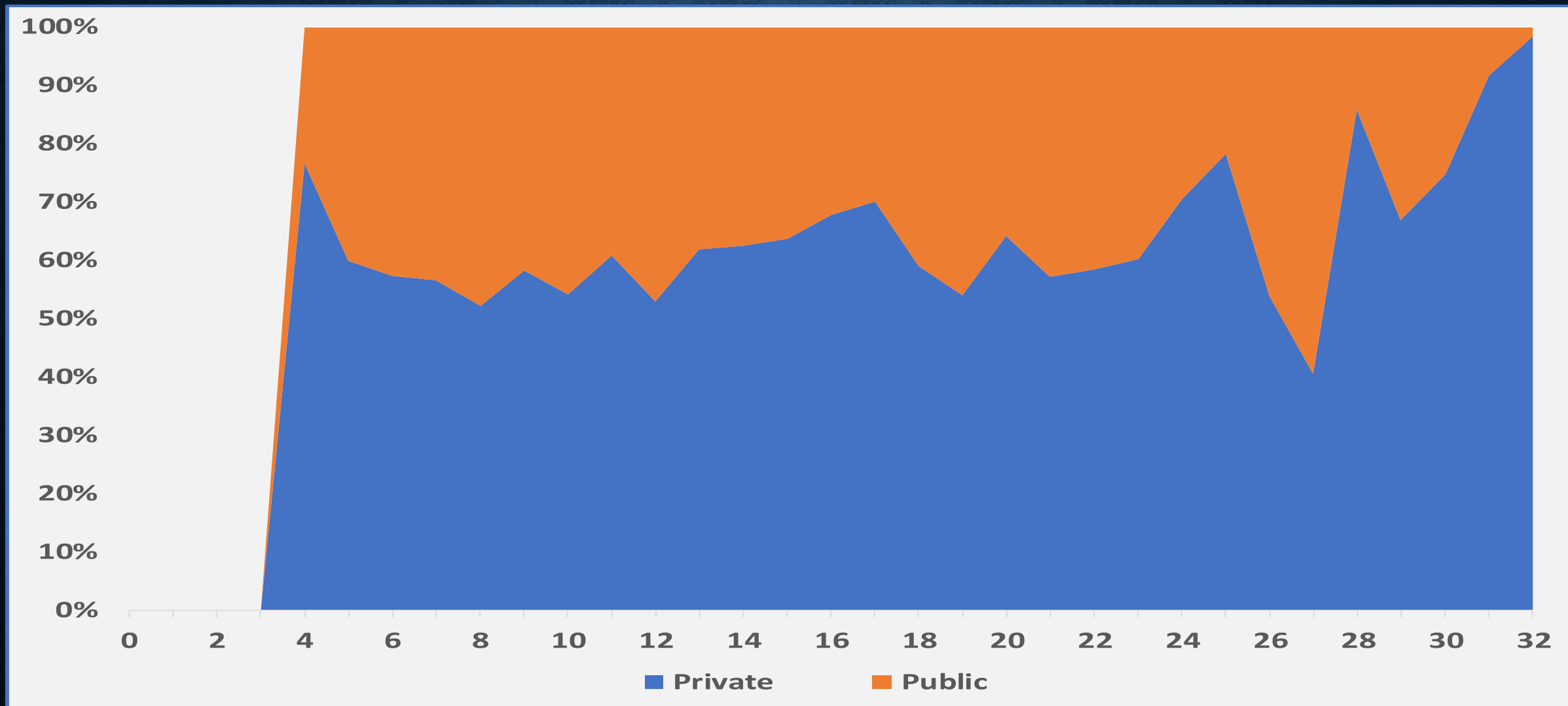
LIFE-CYCLE DEFICIT: PER CAPITA (THOUSAND RUPEES)



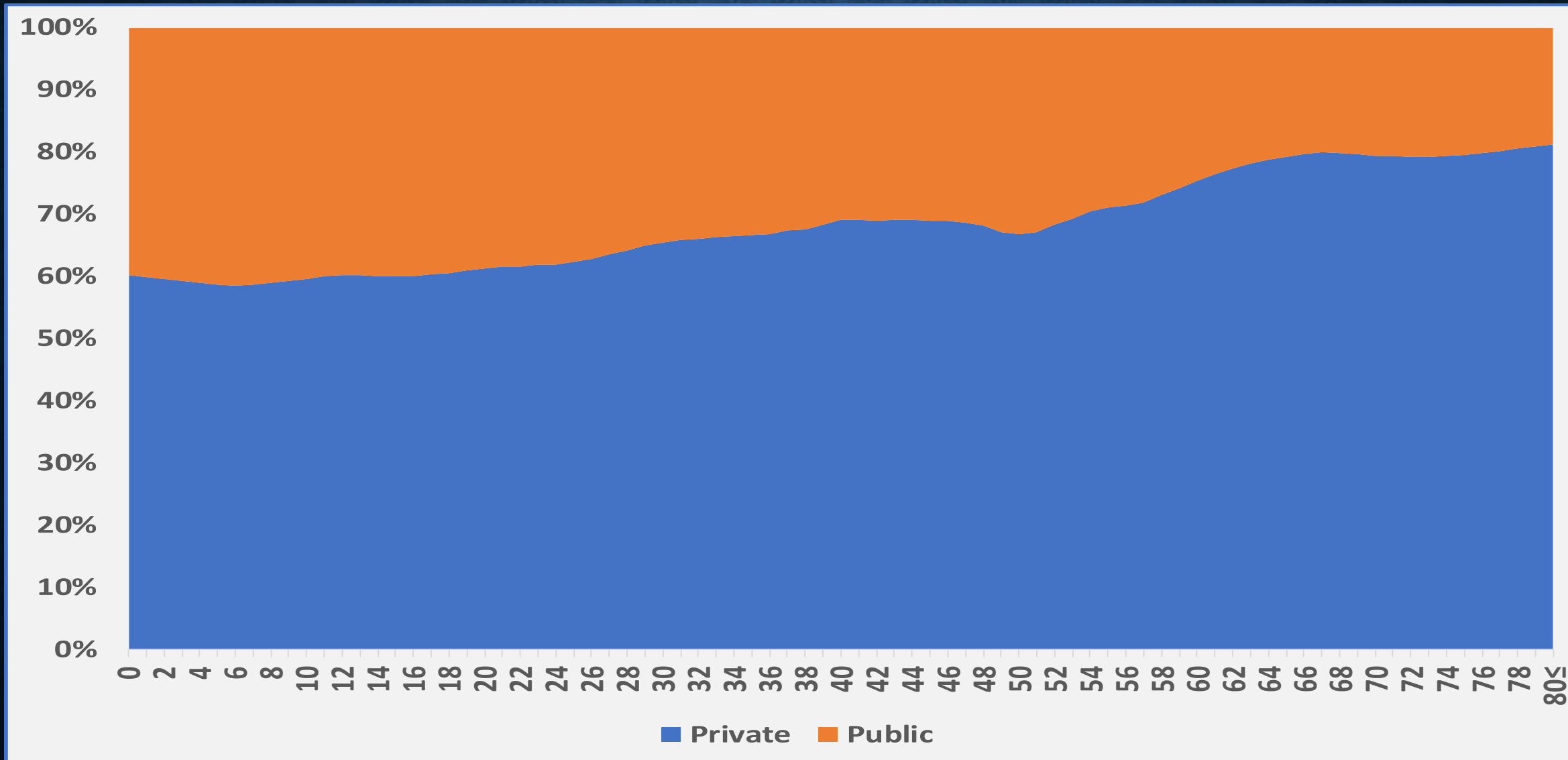
LIFE-CYCLE DEFICIT: AGGREGATE (MILLION RUPEES)



SHARE OF PUBLIC AND PRIVATE IN PER CAPITA TOTAL EDUCATION CONSUMPTION



SHARE OF PUBLIC AND PRIVATE IN PER CAPITA TOTAL HEALTH CONSUMPTION



CONCLUSIONS-1

- A large life-cycle deficit exists for the young and an even bigger one for the elderly with the prime productive ages being the 40s- conforms to the notion of demographic dividend.
- The aggregate estimates for Pakistan show the younger ages consuming the most because of the age structure effect.
- Education consumption is reliant more on private sources than public ones. This is true for all educational levels.

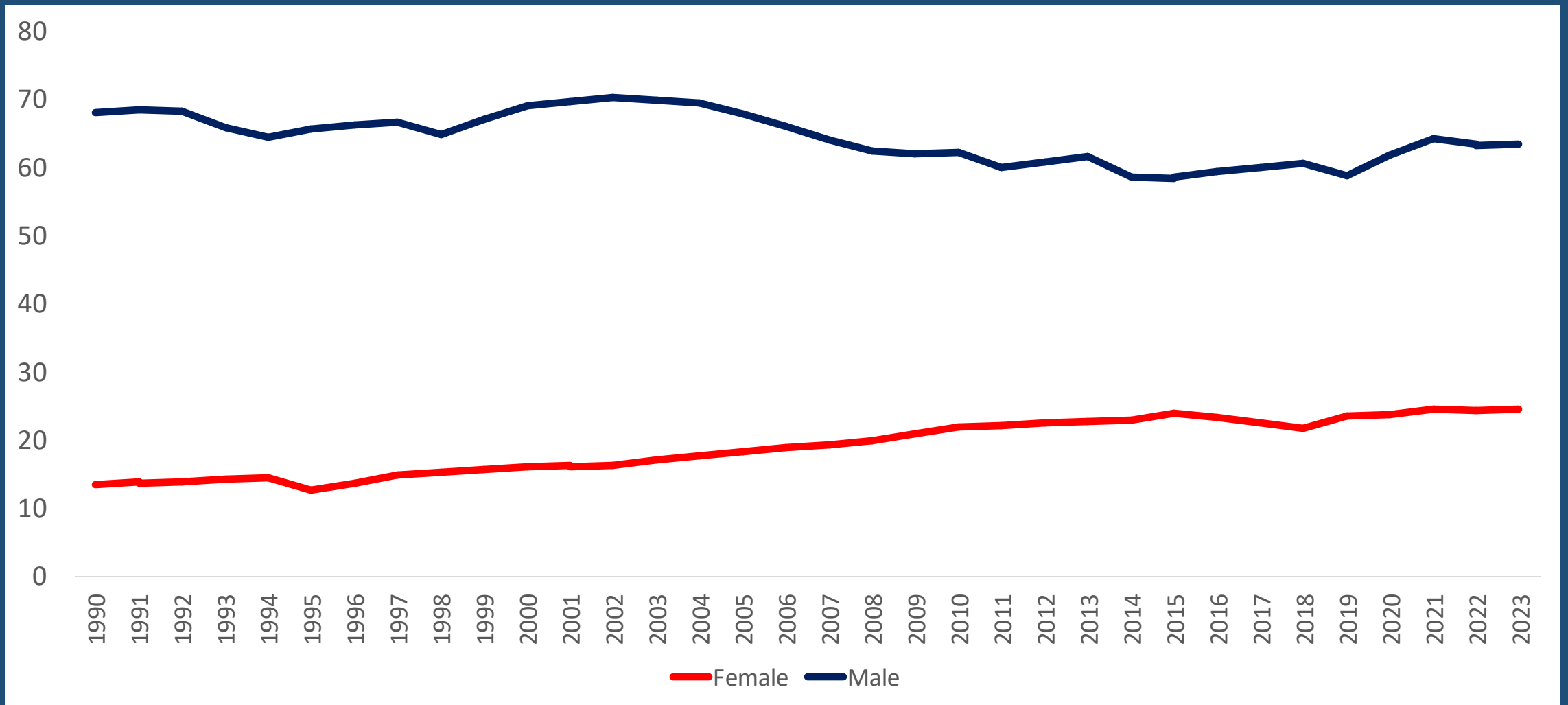
CONCLUSIONS-II

- Health consumption is highest for the elderly, and irrespective of age private financing of health exceeds public.
- The life-cycle deficit in Pakistan is mainly met by private sources, primarily private asset-based reallocations
- In per capita terms, the reallocations were higher for the elderly than the young but when we factor in the age-structure, in the aggregate estimates, the reallocations are then much higher for the young.

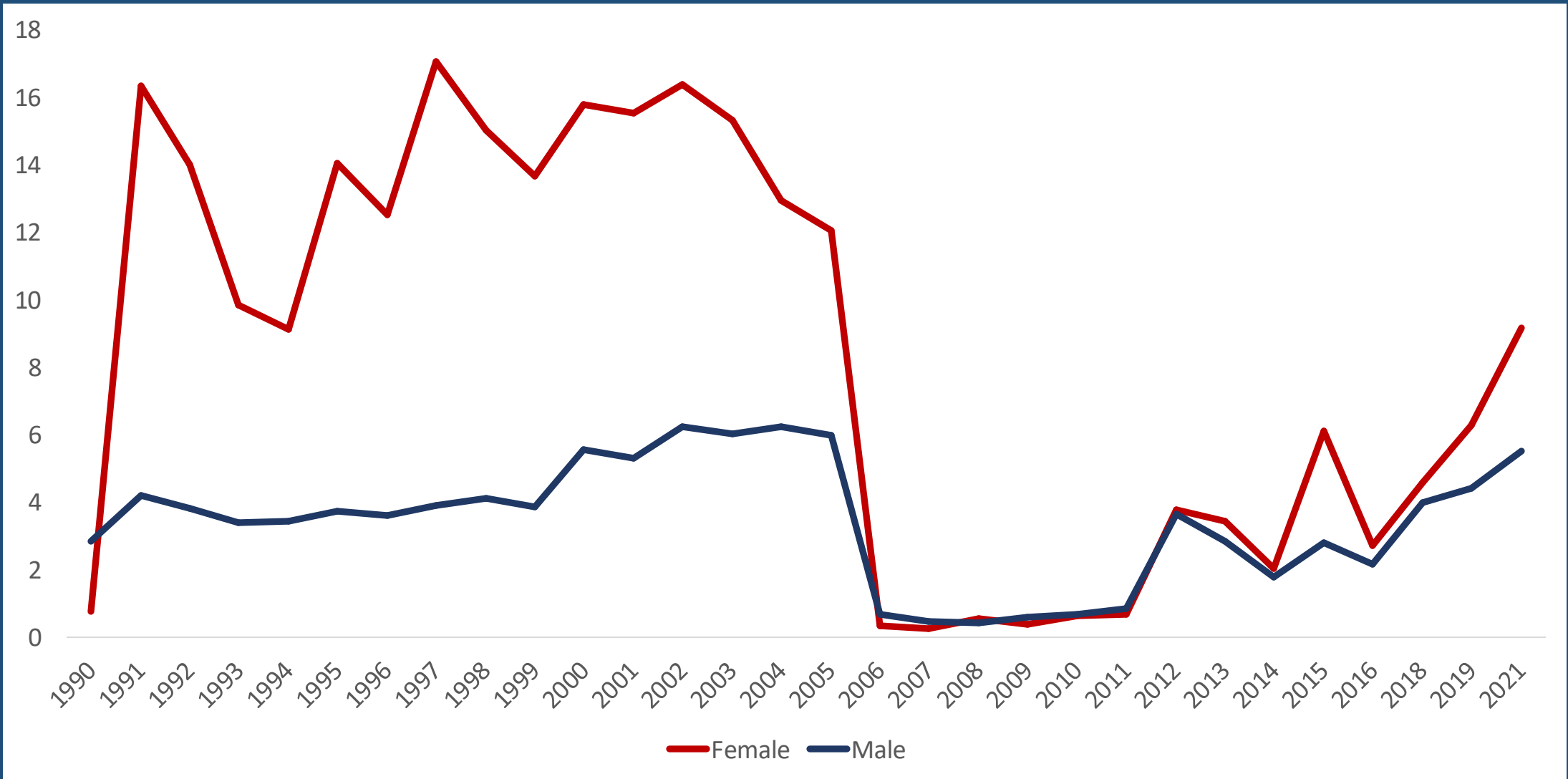
**ARE THE INCOME/PRODUCTION TRENDS
THE SAME FOR EVERYONE, MALE OR
FEMALE?**

**MEASURING THE GENDERED ECONOMY IN
PAKISTAN**

LABOUR FORCE PARTICIPATION RATES BY SEX (%)



UNEMPLOYMENT RATES BY SEX (%)



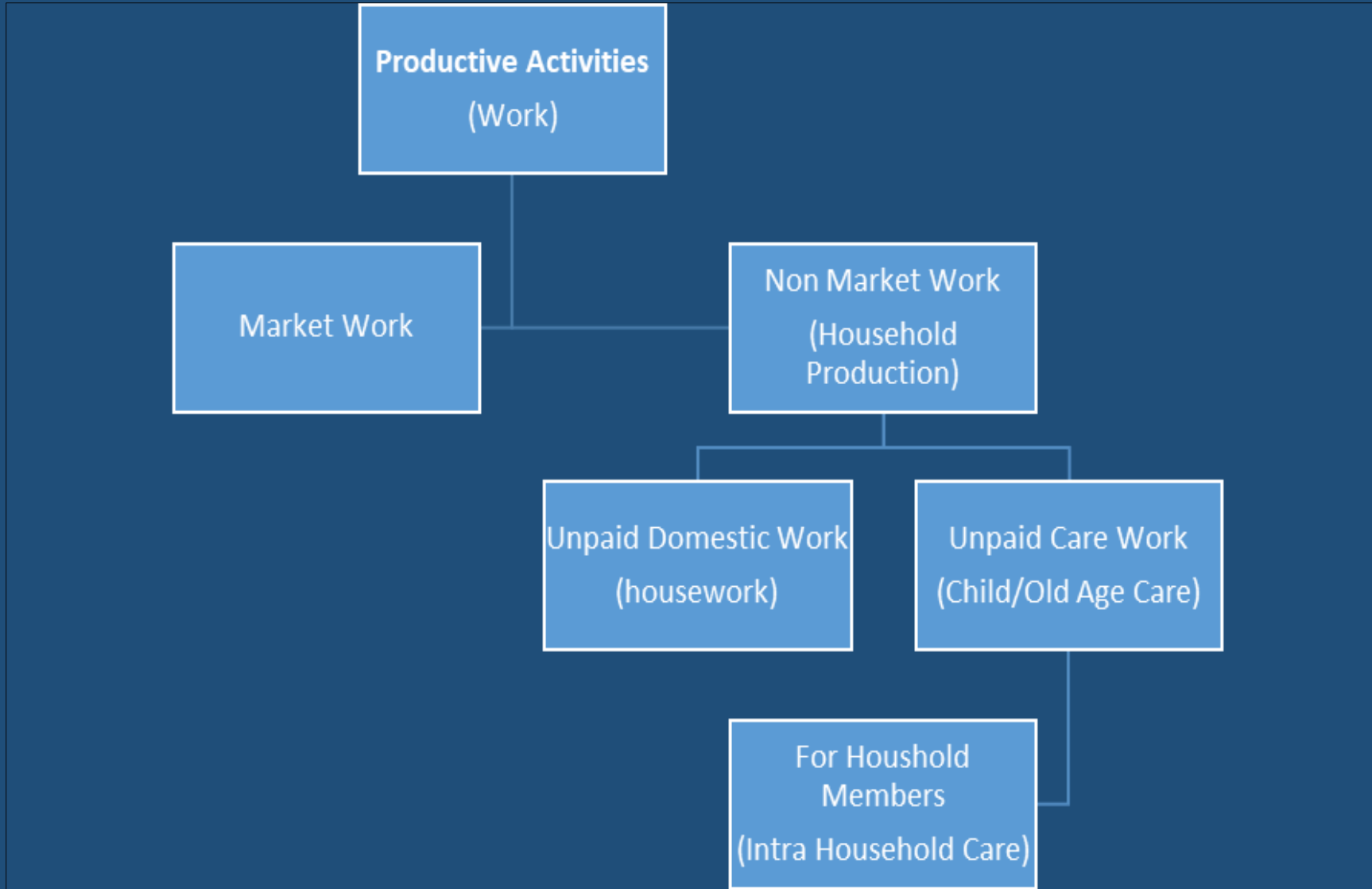
VALUING 'NON-MARKET' WORK

- Estimate the magnitude of unpaid work performed in the country
- Finding the gender differences in carrying out non-market tasks.
- Giving monetary value to work not included in the National Accounts- unpaid care work, household production or household services .
- Provide insights into policies aimed at reducing the time women spend on housework and enhancing their economic empowerment.

DATA FOR MEASURING WOMEN'S WORK

- All data needed for NTA
- Pakistan Labour Force Survey (LFS) 2018-19, to quantify the value of non-market work performed by individuals by age and sex.
 - Like, washing, mending or pressing clothes, caring for children, care for elderly, health care of ill persons, cleaning and arranging the house, construction work, such as mud plaster of roofs and walls of house, cooking food at home, bringing water from outside to the house, taking food from house to farm, etc.

Framework

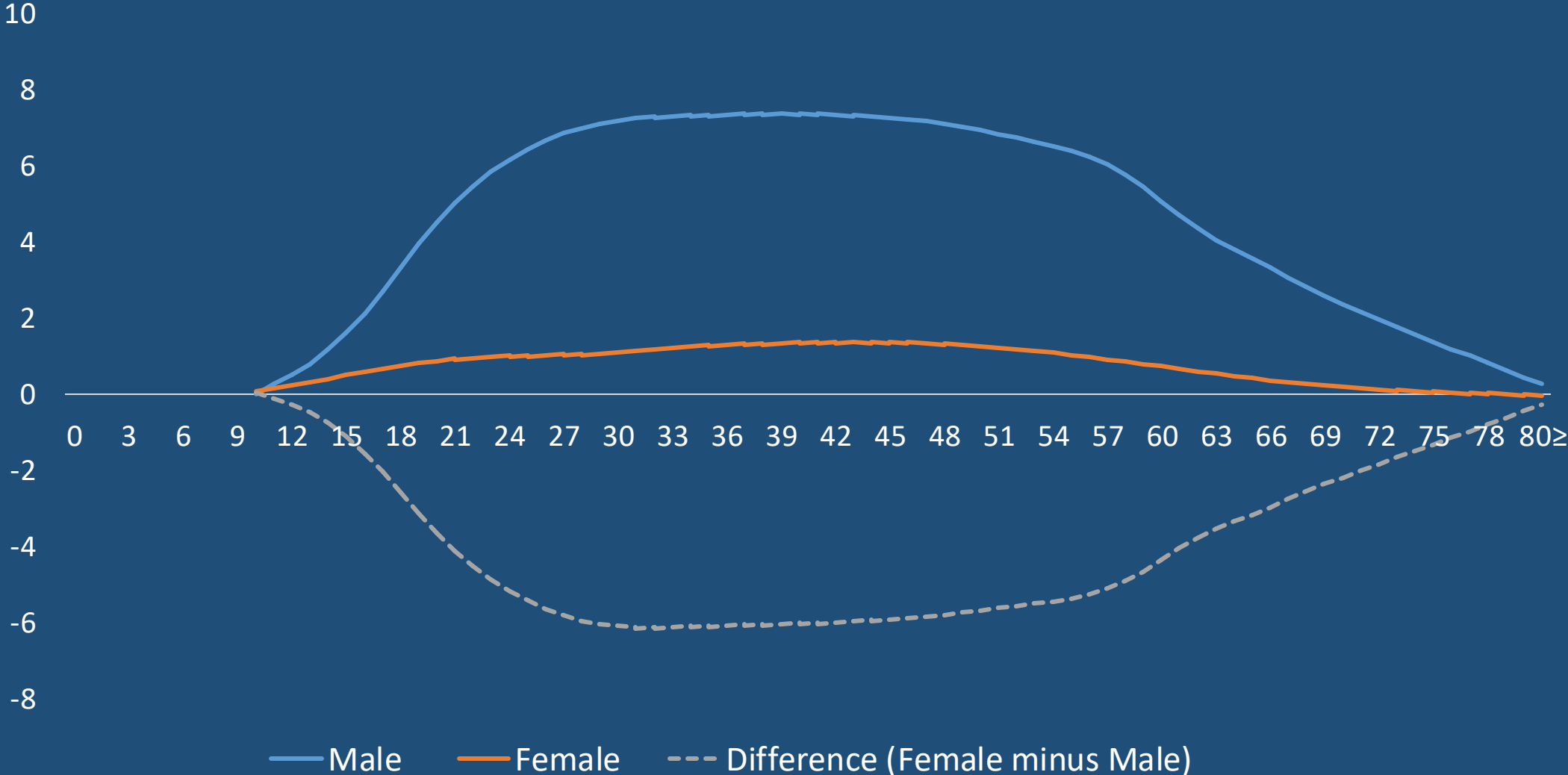


'UNPAID PRODUCTION'

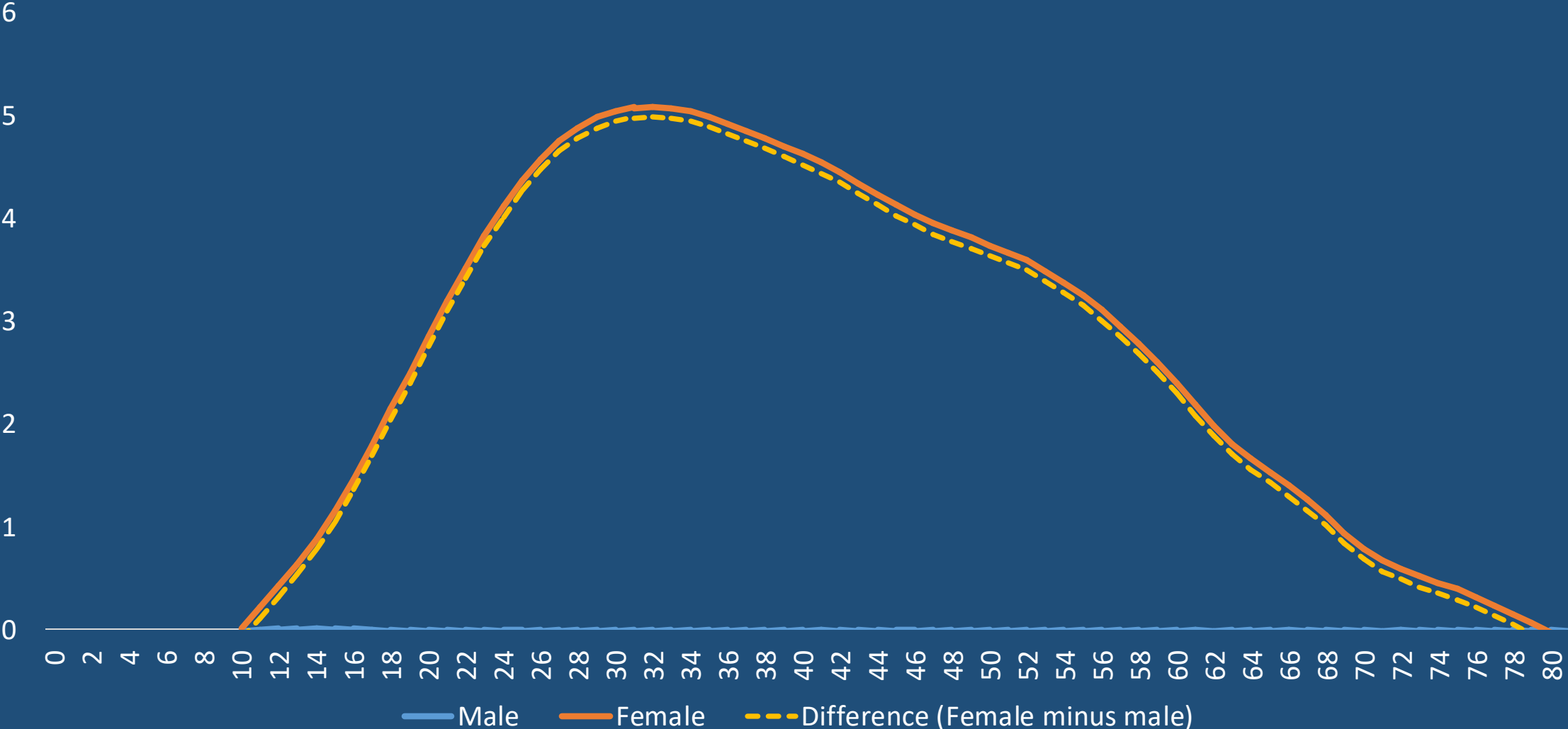
The following analysis is carried out for persons aged 10 and above:

- Average hours spent on unpaid production by age and sex.
- Using the wages of workers who are working in a similar occupation to quantify the value of unpaid work for all categories of unpaid production: general household production, care production provided and learning activities.

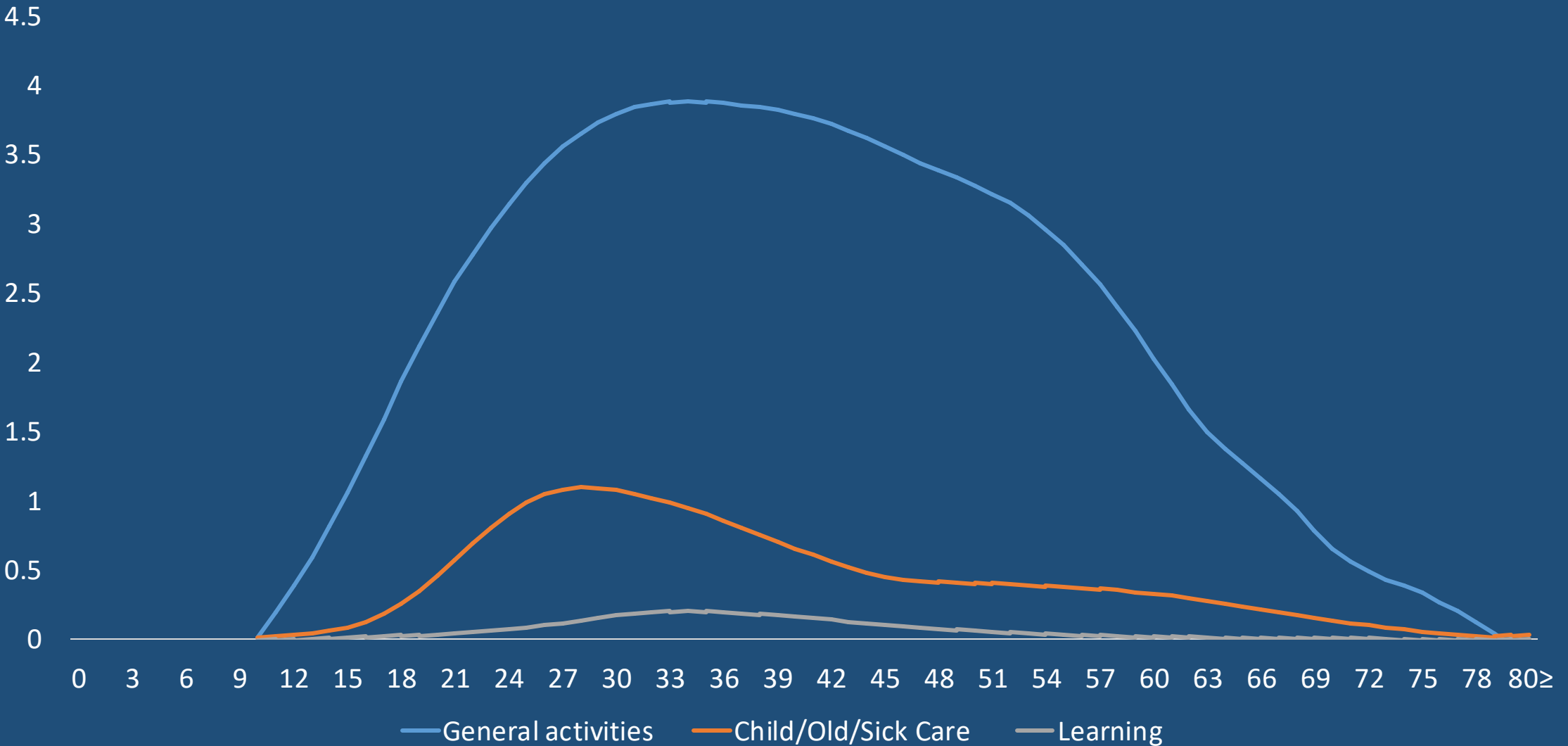
AVERAGE DAILY HOURS SPENT ON MARKET-BASED WORK BY AGE AND SEX



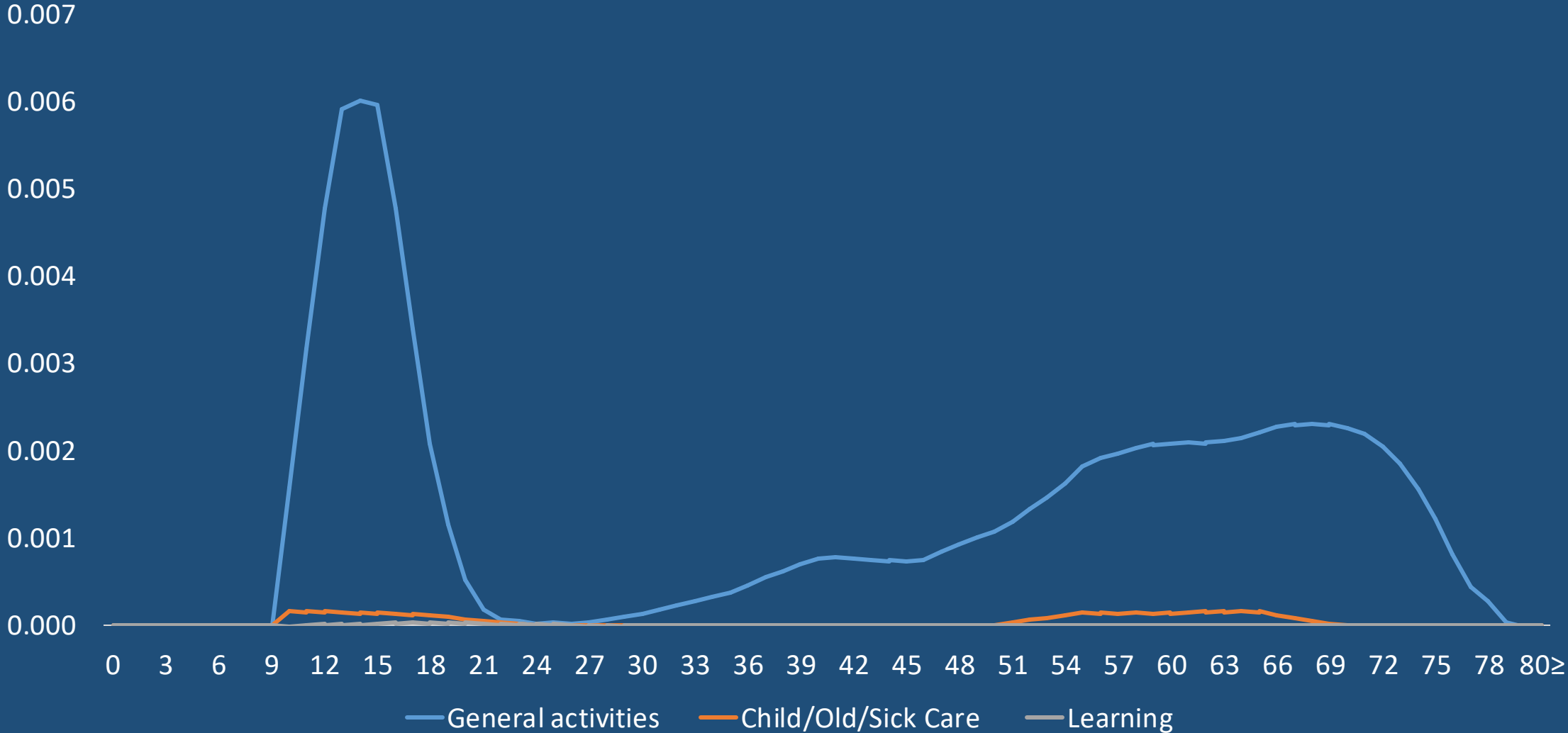
AVERAGE DAILY HOURS SPENT ON NON-MARKET BASED WORK BY AGE AND SEX



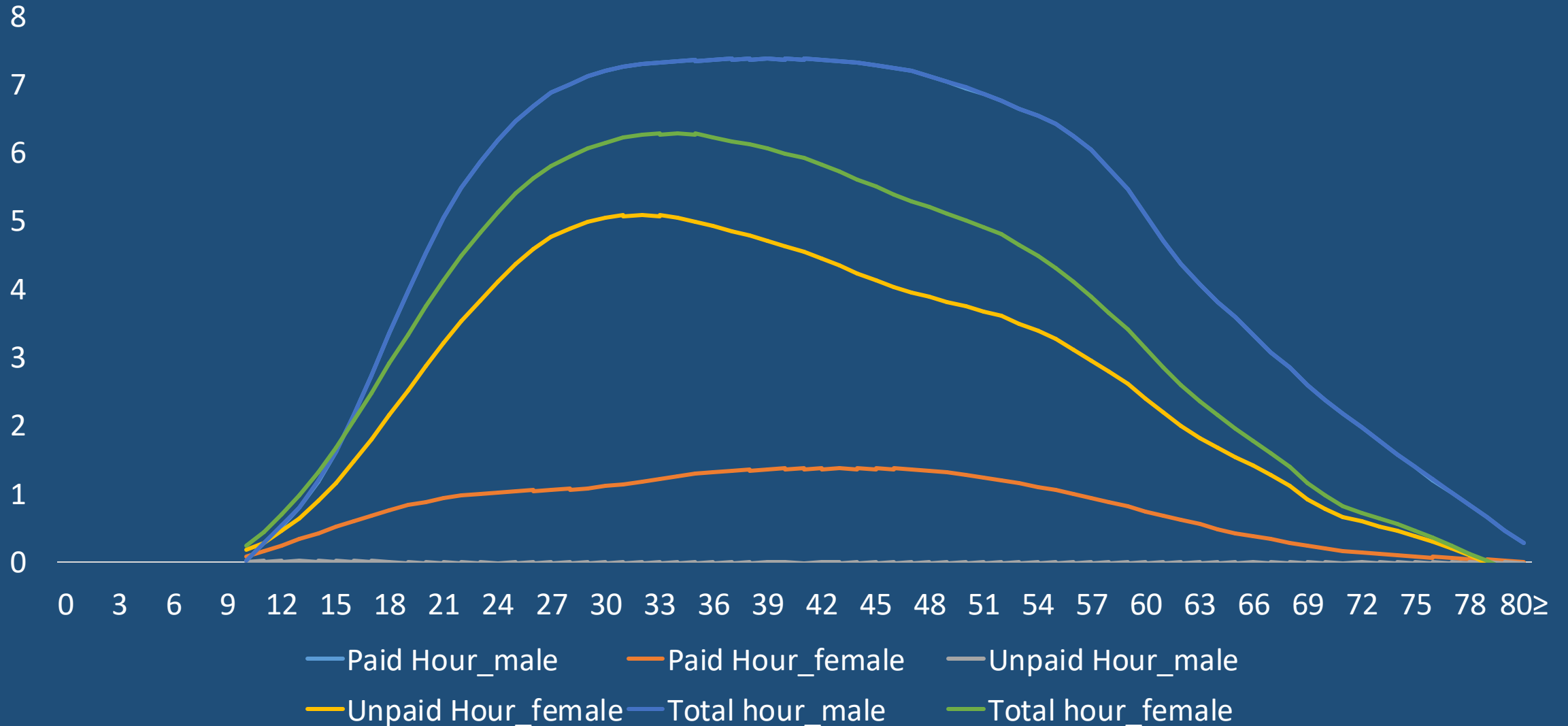
AVERAGE DAILY HOURS SPENT ON MAJOR CATEGORIES OF NON-MARKET ACTIVITIES BY AGE FOR WOMEN



AVERAGE DAILY HOURS SPENT ON MAJOR CATEGORIES OF NON-MARKET ACTIVITIES BY AGE FOR MEN

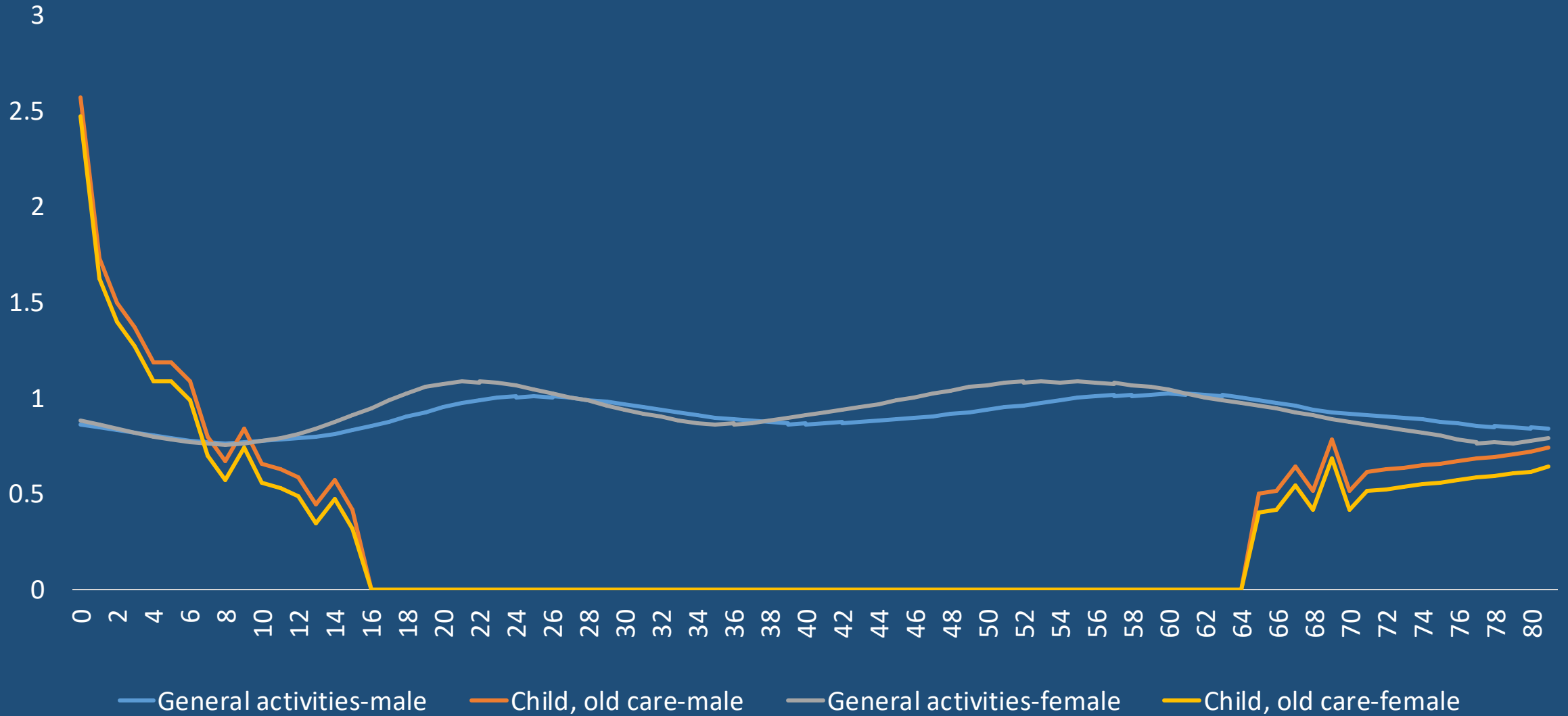


AVERAGE DAILY TIME (IN HOURS) SPENT ON MARKET AND NON-MARKET WORK BY AGE AND SEX

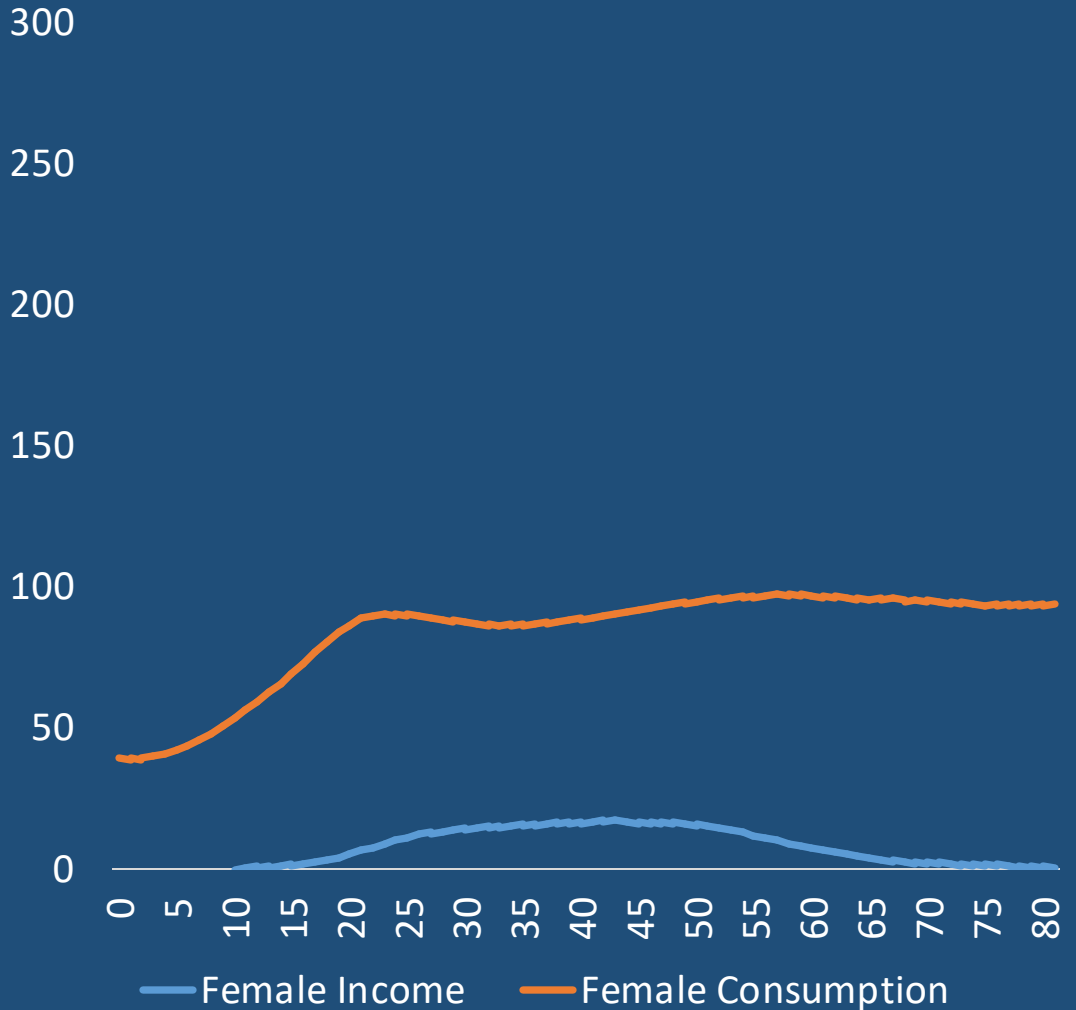
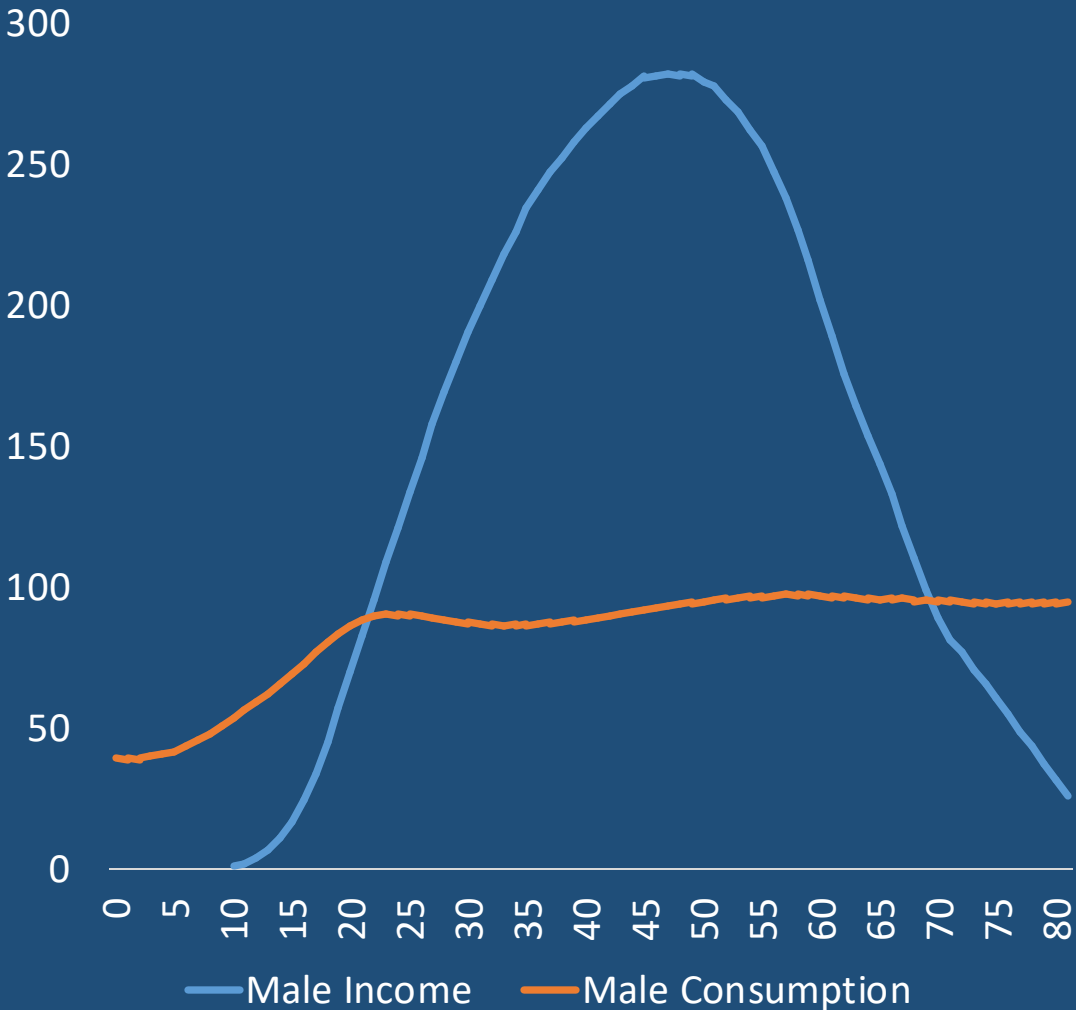


Unpaid Consumption: Average Daily Time (in Hours)

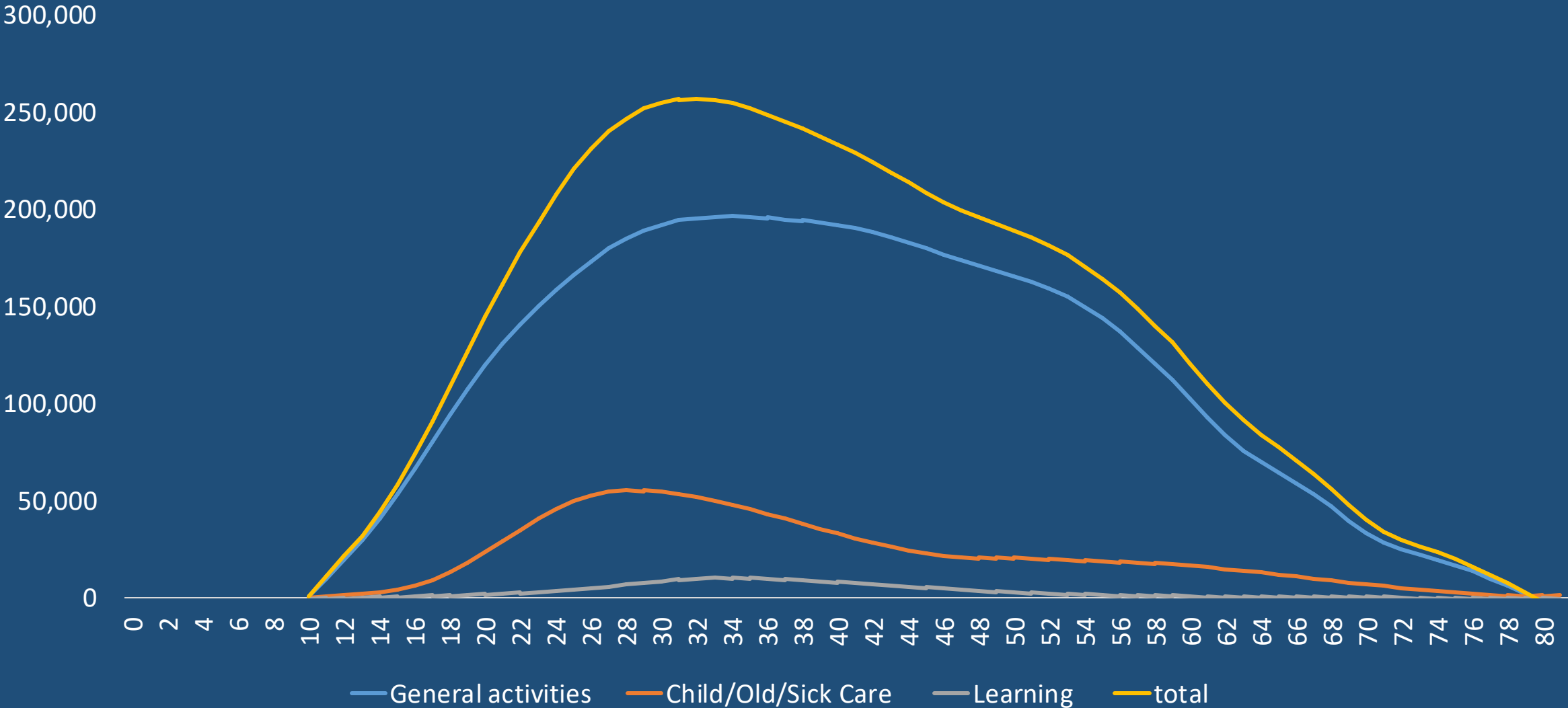
Consumption on Non-Market Activities by Age and Sex



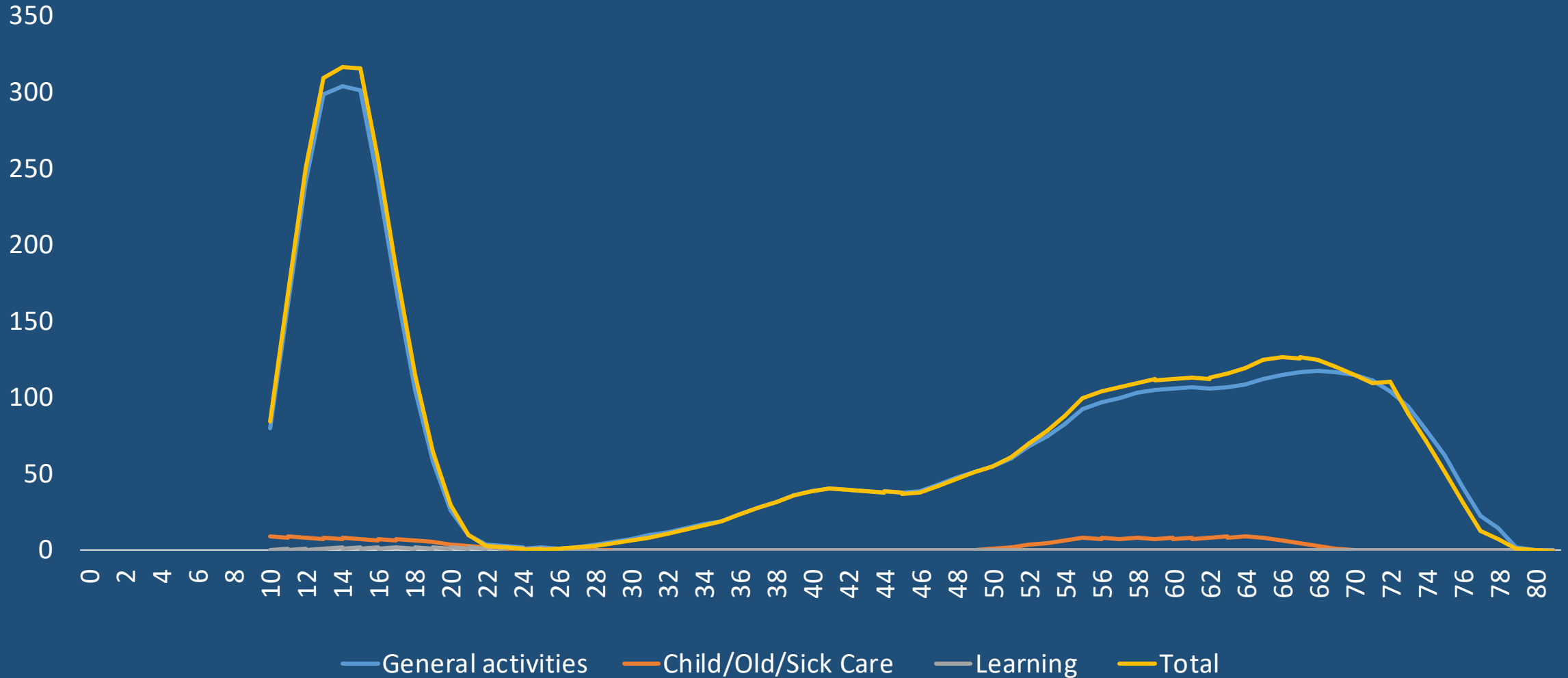
MARKET WORK: PER CAPITA ANNUAL LABOR INCOME AND CONSUMPTION BY AGE AND SEX (RS.'000)



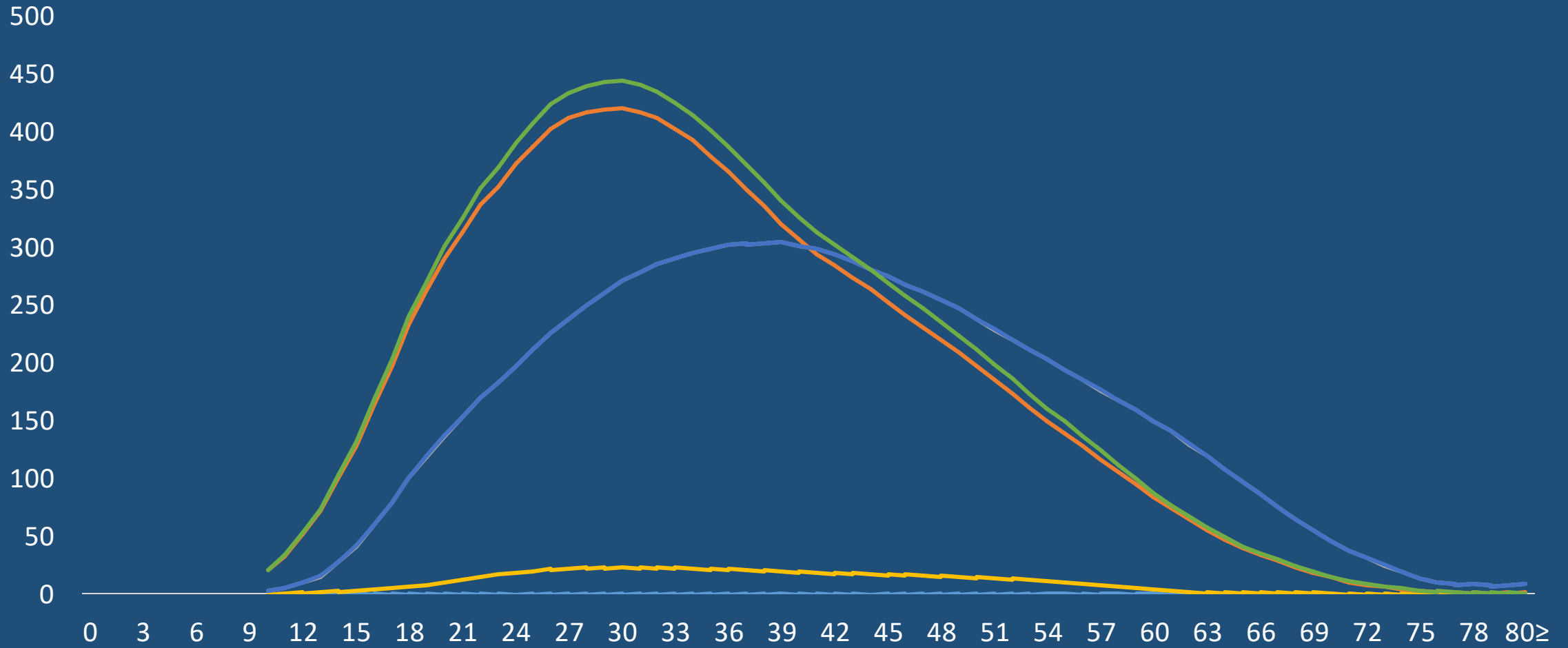
NON-MARKET: PER CAPITA ANNUAL PRODUCTION VALUE FOR WOMEN BY AGE (RS.)



NON-MARKET: PER CAPITA ANNUAL PRODUCTION VALUE FOR MEN BY AGE (RS.)



PUTTING MARKET AND NON-MARKET WORK TOGETHER-I AGGREGATE INCOME/PRODUCTION BY AGE AND SEX (RS. BILLION)



— NTTA -male — NTTA -female — NTA -male — NTA -female — NTA+NTTA male — NTA+NTTA female

CONCLUSIONS

- Estimates in the present study for the market and non-market economy show a very gendered scenario. While men produce more in the market economy, it is the women who out-produce them in non-market economy.
- Women are burdened with the responsibilities of housework and care of the children and elderly from a very young age. It is, thus, not surprising to see low enrolment and high drop-out rates for them, along with limited participation in the market economy.

IMPLICATIONS-I

- ***Gainful employment:*** Needed to fulfil not just personal needs but also the deficit faced by the young and the elderly, and for asset accumulation which was found to be the primary sources of funding the life-cycle deficit along with labour income. This is the very essence of reaping the demographic dividend.
- ***Public spending on education:*** Quality needs investment and the estimates show that education consumption is just too low to produce the quality needed for the 21st century. Overall education consumption is low with the share of public even lower than private. More needs to be allocated and used wisely.

IMPLICATIONS-II

- ***Public health consumption:*** Private health consumption far exceeds public health consumption. Literature suggests that health expenditures are a major source of pushing households into poverty. The private health consumption being high for all ages in the NTA estimates necessitates increasing public spending on health.
- ***Fertility decline:*** The whole idea of demographic dividend stems from fertility decline, and Pakistan with its almost stagnant fertility rates is not helping itself. The opportunity of reaping the dividend is nullified if the fertility rates are not brought down. New, innovative strategies need to be thought out to deal with the high population growth rate.

IMPLICATIONS-III

- Lower fertility levels can go a long way in reducing work for women- it is not just the mothers but also the female siblings doing childcare
- For women in Pakistan to have equal opportunities to grow and prosper as individuals there is a need to acknowledge their contribution to the well-being of the population.

THANK YOU