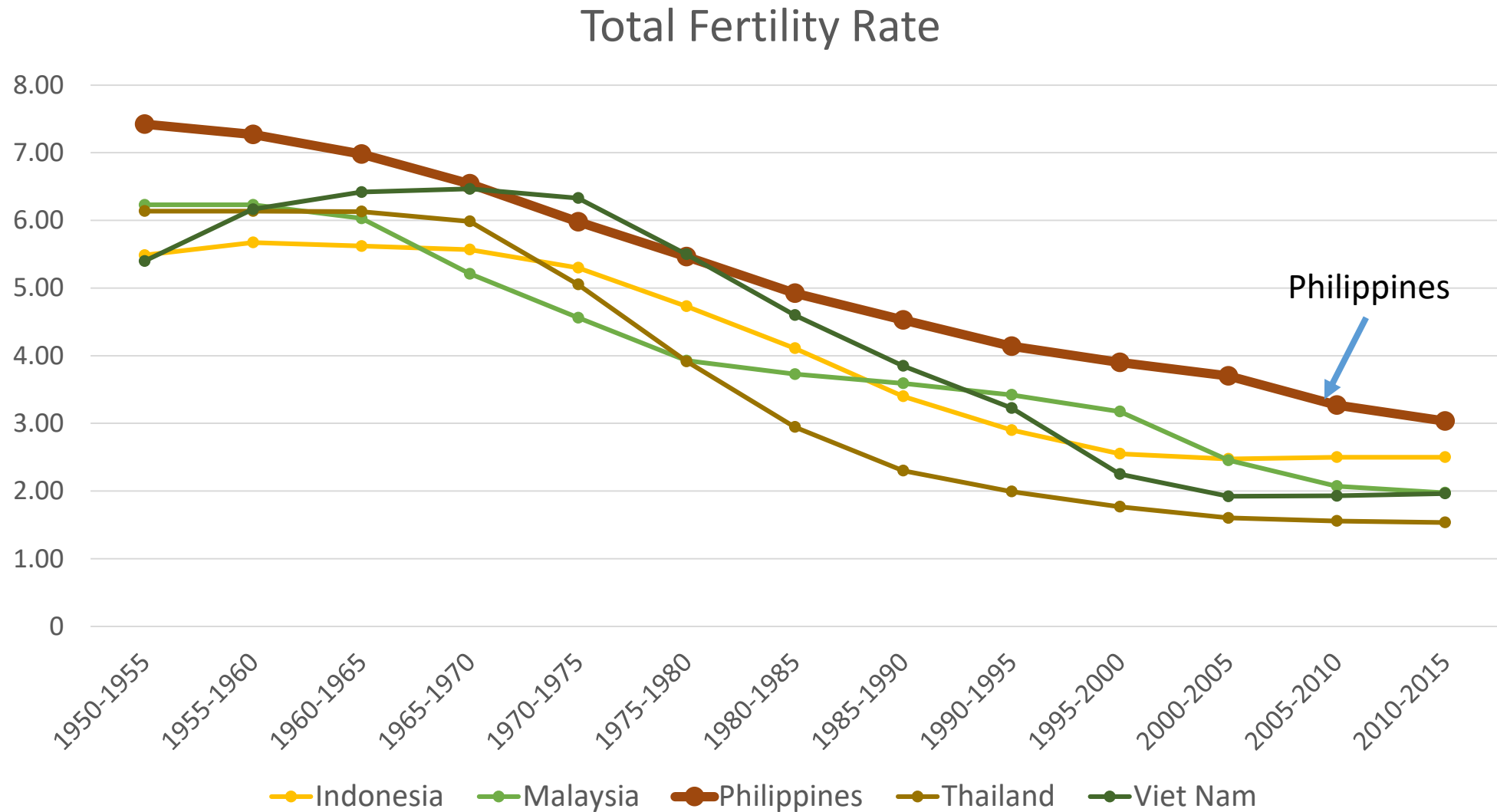


Economic Gains from a More Vigorous Implementation of the RPRH Law

Michael R.M. Abrigo, Aniceto C. Orbeta and Alejandro N. Herrin
12th Global Meeting of the National Transfer Accounts Network
23-27 July 2018

1. Some basic indicators

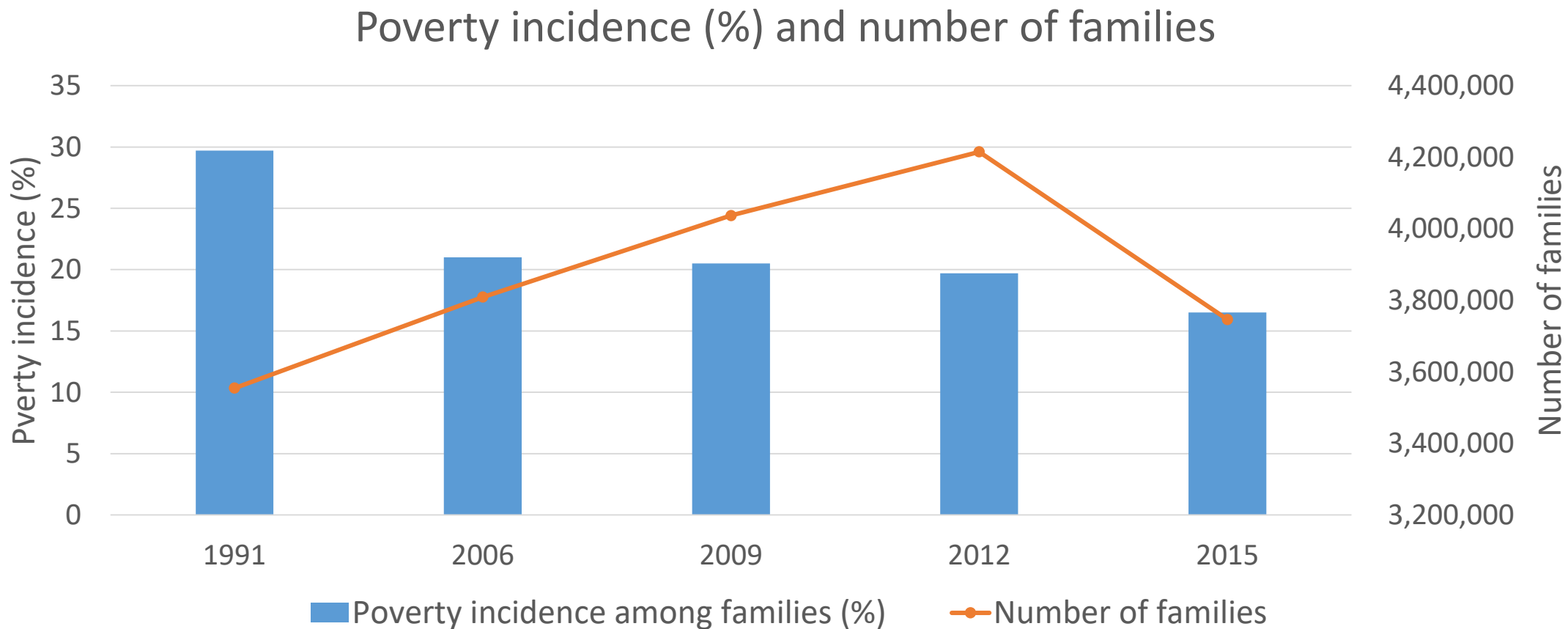
Progress in RPRH indicators: Total Fertility Rate



Source: United Nations (2015)

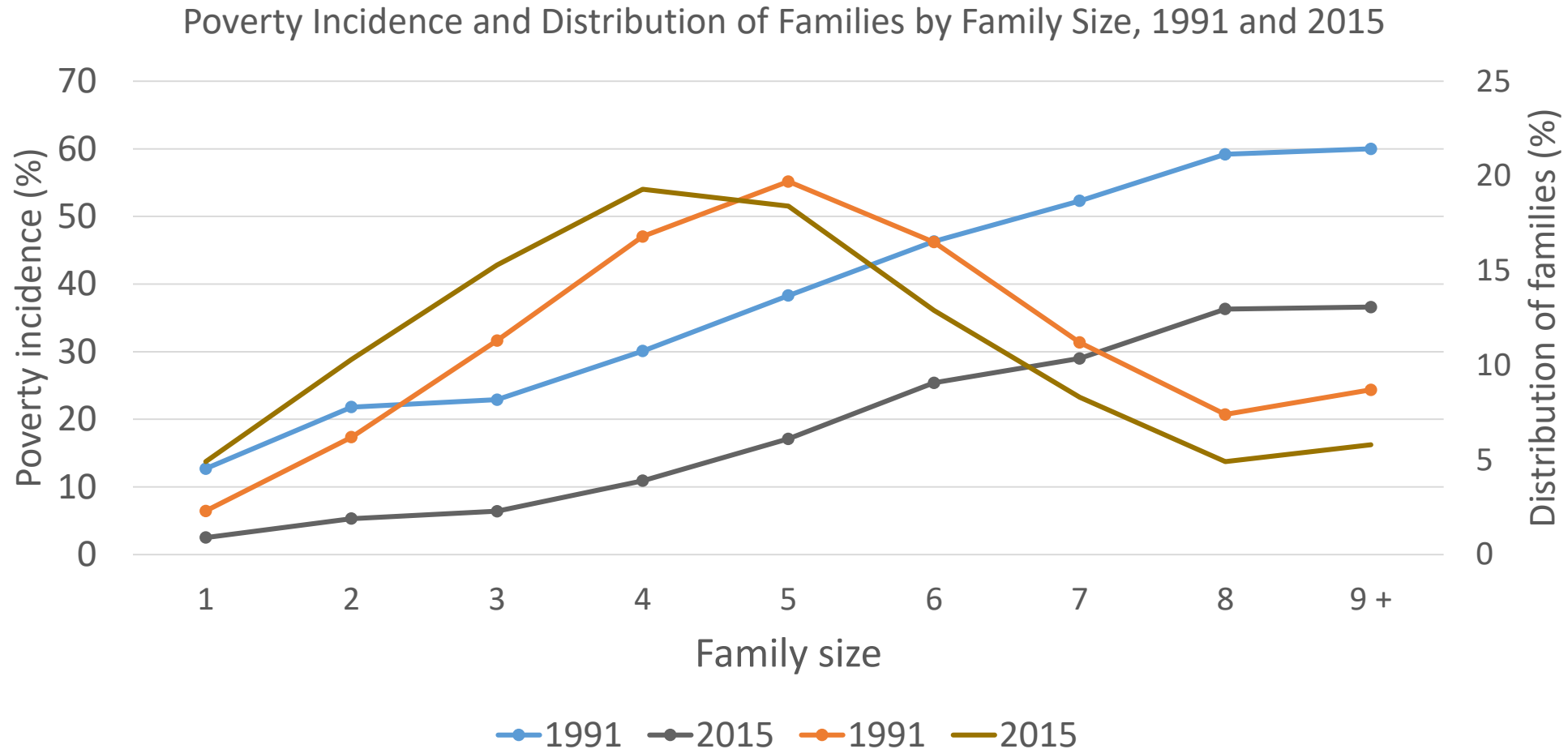
Abrigo, Orbeta and Herrin November 2017

Poverty incidence among families (percent)



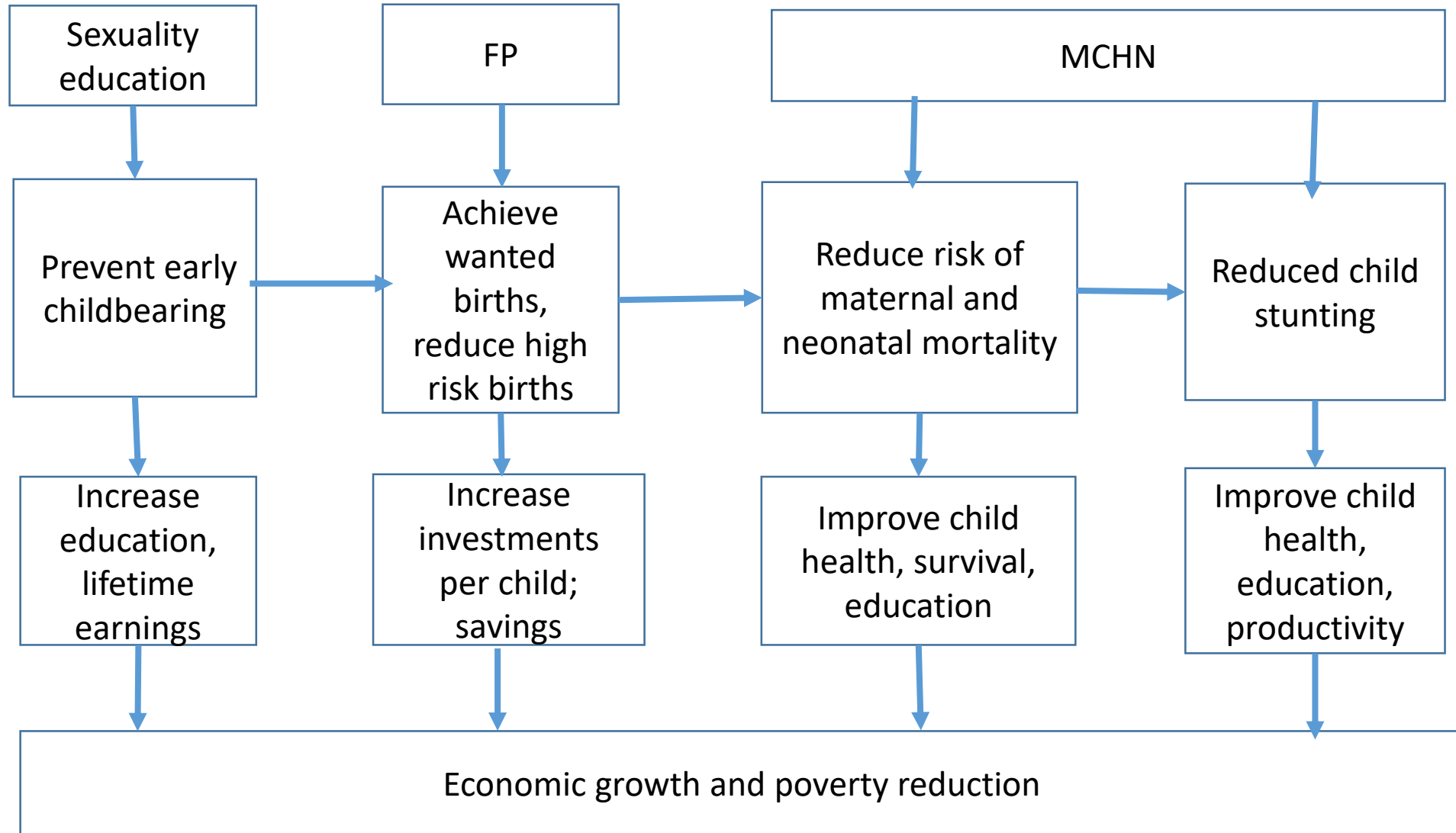
Source: Philippine Statistics Authority (2016). Official Poverty Statistics of the Philippines: Full Year 2015.

Poverty incidence and distribution of families by family size: 1991 and 2015



2. Economic gains from RPRH implementation: Key pathways

Economic gains from RPRH implementation: Key pathways



3. Estimating economic gains: RPRH principles and national policy goals, National Transfer Accounts (NTA) framework, and demographic dividends

3a. RPRH principles and
national policy goals

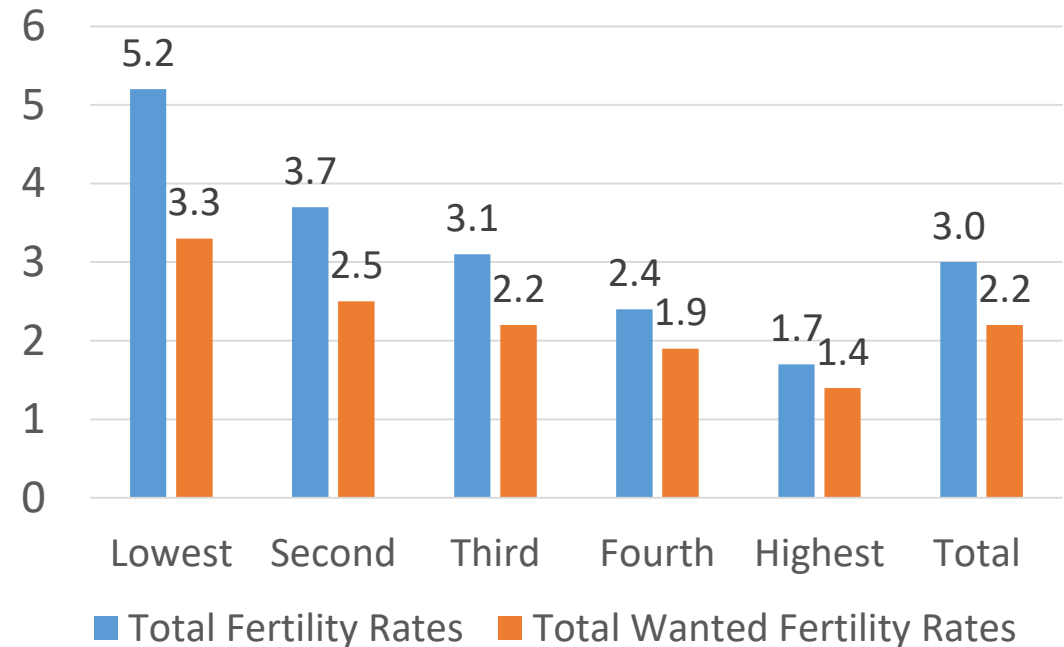
Guiding principles of RPRH implementation

- “The State shall promote programs that enable individuals and couples to have the number and children they desire...” (Sec.3, (f)).
“Each family shall have the right to determine its ideal family size” (Sec. 3, (k))
- “There shall be no demographic or population targets...” (Sec. 3, (l))
- “The provision of reproductive health care, information and supplies giving priority to poor beneficiaries as identified through the NHTS-PR and other measures of identifying marginalization must be the primary responsibility of the national government...” (Sec. 3, (g))

Achieving policy goals: Alternative scenarios

- Achieve wanted total fertility rate of 2.2 births per woman by 2022 (EO No. 12) and total fertility rate of 2.1 births per woman by 2025 (PDP 2017-2022)
- Delayed achievement of wanted total fertility rate of 2.2 per woman by 2032 and replacement fertility by 2035
- Focus RPRH implementation on poor families

Total Fertility Rates and Total Wanted Fertility Rates by Wealth Quintile, NDHS 2013

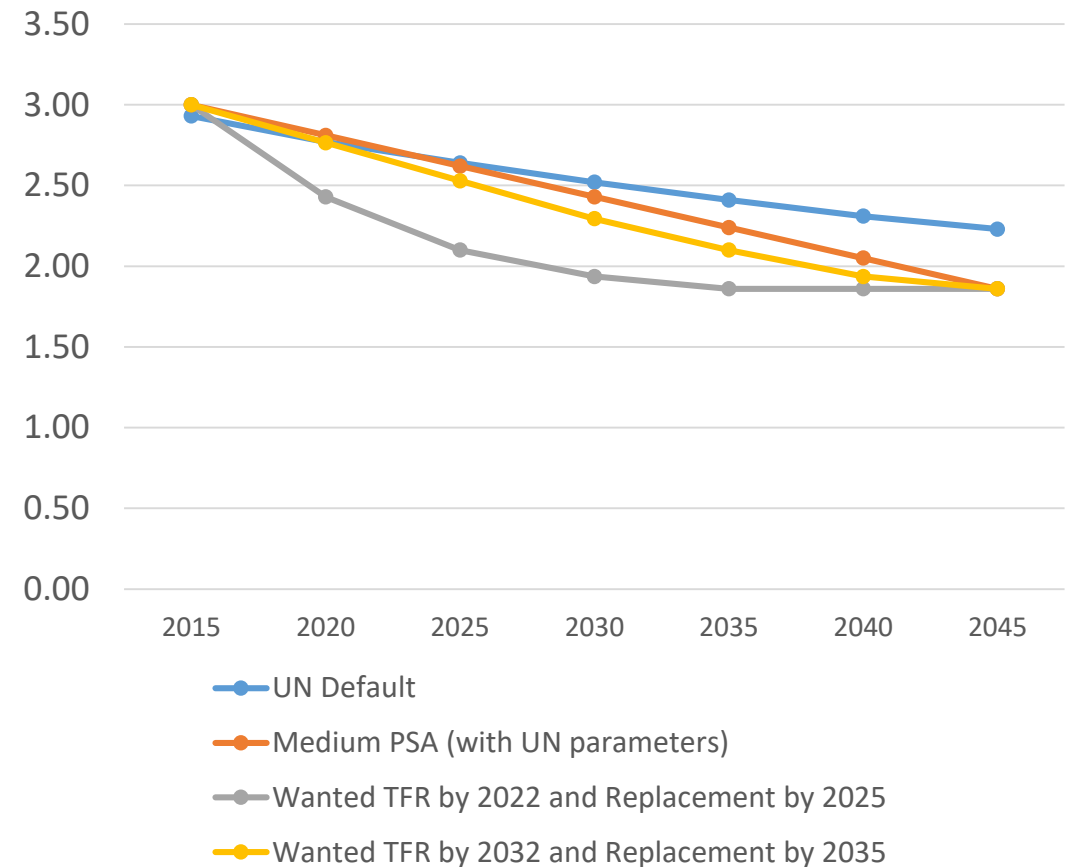


Achieving policy goals: Alternative scenarios

Total Fertility Rate Assumptions

	UN Default	Medium PSA (with UN parameters)	Wanted TFR by 2022 and Replacement by 2025	Wanted TFR by 2032 and Replacement by 2035
2015	2.93	3.00	3.00	3.00
2020	2.77	2.81	2.43	2.76
2025	2.64	2.62	2.10	2.53
2030	2.52	2.43	1.94	2.29
2035	2.41	2.24	1.86	2.10
2040	2.31	2.05	1.86	1.94
2045	2.23	1.86	1.86	1.86

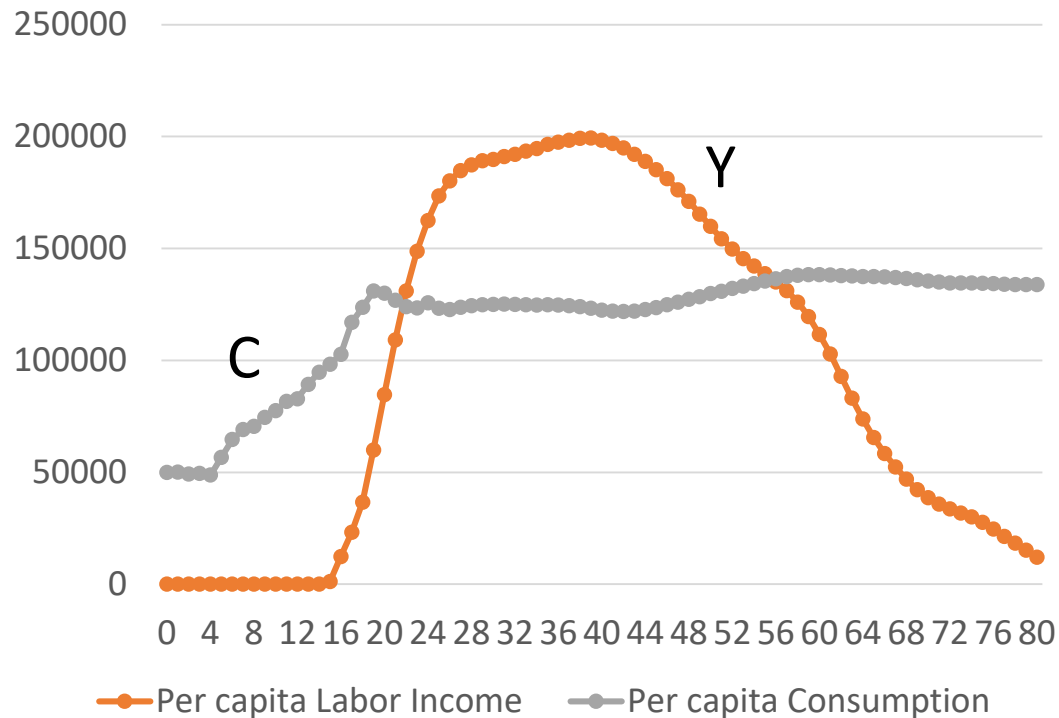
Total Fertility Rate (births per woman)



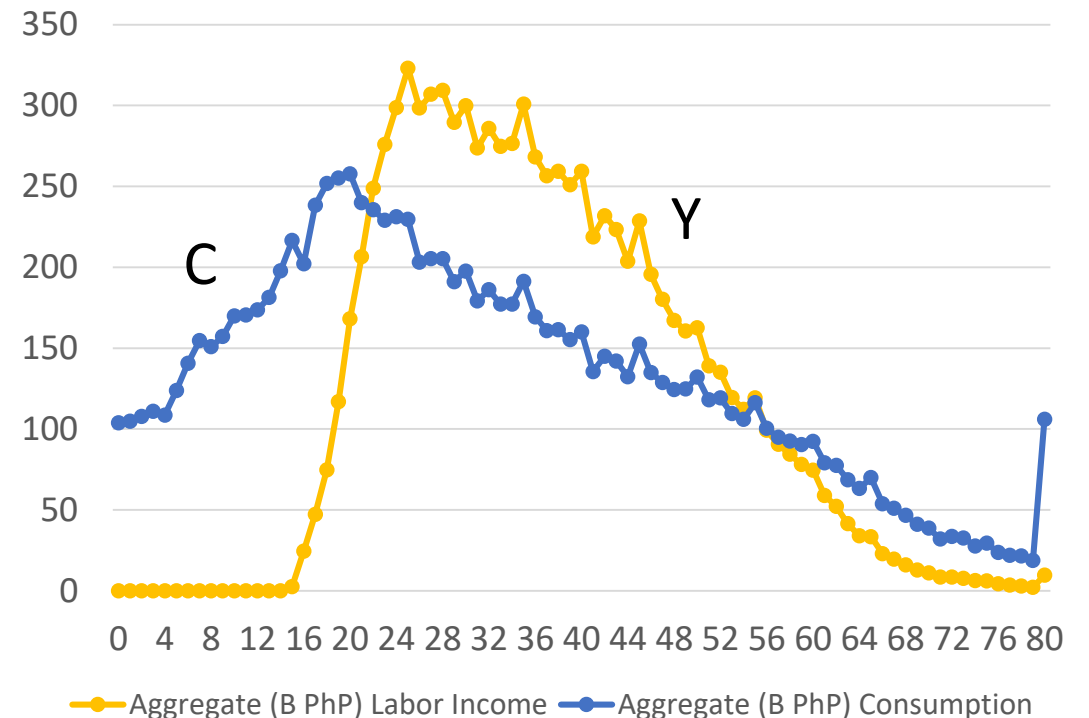
3b. National Transfer Accounts Framework

Economic life cycle: Consumption (C) and labor income (Y), Philippines 2015

Per Capita Consumption and Labor Income, 2015



Aggregate Consumption and Labor Income, 2015



Effect of age structure on economic growth

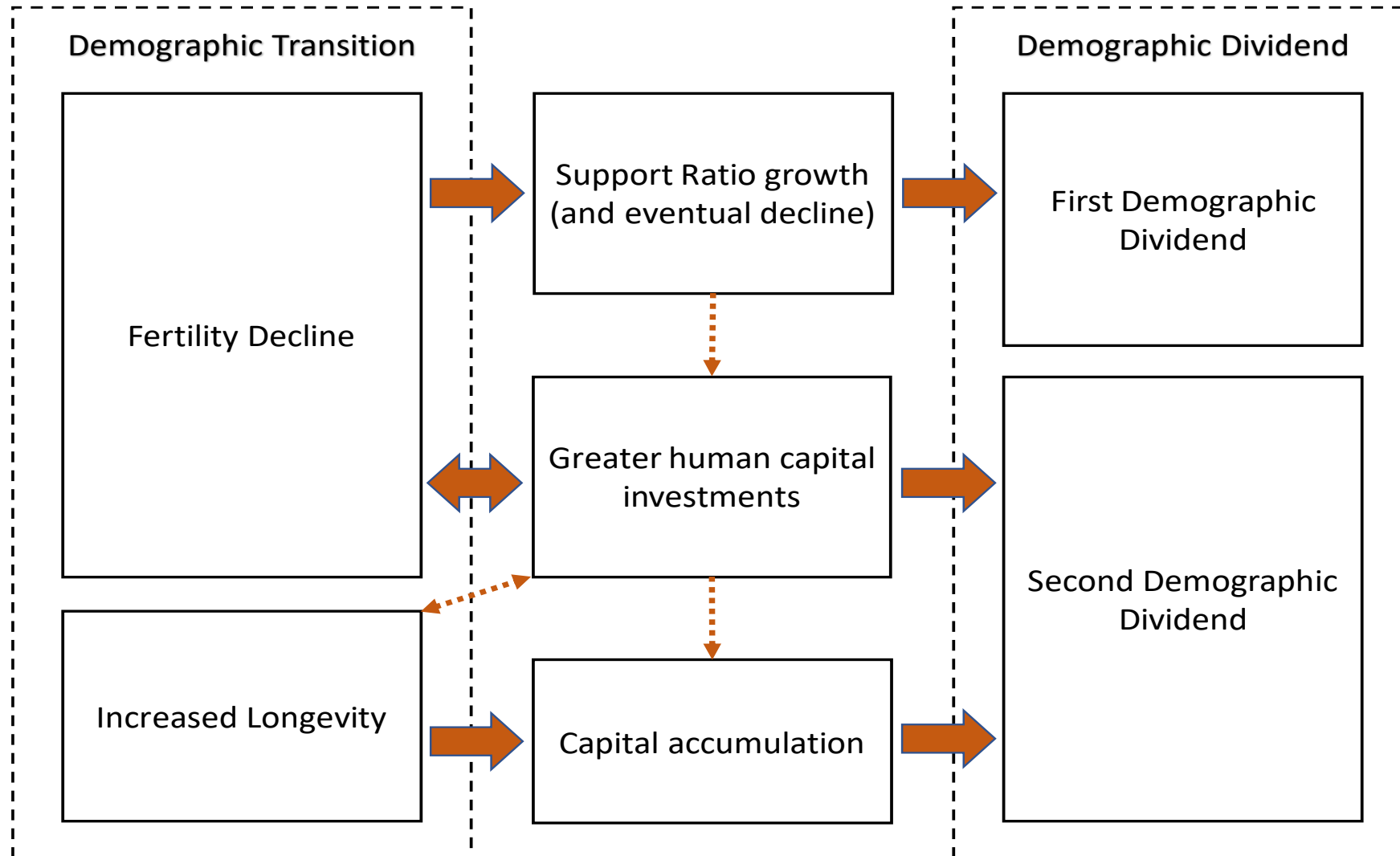
$$\frac{C(t)}{N(t)} = \left[(1 - s(t)) \frac{Y(t)}{L(t)} \right] \cdot \left[\frac{L(t)}{N(t)} \right]$$

Aggregate consumption per effective consumer depends on labor productivity as affected by different factors, and the support ratio, the ratio of effective workers to effective consumers, which captures the effect of changing age structure on the economy.

In terms of growth rates:

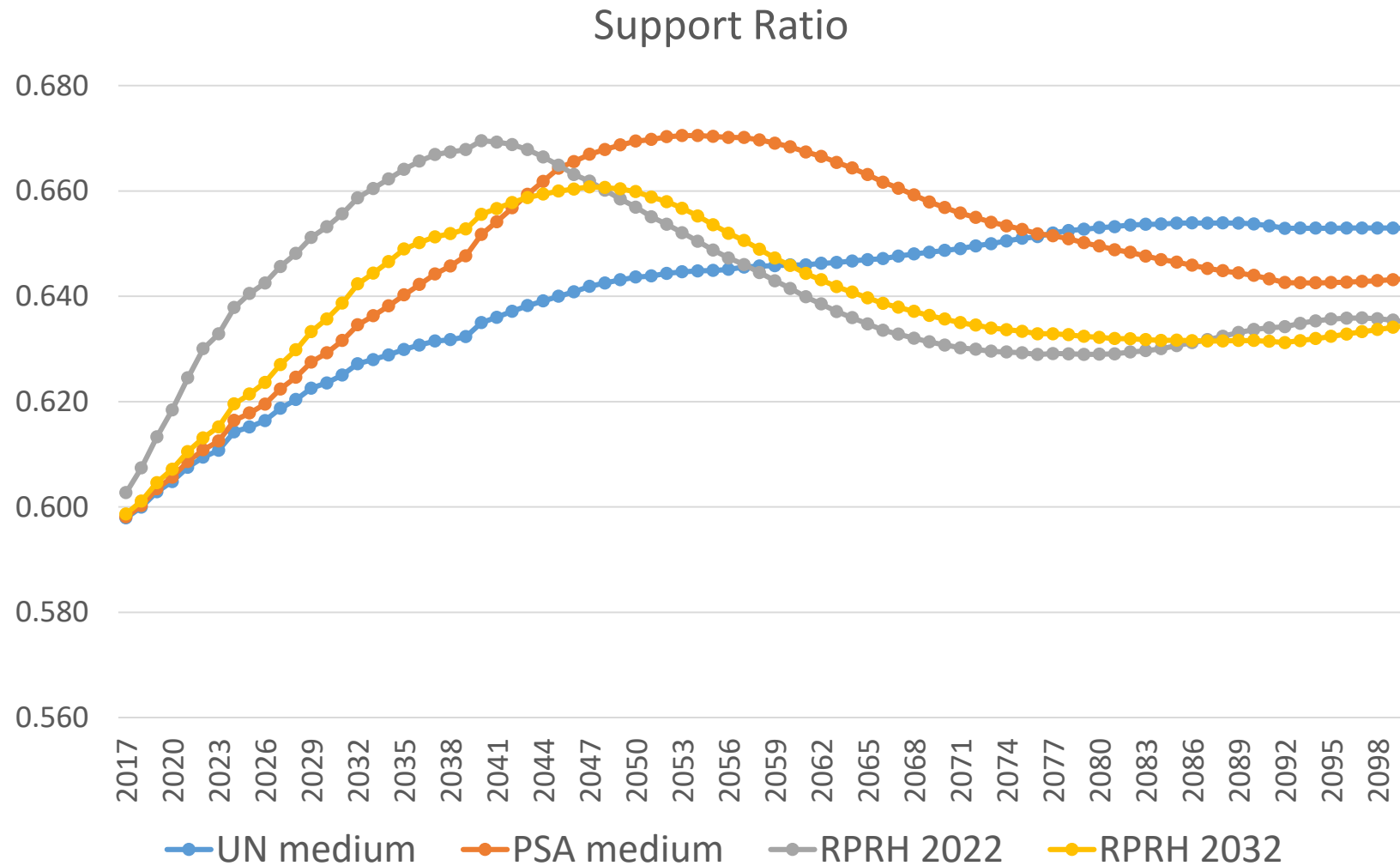
$$g \left[\frac{C(t)}{N(t)} \right] = g \left[(1 - s(t)) \frac{Y(t)}{L(t)} \right] + g \left[\frac{L(t)}{N(t)} \right]$$

Demographic transition and demographic dividend



3c: Estimates of economic gain:
Demographic dividends and
poverty impact

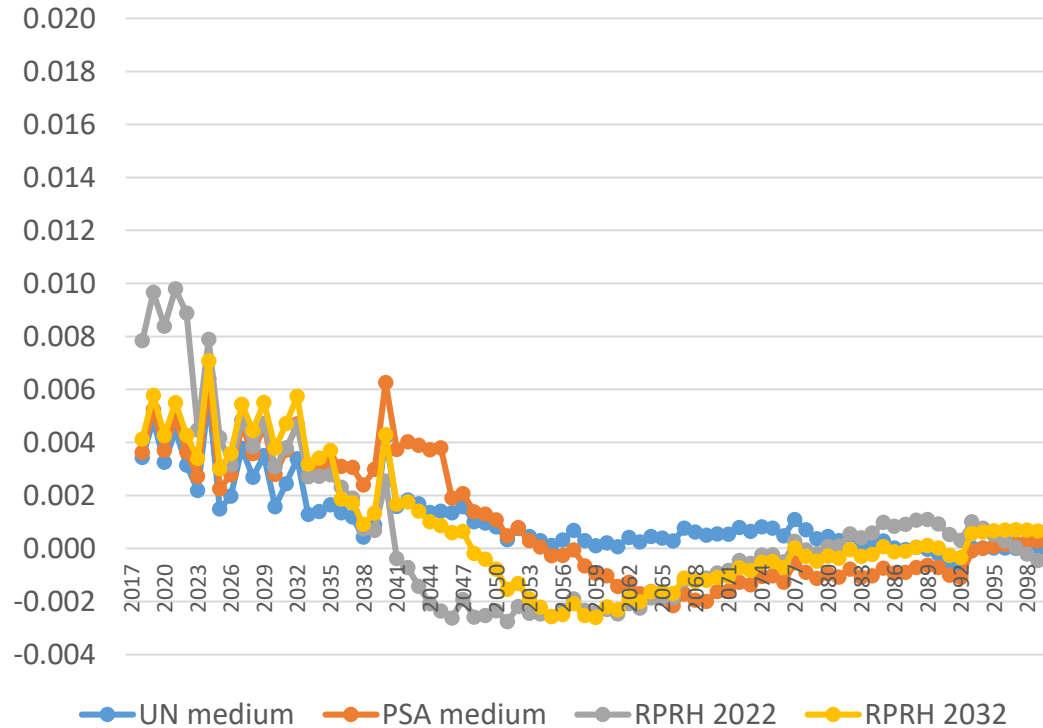
Support ratio: Effective workers per effective consumers



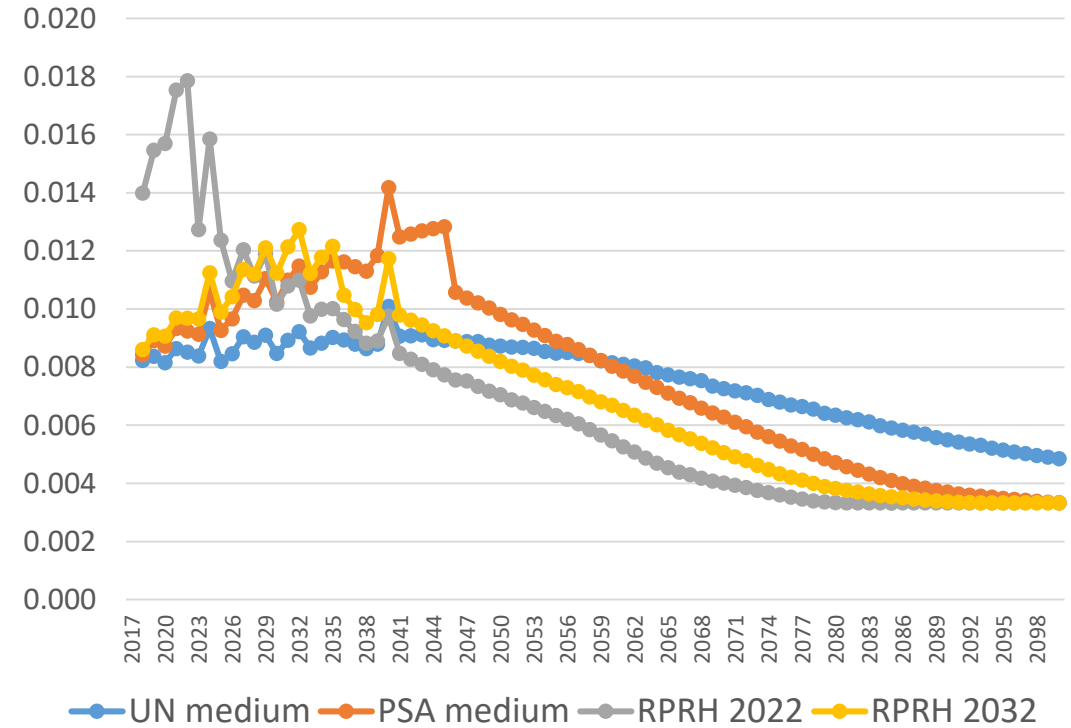
Abrigo, Orbeta and Herrin November 2017

First and second demographic dividends

First Demographic Dividend: Growth in Consumption Per Effective Consumer

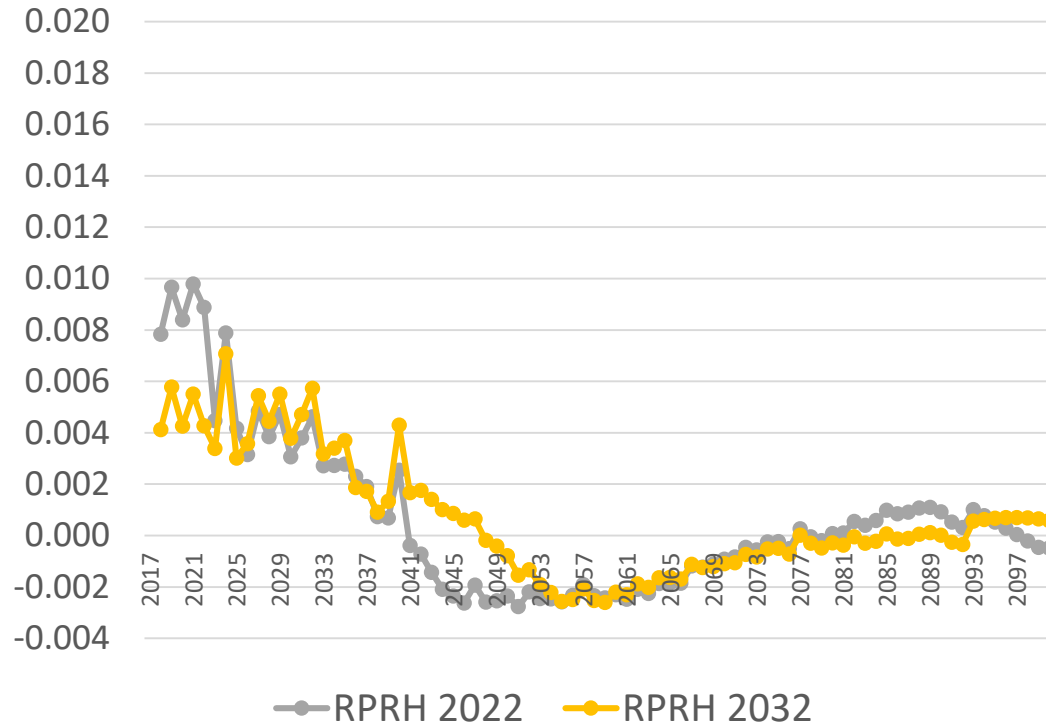


Second Demographic Dividend: Growth in Consumption Per Effective Consumer

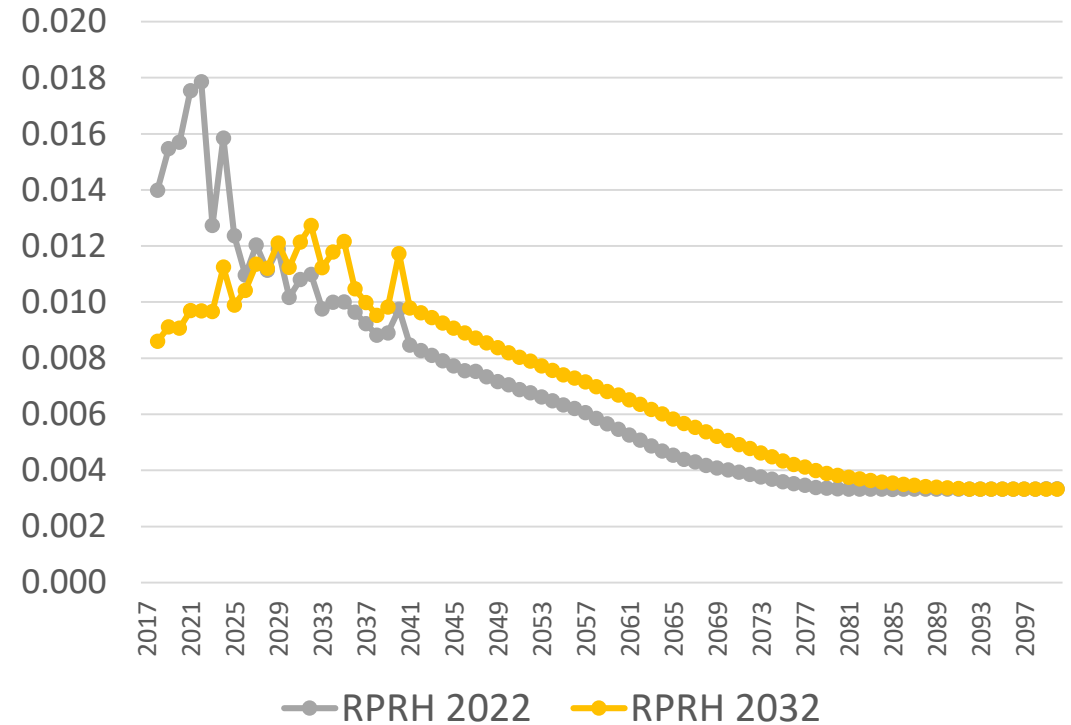


First and second demographic dividends

First Demographic Dividend: Growth in Consumption Per Effective Consumer

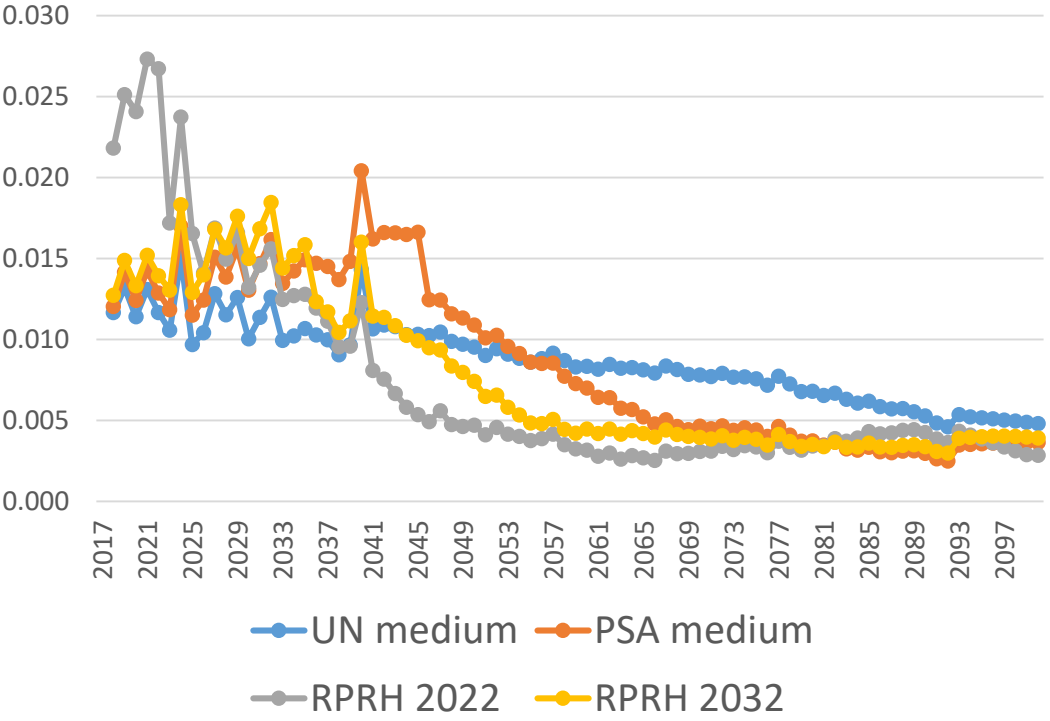


Second Demographic Dividend: Growth in Consumption Per Effective Consumer

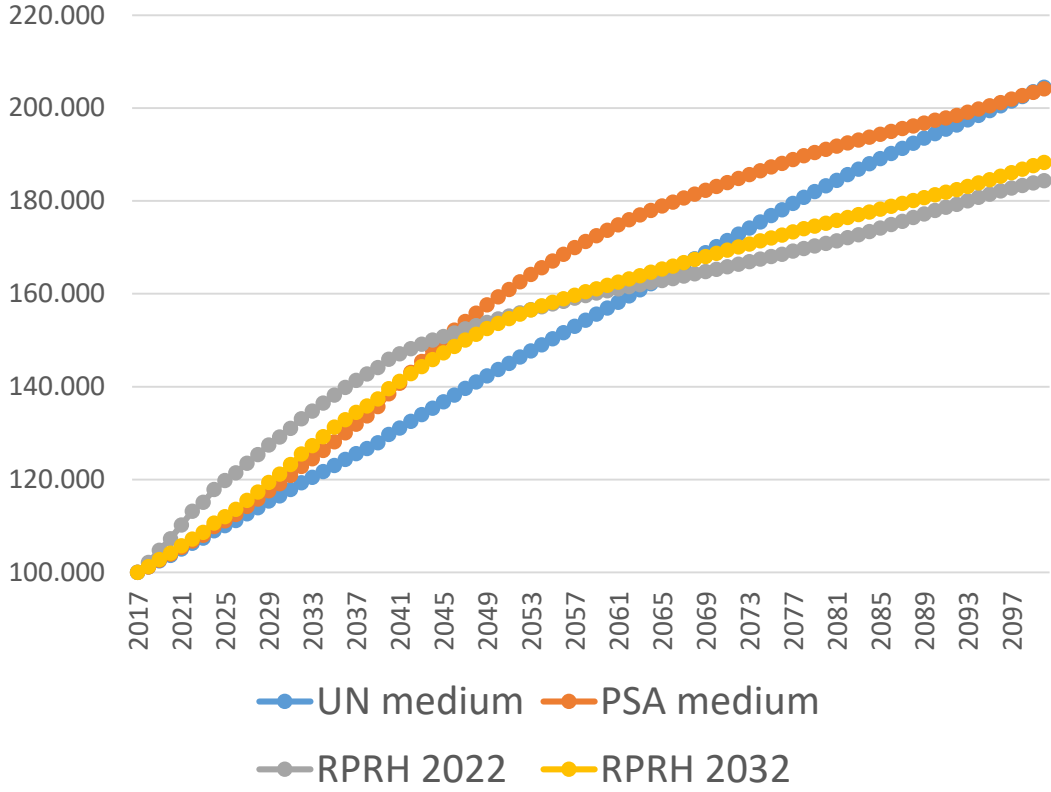


Total demographic dividend

Total Demographic Dividend: Growth in Consumption Per Effective Consumer

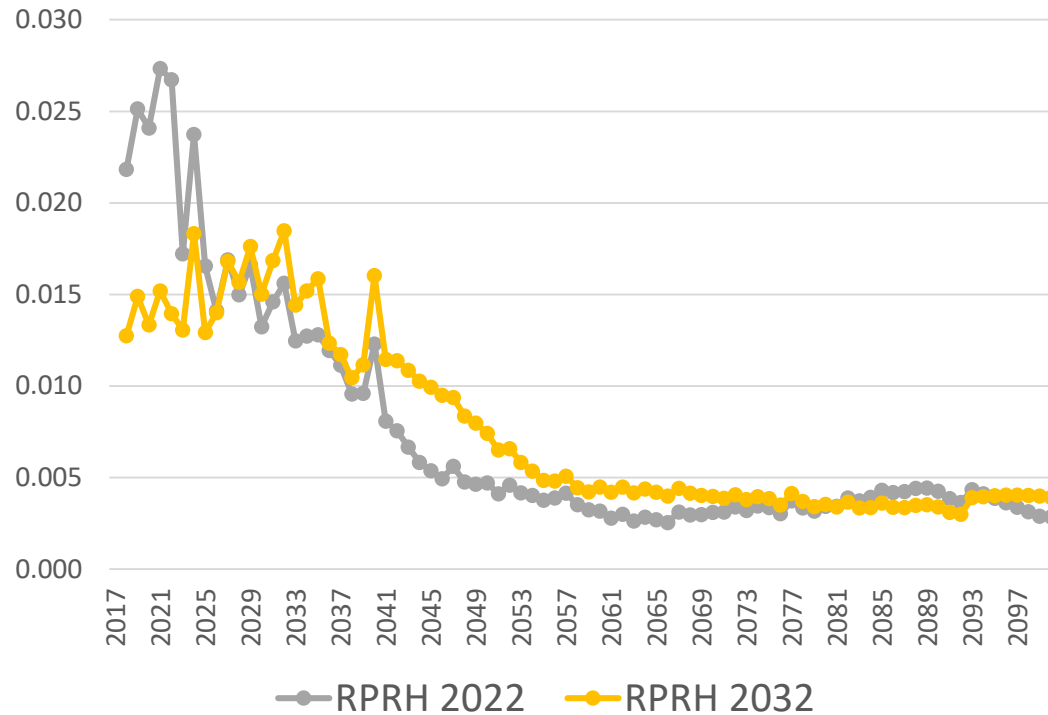


Demographic Dividend Index (2017=100)

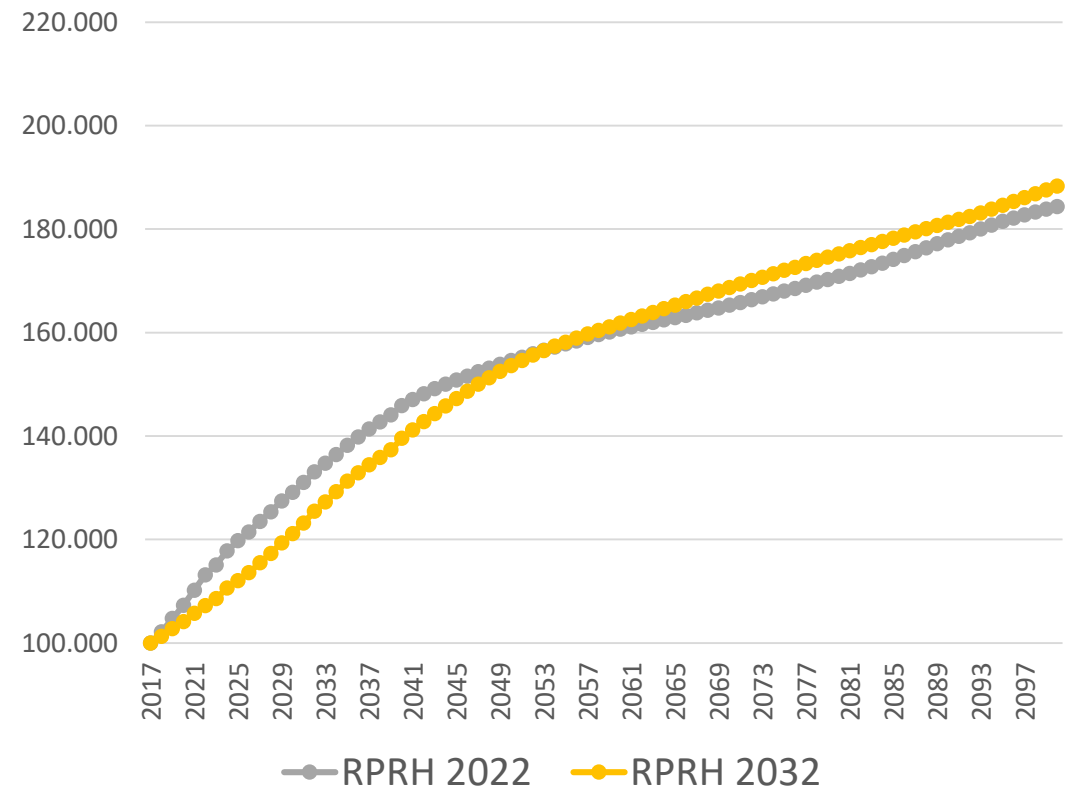


Total demographic dividend

Total Demographic Dividend: Growth in Consumption Per Effective Consumer



Demographic Dividend Index (2017=100)



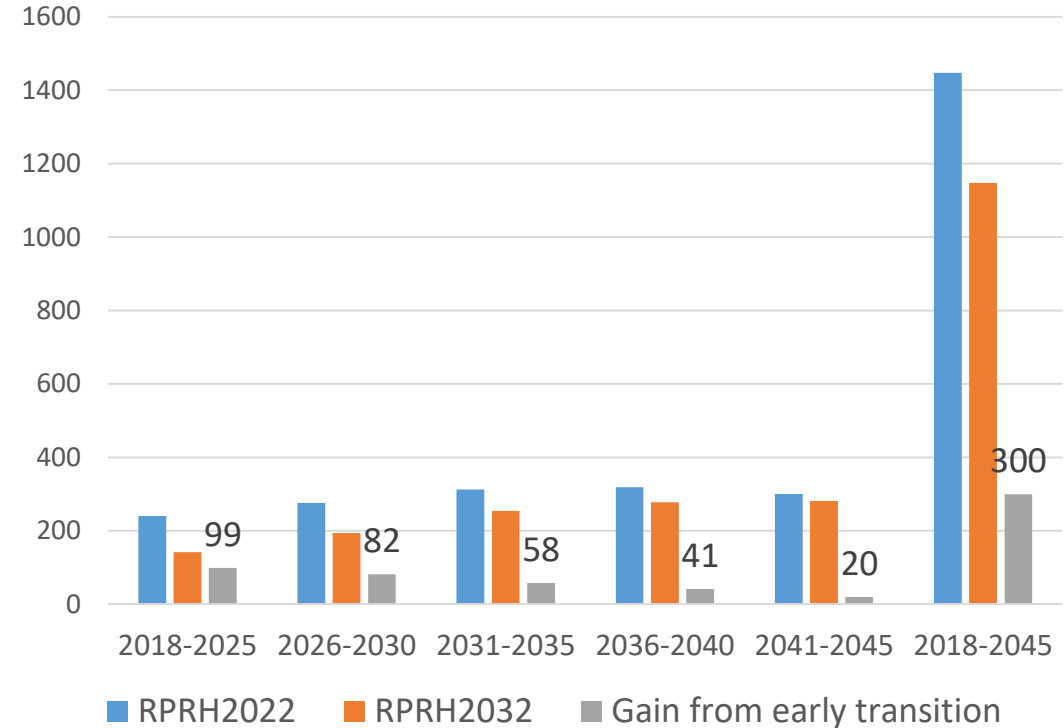
Present value of demographic dividend and gain from early transition

Present Value of Projected Demographic Dividend
(2017 billion USD discounted at 5 percent per annum)

	UN-medium	PSA-medium	RPRH2022	RPRH2032
2018-2025	120.4	131.3	240.4	141.4
2026-2030	152.7	175.4	275.6	193.9
2031-2035	187.1	226.4	312.3	253.9
2036-2040	202.3	259.1	318.5	277.5
2041-2045	209.8	283.8	300.5	280.9
2018-2045	872.5	1076.0	1447.3	1147.7

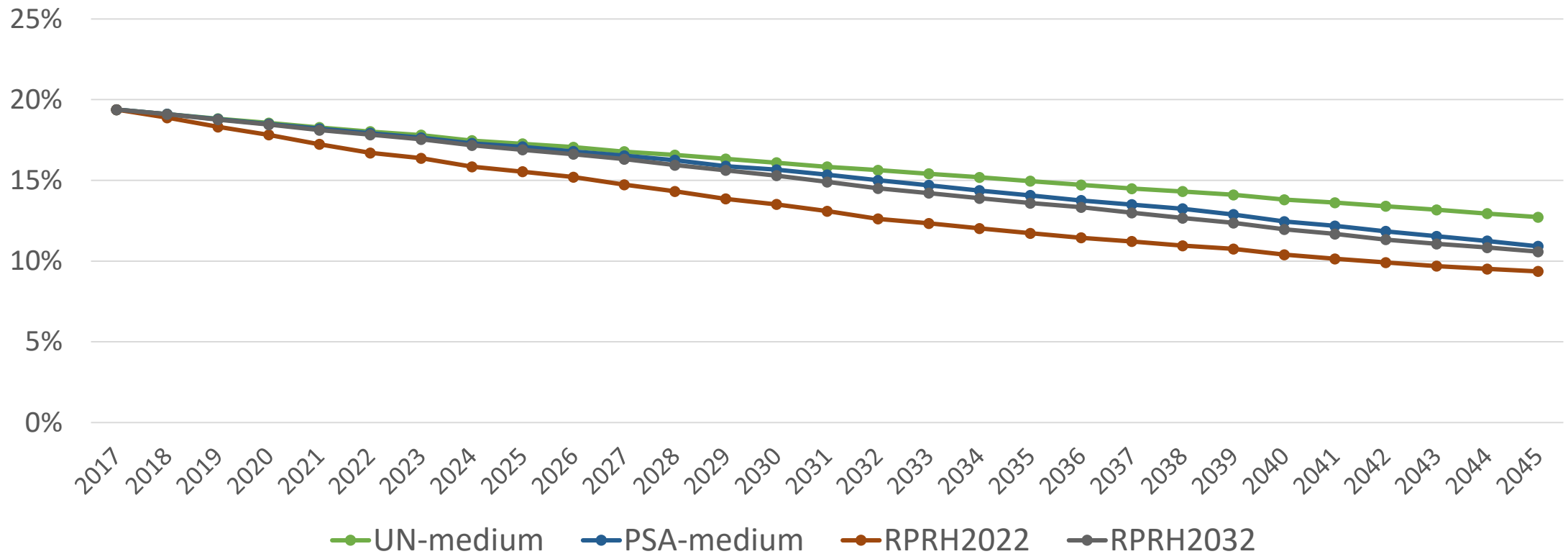
Source: Authors calculation

Present Value of Gain from Early Fertility Transition (Billion USD)



Poverty impact of demographic dividend

Poverty incidence (%) under alternative scenarios of economic gains from demographic dividends



Estimates using Balisacan and Pernia (2001) growth elasticity of poor household income

4. Some operational considerations

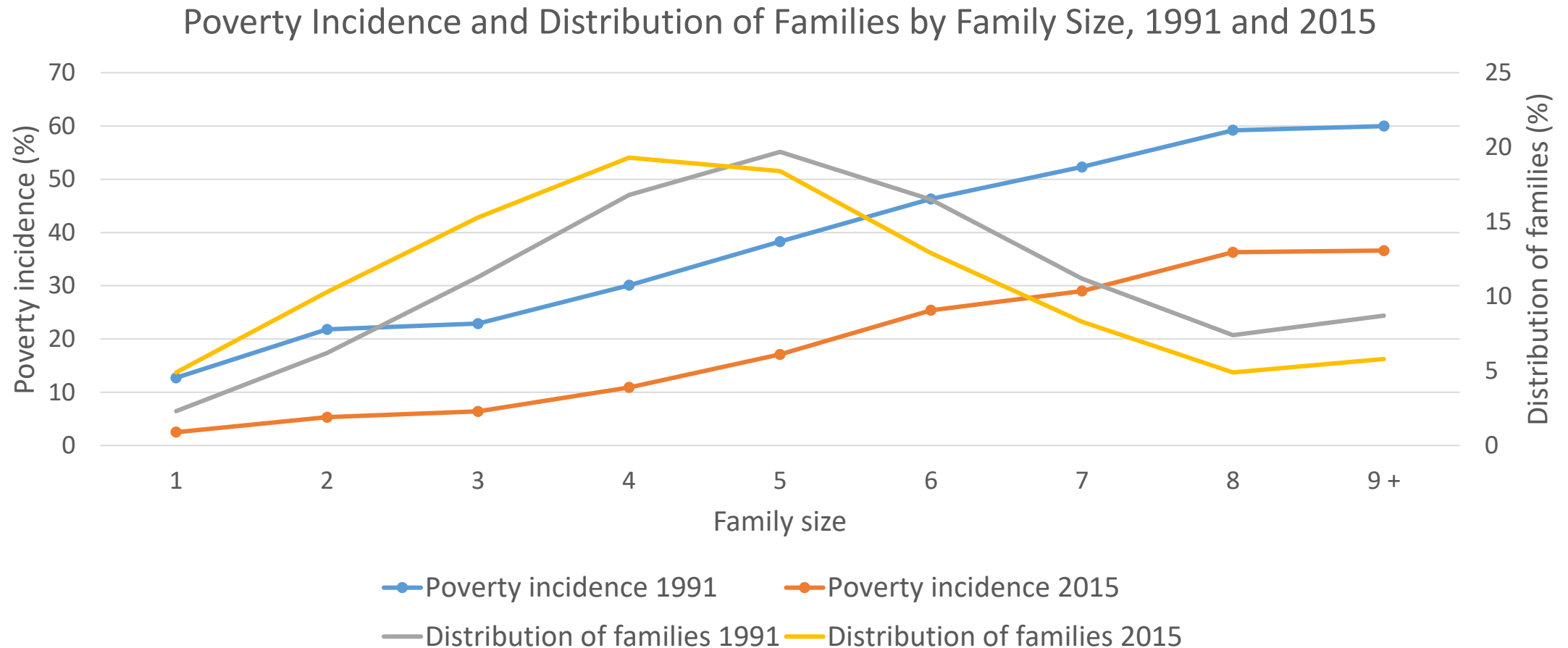
Operational considerations

- Design of strategy → implementation/delivery?
- Implementation at scale; do effects of specific interventions, by specific groups, in specific areas add up to achieve policy goals?
- Implementation by LGUs: Need for coordination. Is RPRH law sufficient to generate national-LGU and inter-LGU cooperation?
- Implementation by contracting FP (and MNCHN) services to serve identified beneficiaries, e.g., NHTS families

Mabuhay

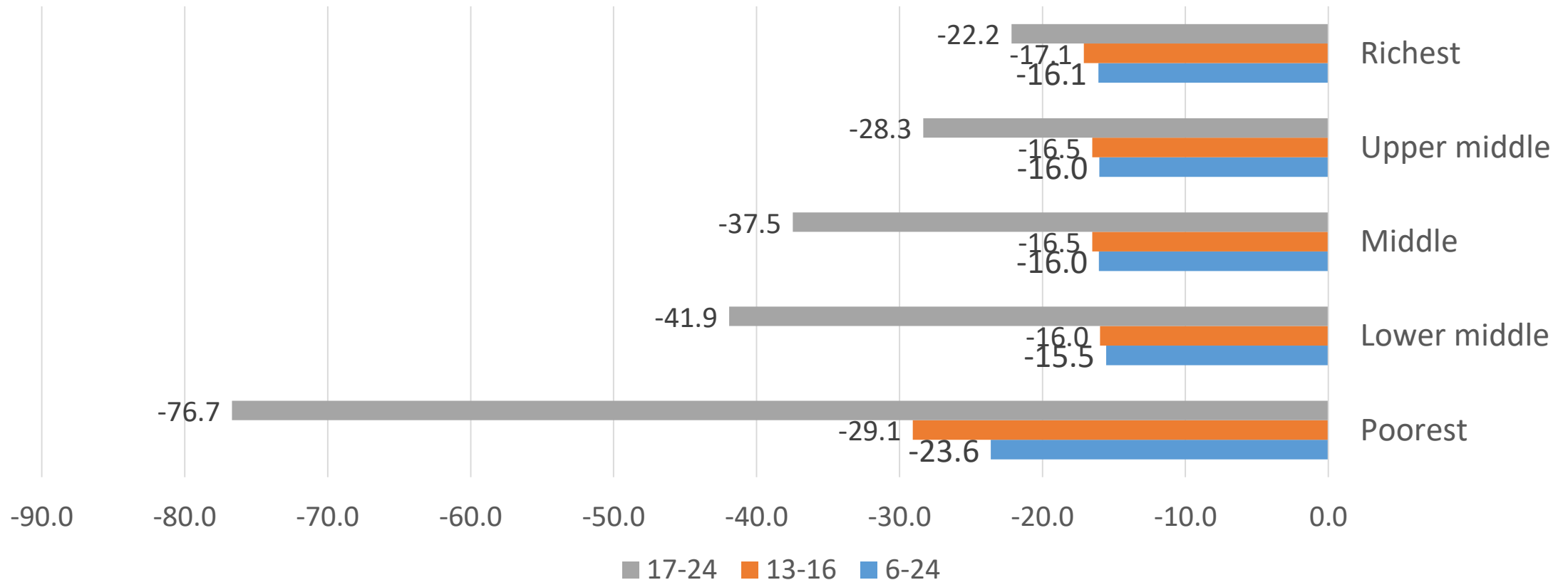
Annex: The effect of an additional child on human capital of children, labor supply of parents, and family savings

Poverty incidence and distribution of families by family size, 1991 and 2015



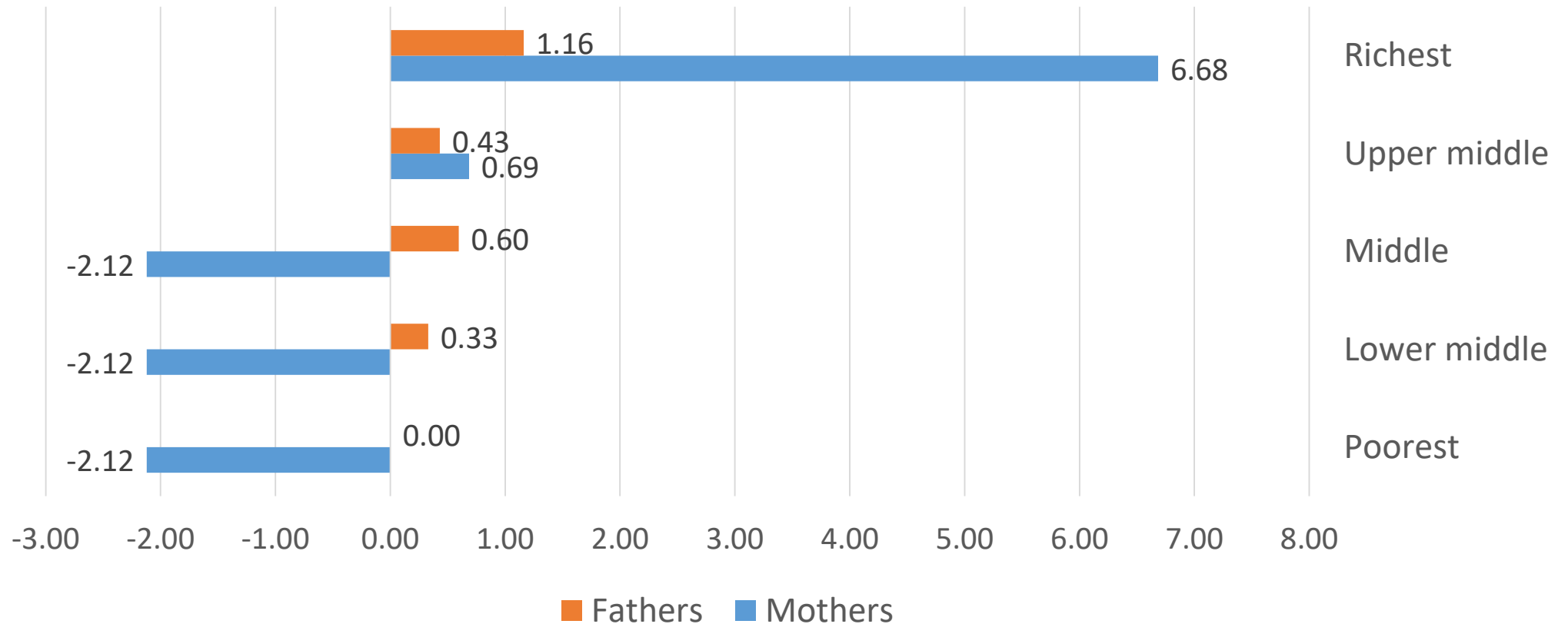
Impact of an additional child on school enrollment by income quintile

Impact of an additional child on school enrollment (%)



Impact of additional child on labor supply of parents

Impact of an additional child on the labor force participation of parents (%)



Impact of an additional child on family savings

