

Critical Examination of the IMF's proposed Permanent Income Hypothesis in terms of fiscal sustainability

The case study of Nigeria

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Introduction

- In principle, natural resources provide stepping stone for economic development
- However, international experience shows vulnerability of developing countries
- One of the main challenges of oil wealth management emanates from oil revenue uncertainty and volatility
- In response to fiscal struggles, IMF has proposed the PIH approach to fiscal planning

The main interest of the study:

- Given the current low oil price and no fiscal adjustment, to what extent can Nigerian fiscal stance deteriorate by 2050?
- How advantageous is PIH for Nigerian economic development and sustainability?
- How helpful is additional expenditure PIH?
- How the short-term oil-revenue fluctuations should be addressed via price rules?

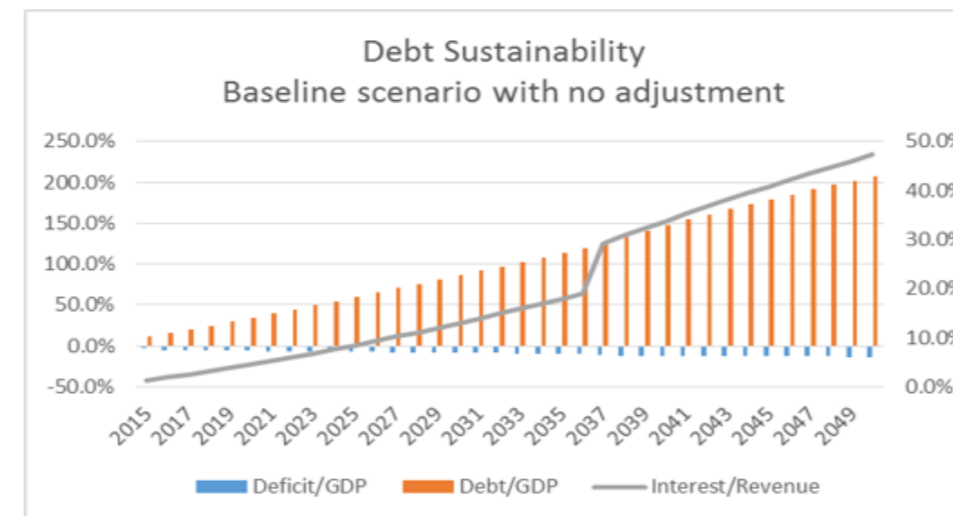
Methodology

- Government cash flow model
- Three sustainability ratios: deficit/GDP, debt/GDP and interest/revenue
- Deterministic Sensitivity Analysis of three different fiscal frameworks

- Monte-Carlo simulation of additional expenditure PIH
- Variables for analysis: oil price, exchange rate, oil production, government take
- Key parameters: Oil wealth, expenditure rate

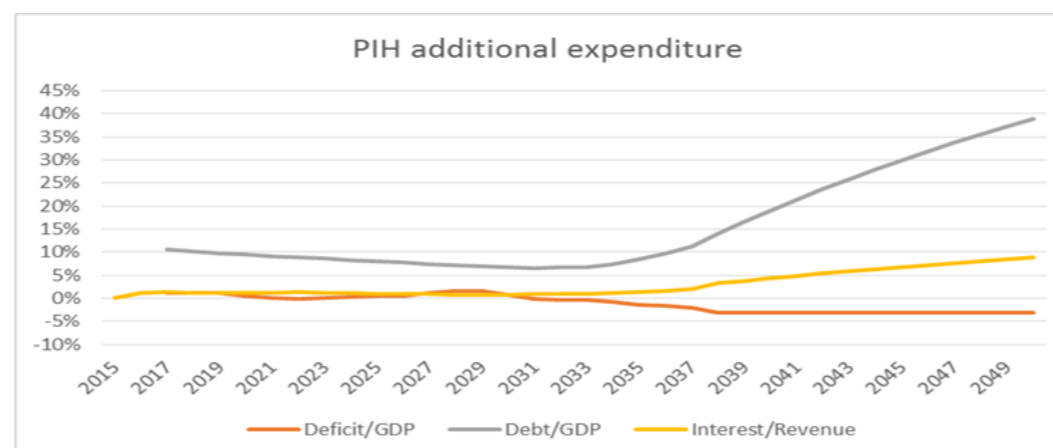
Results

Nigerian fiscal stance could worsen significantly

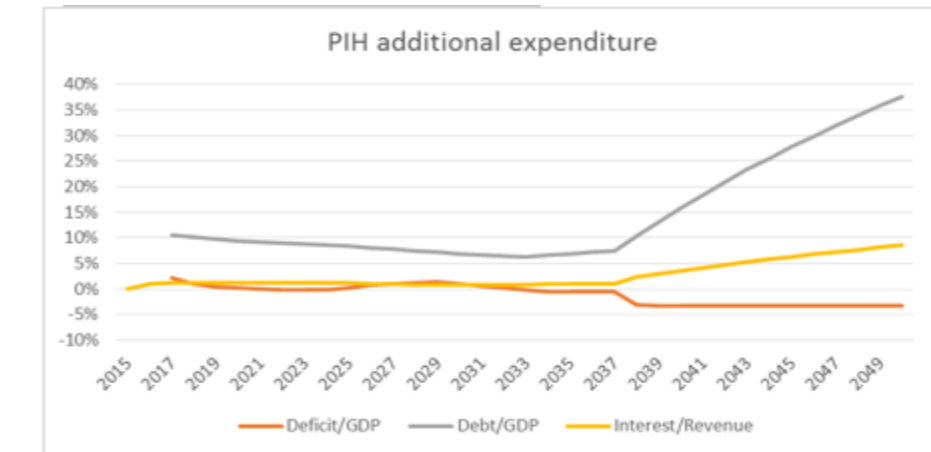


- Under the new framework constructed, Nigerian government could spend as much as 41% more than that stipulated by PIH
- If more prudent approach is chosen, Nigeria can increase its spending by 21%

Sustainability ratios under the new framework constructed



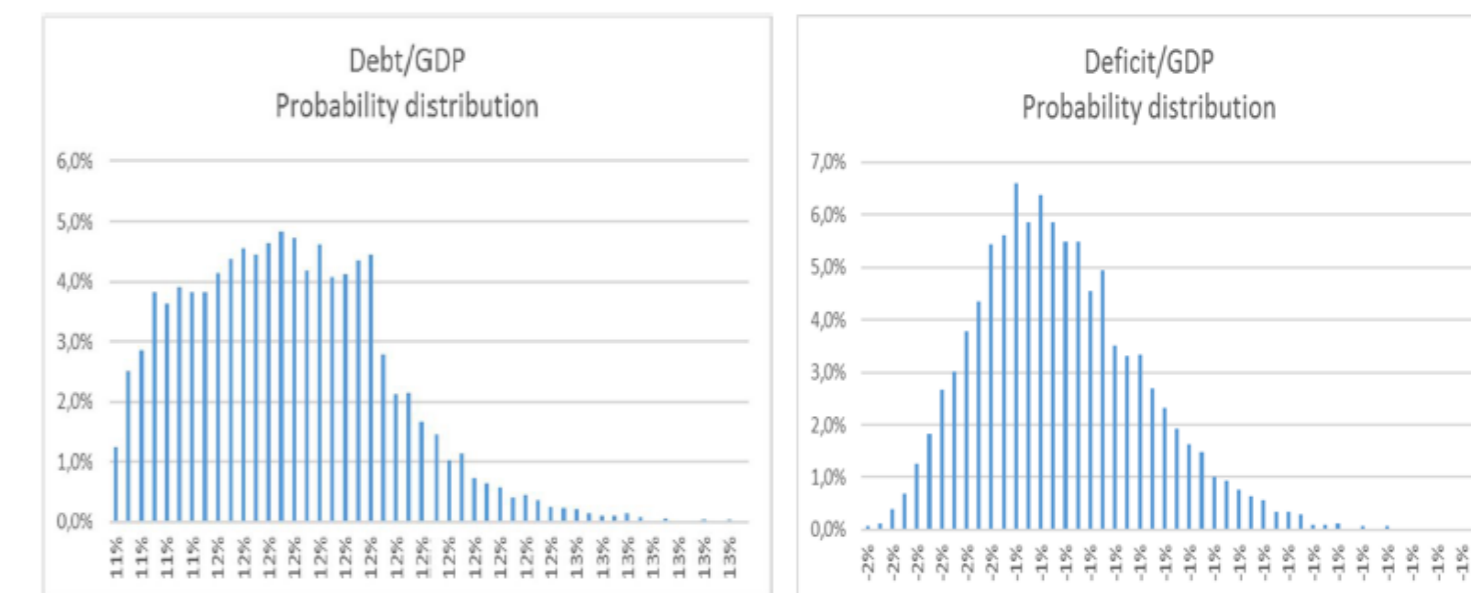
5-MA snapshot of PIH-AE framework



Comparisons

Scenarios	Baseline	PIH	PIH with additional expenditure
Deficit/GDP			
Years exceeding 3%	36	0	0
Average	-9%	1%	-1%
Maximum	-13%	-1%	-3%
Debt/GDP			
Years exceeding 60%	25	0	0
Average	105%	8%	16.0%
Maximum	208%	12%	39.0%
Interest/Revenue			
Average	21%	1%	3%

Monte-Carlo simulation of sustainability ratios under the additional expenditure PIH



Conclusions

- PIH framework not suitable for Nigerian development needs
- Alternative fiscal frameworks should be devised
- Oil price uncertainty addressed by 5-year MA