

Spending Baselines and Wage Bill Issues

IMF Technical Assistance Mission

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Structure of Presentation

- Wage bill issues
 - Wage bill baselines
 - Public-private wage differentials (premia/deficits)
- Health baseline
 - Current work
 - Next phase
- Agriculture & Rural Development baseline
 - Current work
 - Next phase

Wage Bill Baselines

- Alternative (complementary) approaches
 - Structural modelling
 - Econometric
- Structural modelling
 - Modelling movement through wage grid matrix
 - Automatic age/tenure increases (movement down)
 - Promotions (movement across)
- Econometric
 - Returns to age in Mincer regression

Structural Modelling

- Have modelled “movement down” (age)
 - Public sector (excluding education and health)
 - Wage baseline projection= 0.5 of a percent per year
 - Expect that wage bill pressures slightly higher when include “movement across) (promotion; management duties)
- Way forward
 - Estimate movement down for other public sector components
 - Estimate movement across
 - Assumptions in short term
 - Better data in medium term
 - Returns beyond baselines: policy reforms

Econometric Analysis

- Mincer regression analysis applied to public sector (2016)
 - Individual wage levels regressed on individual characteristics (gender, education, age, occupation, region....)
 - Including occupation (manager) for movement down (keeping cohort characteristics fixed)=0.5 of a percent
 - Excluding occupation for “up and down”=0.6 of a percent
- Way forward
 - Rely on econometrics for now.....
 -but anchored on structural for validity test
 - Enhance econometric for different sectors and years (databases?)
 - Continue to strengthen structural approach

Public-Private Wage Differentials

- Range of approaches already identified (simple to sophisticated)
 - Ordinary-least squares with public dummy variable
 - Oxaca-Blinder decomposition (like many dummies)
 - Quantile regressions focusing on overall distribution
 - Quantile + Oxaca decomposition
- Way forward
 - Start simple, then more sophisticated
 - Testing robustness and enhancing policy relevance
 - OLS with finer dummy classifications
 - Separate by gender then across skill and age groups
 - With and without occupation controls

Current Work on Health Baselines

- Move from economic to program structure provides a good basis for baselines and for policy analysis. Scope for further break ups for larger items e.g. generic and patent drugs
- Econometric approach: useful for a medium term scenario in a stable policy environment. But not strictly NPC as is based on past patterns of new policies.
- Alternative approach:
 - assumes current level of services, adjusted for inflation, and includes savings from spending review
 - uses wages as price parameter for labor-based services such as primary care
 - uses CPI for non-wage costs
 - would potentially provide a conservative estimate of NPC as it does not account for volume growth

Way Forward on Health Baselines: Next Phase

- Prepare baseline, starting from alternative approach, and incorporating simple volume assumption where justified
 - e.g. specialized care. Look at recent expenditure growth, and by assuming a level of price growth (based on wages), impute a level of volume growth
- Identified one-offs or permanent shifts should be taken into areas where policy has changed recently, including from spending reviews

Way Forward on Health Baselines: Medium Term

- Develop projections for each of the major program areas based on more detailed volume and average price data.
 - This requires data from HIC on number of services and average price per service
- Develop models based on expected price and volume growth. Recent growth rates are often best estimates as they reflect the impact of current policy. Work closely with MoH to get agreement on methodology

Agriculture Baseline - CAP

- Baseline is straight forward with the exception of the volatility of project-based transfers (pillars 2 and 3 of CAP).
- Baseline for pillar 1 relatively stable, and mainly requires projection of price changes
- To construct baselines for (volatile) spending on pillars 2 and 3 requires construction of an underlying path which represents the resources provided under the CAP agreement.
 - Assessment of likely outstanding funds at end of agreement needs to be made
 - The current position in relation to the path should be factored in projecting remaining spending over the period of the agreement
- Projections for 2021 onwards will require an assumption of the likely of funding under the next phase

Agriculture Baseline – State Budget

- Wage: apply the general approach to wage baselines
- Goods and services & transfers to lower levels of government: baselines based on current level of activity adjusted for inflation