Assessing Development Strategies to Achieve the MDGs in Uganda

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Overview

Objectives of the paper

- Assess whether all or some of the MDGs will be attained in the current economic climate and under prevailing trends.

- Explore the role of public policy, including the cost implications, of accelerating progress to ensure that the MDG targets would be met.

Uganda: Selected macroeconomic indicators, 1989/90-2009/10

	1989/90 to 1993/94	1994/95 to 1999/00	2000/01 to 2004/5	2005/6 to 2009/10
Real Sector				
Real GDP growth (per cent)	5.6	6.0	6.7	8.2
Private investment (per cent of GDP)	8.0	-	14.1	17.7
Public investment (per cent of GDP)	6.6	-	4.7	4.7
Private consumption (per cent of GDP)	89.4	-	77.8	77.4
Public consumption (per cent of GDP)	9.2	-	13.9	11.4
Fiscal Sector				
Government domestic revenue (per cent of GDP)	7.8	11.3	12.2	12.8
Government expenditure (per cent of GDP)	17.9	18.0	22.6	18.2
Fiscal deficit excluding grants (per cent of GDP)	-10.1	-6.7	-10.4	-5.4
Domestic interest payments (per cent of GDP)	1.6	0.9	1.5	1.2
Domestic borrowing (per cent of GDP)	-0.1	-1.1	0.0	-0.2
External Sector				
Exports of goods (per cent of GDP)	6.7	9.5	8.4	15.0
Imports of goods (per cent of GDP)	21.3	19.6	16.8	22.9
Trade deficit (per cent of GDP)	-14.5	-10.1	-8.4	-8.0
Public debt stock (per cent of GDP)	75.8	62.4	58.6	19.1
Donor aid (per cent of GDP)	11.2	10.7	10.7	6.8
Foreign Direct Investment (FDI) (per cent of GDP)	0.1	2.5	3.1	4.9
Monetary Sector				
Inflation(Headline)	30.9	5.8	4.3	9.0
Reserves in months of imports	1.5	5.6	6.3	5.3

Source: Uganda Bureau of Statistics and Bank of Uganda.

3. Progress towards the MDGs in Uganda

On track/achieved (7)

Goal 1: Eradicate extreme poverty and hunger	
Target 1.A: Halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day	**ON TRACK**
Target 1.C: Halve, between 1990 and 2015, the proportion of people who suffer from hunger	**ON TRACK**
Goal 3: Promote gender equality and empower women	
Target 3.A: Eliminate gender disparity in primary and secondary education, preferably by 2005, and in all levels of education no later than 2015	**ON TRACK**
Goal 6: Combat HIV/AIDS, malaria and other diseases	
Target 6.B: Achieve, by 2010, universal access to treatment for HIV/AIDS for all those who need it	**ON TRACK**
Goal 7: Ensure environmental sustainability	
Target 7.C: Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation	**ON TRACK**
Goal 8: Develop a global partnership for development	
Target 8.D: Deal comprehensively with the debt problems of developing countries through national and international measures in order to make debt sustainable in the long term	**ACHIEVED**
Target 8.F: In cooperation with the private sector, make available the benefits of new technologies, especially information and communications	**ON TRACK**

Slow/stagnant (8)

Goal 2: Achieve universal primary education	
Target 2.A: Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling	**SLOW**
Goal 4: Reduce child mortality	
Target 4.A: Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate	**SLOW**
Goal 5: Improve maternal health	
Target 5.A: Reduce by three quarters, between 1990 and 2015, the maternal mortality ratio	**SLOW**
Target 5.B: Achieve, by 2015, universal access to reproductive health	**SLOW**
Goal 6: Combat HIV/AIDS, malaria and other diseases	
Target 6.C: Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases	**SLOW**
Goal 7: Ensure environmental sustainability	
Target 7.A: Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources	**SLOW**
Target 7.B: Reduce biodiversity loss, achieving, by 2010, a significant reduction in the rate of loss	**SLOW**
Goal 8: Develop a global partnership for development	
Target 8.E: In cooperation with pharmaceutical companies, provide access to affordable essential drugs in developing countries	**STAGNANT**

Reversal (2)

Goal 6: Combat HIV/AIDS, malaria and other diseases	
Target 6.A: Have halted by 2015 and begun to reverse the spread of HIV/AIDS	**REVERSAL**
Goal 8: Develop a global partnership for development	
Target 8.B: Address the special needs of the least developed countries	**REVERSAL**

No target (2)

| Goal 1: Eradicate extreme poverty and hunger	
Target 1.B: Achieve full and productive employment and decent work for all, including women and young people	**NO TARGET**
Goal 7: Ensure environmental sustainability	
Target 7.D: By 2020, to have achieved a significant improvement in the lives of at least 100 million slum dwellers	**NO TARGET**

Progress towards MDG1
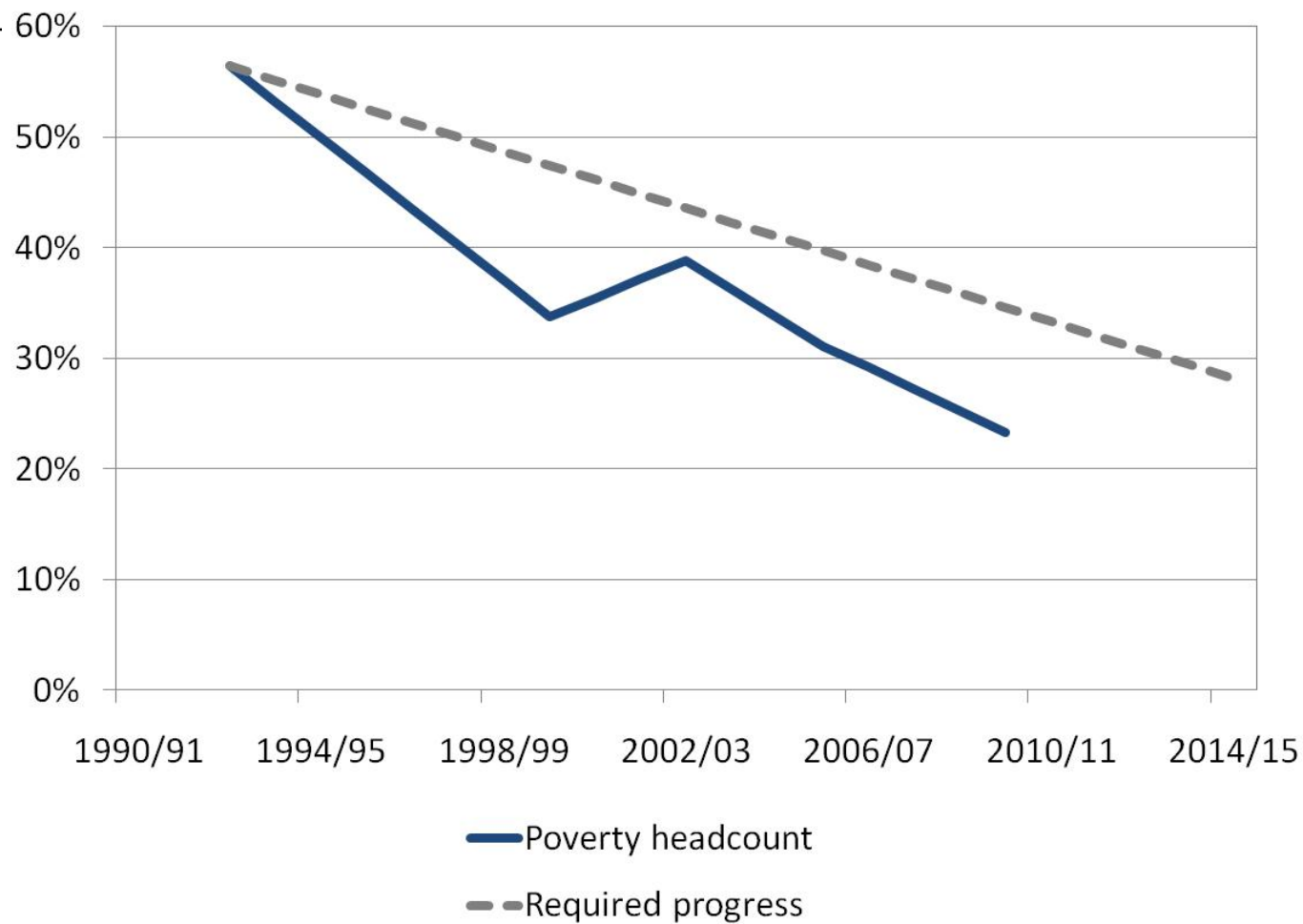
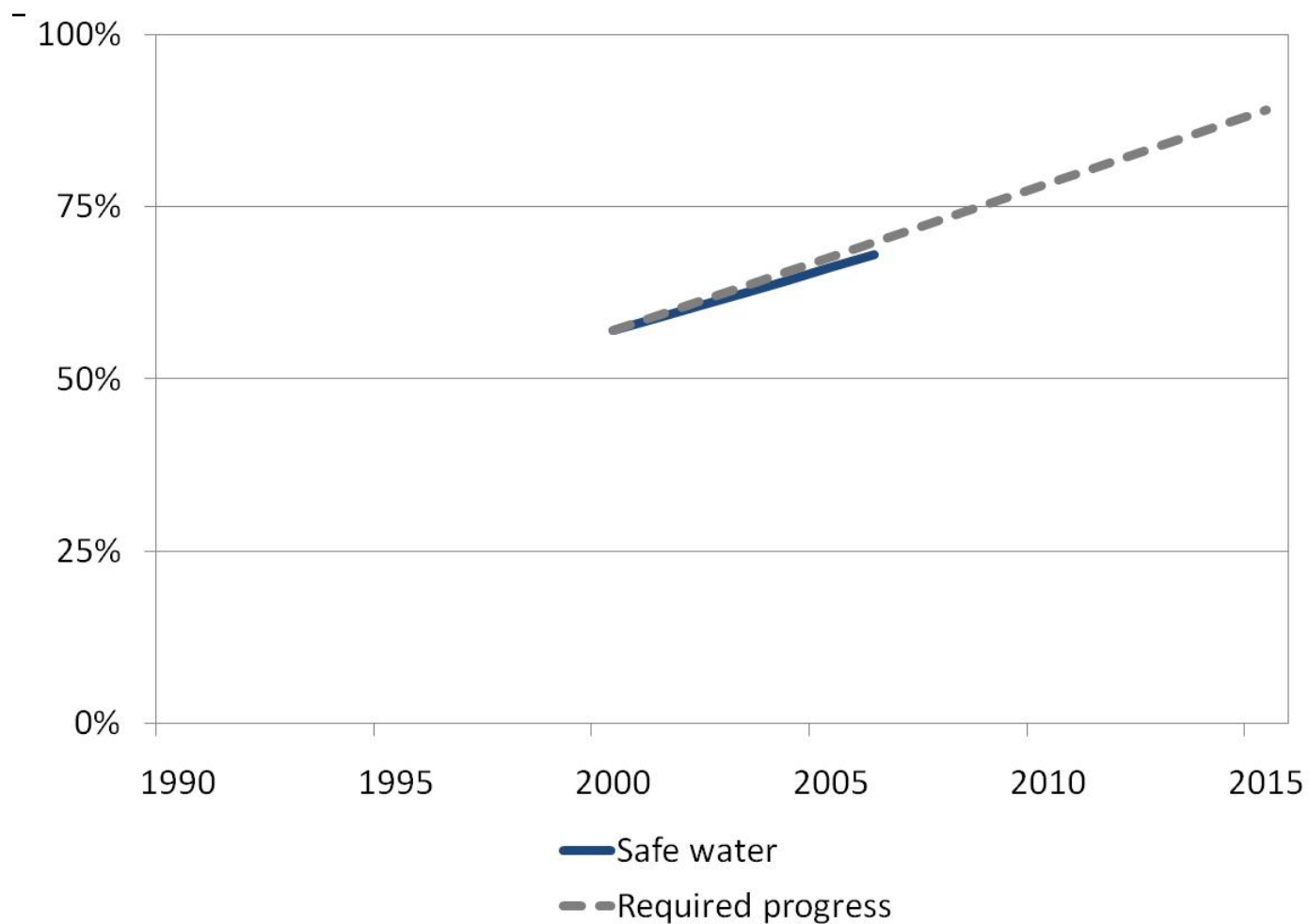*Sources:* UBOS and EPRC

Progress towards MDG2
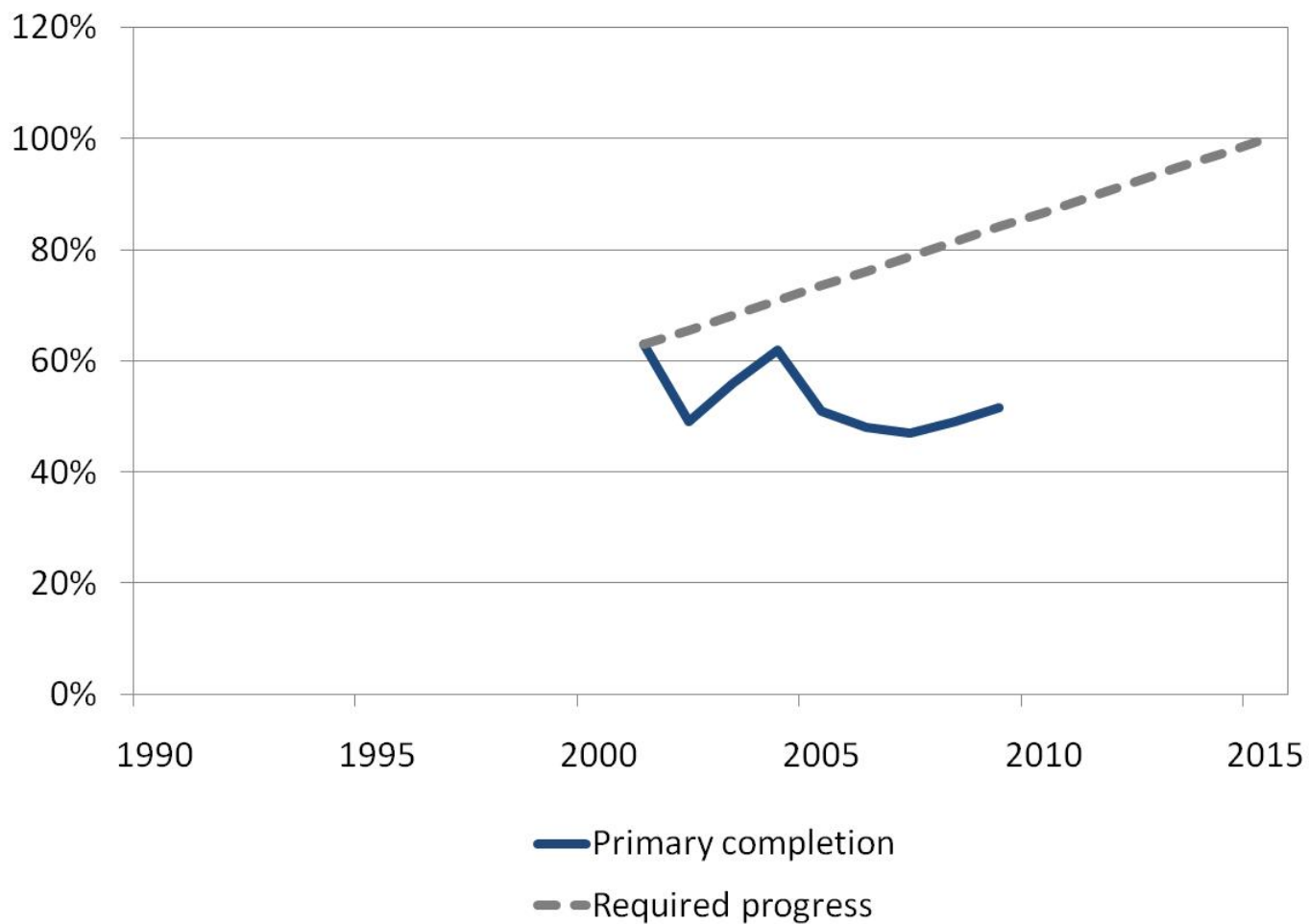
Sources: ESSAPR

Progress towards MDG4 and 5
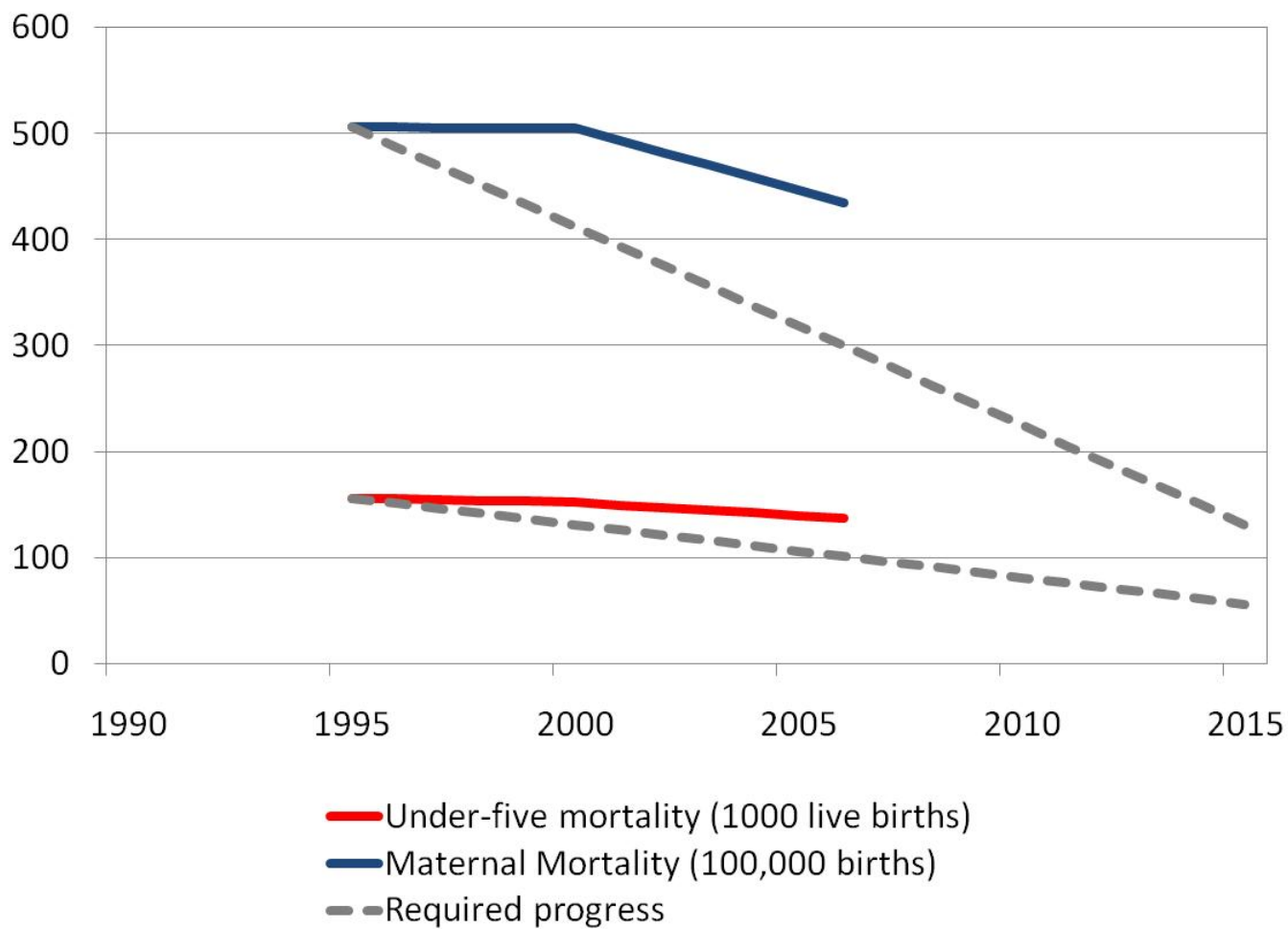
Sources: UBOS and MOH

Progress towards MDG7a

Sources: UBOS and MOH

Methodology

- Based on the MAMS (Maquette for MDG – Millennium Development Goal – Simulations) which is a dynamic-recursive computable general equilibrium (CGE) model (see Lofgren et.al. 2006)

- Microsimulation-top down (Mams results on to welfare distribution of the UNHS)

  - Micro-simulation Module to generate poverty and inequality

- Extension of analysis used for National Development Plan. NDP assumed continued good macroeconomic performance – 7.2% growth

Social Accounting Matrix 2007

Activities/Commodities	Factors of Production	Investment Accounts
Agriculture	Labor - less than secondary education	private investments
Industry	Labor - completed secondary education	Government investment in primary education
Transport	Labor completed tertiary education	Government investment in secondary education
Private services	Private capital	Government investment in tertiary education
Primary education nongovernment	Capital for primary education	Government investment in health
Secondary education nongovernment	Capital for secondary education	Government investment in water and sanitation
Tertiary education nongovernment	Capital for tertiary education	Government investment in agriculture
Health - non-government	Capital for Health	Government investment in roads
Primary education government	Capital for water and sanitation	Government other government
Secondary education government	Capital for agriculture	
Tertiary education government	Capital for roads	**Other Accounts**
Health - government	Capital for other government	interest payments on domestic debt
Water and Sanitation	Land	interest payments on foreign debt
Agriculture-government		
Roads	**Institutions**	**Tax Accounts**
Other government	Households	Direct taxes
	Government	Indirect taxes
	Rest of the World	Import taxes

MDG determinants

$$MDG = S + I + C + oMDG + X$$

MDG	= MDG outcome
S	= Service provision
I	= Physical infrastructure
C	= Household consumption
oMDG	= Other MDGs
X	= Vector of other factors

MDG elasticities used in MAMS

|	S			I	C	oMDG			X
	Health	W/S	Education			MDG4	MDG7a	MDG7b	(Wage prem)
MDG4	-1.000			-0.011	-0.110		-0.086	-0.010	
MDG5	-1.000			-0.011	-0.110		-0.086	-0.010	
MDG7a		0.744		0.014	0.001				
MDG7b		0.099		0.005	0.089				
Entry primary			1.000	0.009		-0.002			0.110
Completion primary			1.000	0.003		-0.003			0.087
Entry secondary			0.748	0.107		-0.003			0.165
Entry tertiary			0.169	0.327		-0.003			0.486
Completion secondary			0.632	0.044		-0.003			0.165
Completion tertiary			0.246	0.167		-0.003			0.486

Assumptions of MAMS under the baseline scenario

- MAMS is calibrated under the baseline to SAM 2007.
- No additional policy measures to meet MDGs
- Productivity in agric: 0.1-0.3%
- Productivity in **other sectors: 0.5-1%**
- Annual GDP growth rate: 7.2%
- Government receipts increasing from 13 percent in 2010 to 14 percent of GDP in 2015 (Tax rates are not changed).
- Government spending increasing by 4-5 percent annually.
- Population growth rate is set at 3.2 percent.
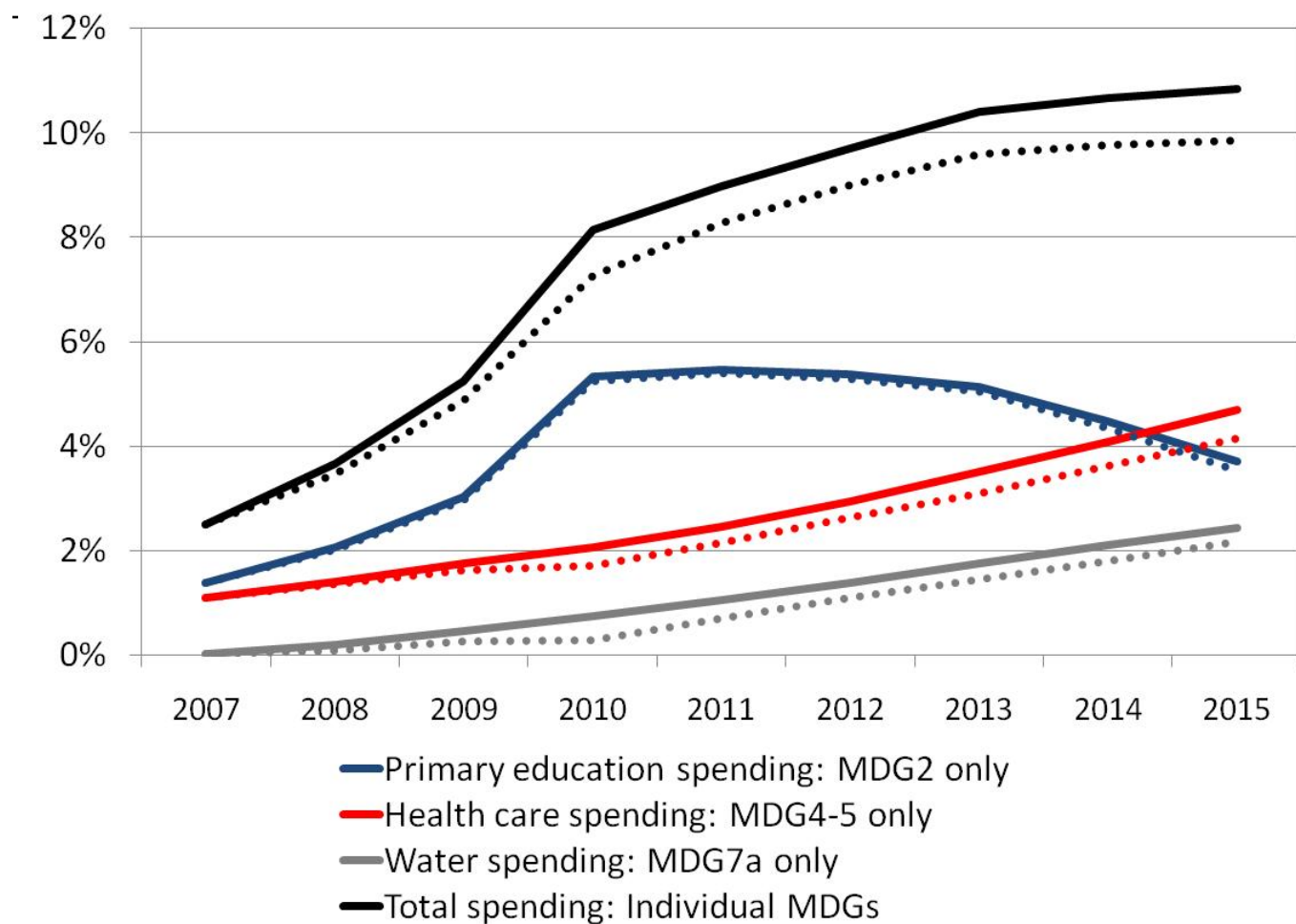
MDG progress under Baseline
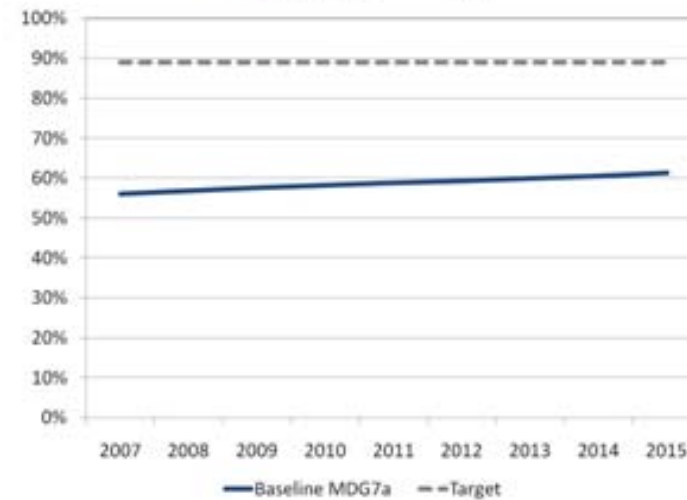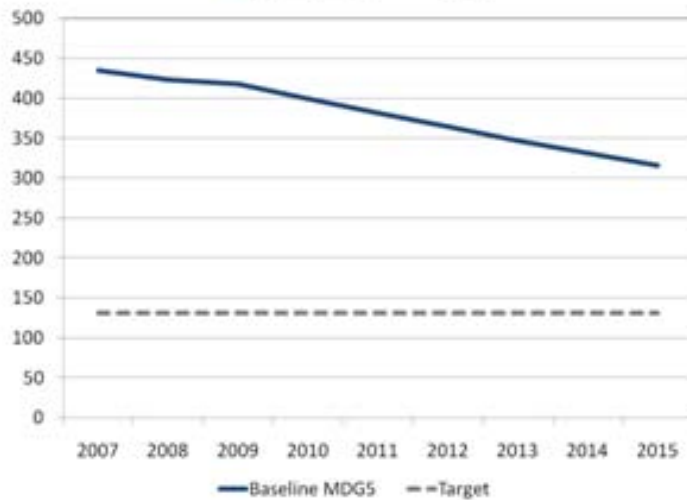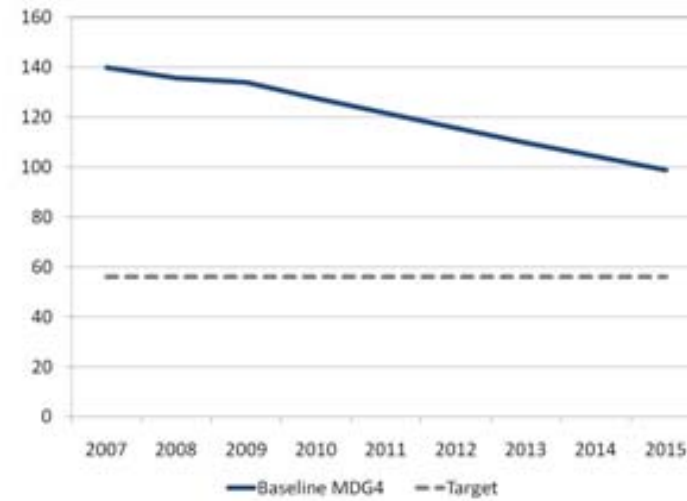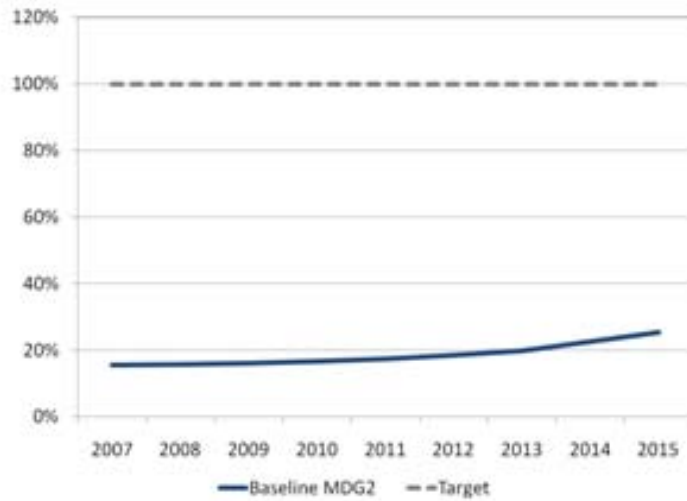
MDG scenarios

○ Key difference between the alternative options relative to the baseline is the endogenous demand of government for services in order to meet the MDGs.

○ Alternative options are implemented under various financing mechanisms to explore the trade-offs.

Overview of scenarios

Targeting of MDGs	Financing option	
MDG2 (97%/92%)	1. Domestic borrowing 2. Foreign borrowing	3. Foreign transfers 4. Tax
MDG4 (53/100%)	5. Domestic borrowing 6. Foreign borrowing	7. Foreign transfers 8. Tax
MDG5 (131/70%)	9. Domestic borrowing 10. Foreign borrowing	11. Foreign transfers 12. Tax
MDG7a (89/100%)	13. Domestic borrowing 14. Foreign borrowing	14. Foreign transfers 15. Tax
MDG7b (72/100%)	16. Domestic borrowing 17. Foreign borrowing	18. Foreign transfers 19. Tax
All MDGs	20. Domestic borrowing 21. Foreign borrowing	22. Foreign transfers 23. Tax

Public expenditure (% of GDP): Foreign transfer

- Primary education spending: MDG2 only
- Health care spending: MDG4-5 only
- Water spending: MDG7a only
- Total spending: Individual MDGs

Note: Dotted lines indicate spending if all MDGs are targeted simultaneously

Trade-offs of Various Financing Options

- Raising Domestic Taxes
  - Infeasible to raise tax revenues by 10 percent within a short period.
- Domestic Borrowing
  - Crowding out costs
  - Interest rate costs and fiscal sustainability
- Foreign Borrowing
  - Appreciation effects
  - Debt build that could be a fiscal burden
- Foreign transfer
  - Dutch disease effects

Conclusions

- Uganda has made progress towards MDGs and has already achieved MDG1 on halving poverty.
- Even under robust growth projections of the NDP some MDGs will not be met.
- This can be reversed and would require considerable scaling up of government spending on education, health, water and sanitation services.
- The additional spending required depending on the form of financing would require about 10 percent of GDP.

Conclusions /cont

- Synergies between MDGs provide 'savings' in terms of the costs of targeting all MDG targets simultaneously rather than individually.

- The four financing options provide various trade-offs in form of growth and macroeconomic outcomes.

- Domestic borrowing is the least favorable option for financing MDGs in the short and medium term due to unsustainable build-up of domestic debt; foreign borrowing also could lead to build-up of foreign debt.

- Foreign transfers is the preferred financing modality but economic policy must be designed to off-set potential 'Dutch disease' effects.

- Macroeconomic implications would also depend on

Discussion Points

- Would government be able to raise these resources especially through donor aid?
- Are there possibilities of exploring all sources of financing especially with recent emphasis on domestic resource mobilization?
- What would be the role of oil revenues to finance meeting the MDGs? Would oil revenues come in too late to finance the MDGs before 2015.