



The Taskforce on Innovative International Financing for Health Systems

Health Systems for the Millennium Development Goals: Country Needs and Funding Gaps

Background Document for the Taskforce on Innovative International Financing for Health Systems.
Working Group 1 Constraints to Scaling Up and Costs

October 29, 2009

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WORLD BANK

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HUMAN DEVELOPMENT NETWORK

World Bank-UNICEF-UNFPA-Partnership for Maternal, Newborn and Child Health

Healthy Women  Healthy Children. Investing in our Common Future.

Working Group 1: Costing Estimates

World Bank, UNICEF, UNFPA, UNAIDS, PMNCH Secretariat

Objective:

- Forecast the potential cost and impact of removing the constraints to reaching the health MDGs at the country level.

Methodology and Tools:

- Costing estimates are based on a country-based model using a marginal cost approach.
- The tool used was the Marginal Budgeting for Bottlenecks, an analytical, costing, and budgeting tool.
 - Simulates potential improvements in coverage derived from bottleneck reduction through addressing both programmatic and system constraints.
 - Estimates the cost of strategies aimed at removing bottlenecks and their returns in terms of health outcomes.
 - Allows for the analysis of the fiscal and financial space and the remaining funding gap
 - Allows for simulation of different scenarios and sensitivity analysis

Assumptions grounded in regional policy frameworks



Strategic Framework for Africa

- Phase 1: 2009-2011 (“low hanging fruits”)
 - Training of human resources
 - Building infrastructure
 - Deploying community health and nutrition promoters
 - Improving demand and quality of clinical services
- Phase 2: 2012-2013
 - Continued investment in human resources and infrastructure
 - Additional neonatal care introduced/ scaled-up
 - Comprehensive emergency obstetric care introduced/ scaled-up
- Phase 3: 2014-2015
 - Investment in human resources and infrastructure decreases
 - Referral-based interventions are scaled-up

Asia-Pacific Investment Case

- **Phase 1: 2009-2011**
 - Strengthening supply of health services at the community and outreach level as well as primary clinic level
 - Investing in training
 - Assigning incentives to providers
- **Phase 2: 2012-2013**
 - Phase 1 interventions are continued and scaled-up
 - Additional neonatal care interventions introduced
 - Complementary and therapeutic feeding
 - Zinc supplementation
 - New vaccines
 - Long-term family planning interventions introduced
 - Investment in human resources and infrastructure at the primary level of care
- **Phase 3: 2014-2015**
 - Emphasize emergency obstetric care
 - HIV/AIDS treatment (ARVs)
 - Water and sanitation
 - Investment in human resources and infrastructure at the referral level

Key Health Systems Assumptions

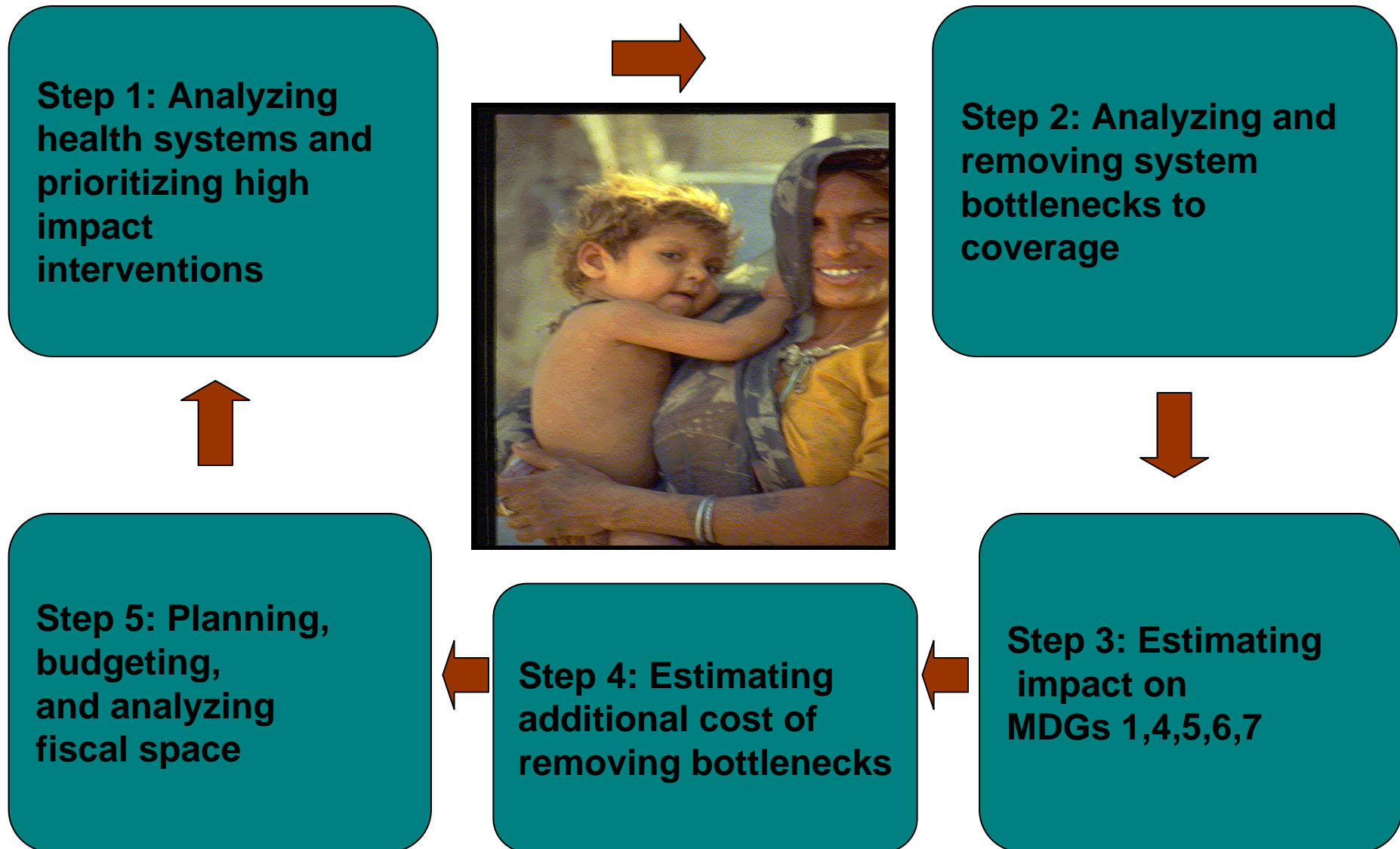


- Six levels of service delivery: community based, outreach, primary care, first referral, second referral
- Human rural policies to address the urban rural gap: Community Health workers, Health Extension Workers, Nurses, Health Officers
- Strengthening of supply chains and leap-frogging of e-health
- Support to demand through Conditional Cash Transfers, Health Insurance and Equity Funds, Voice and Accountability Mechanisms
- Incentives to supply of high impact interventions through Results Based Financing and pro-poor pricing policies

Methodology

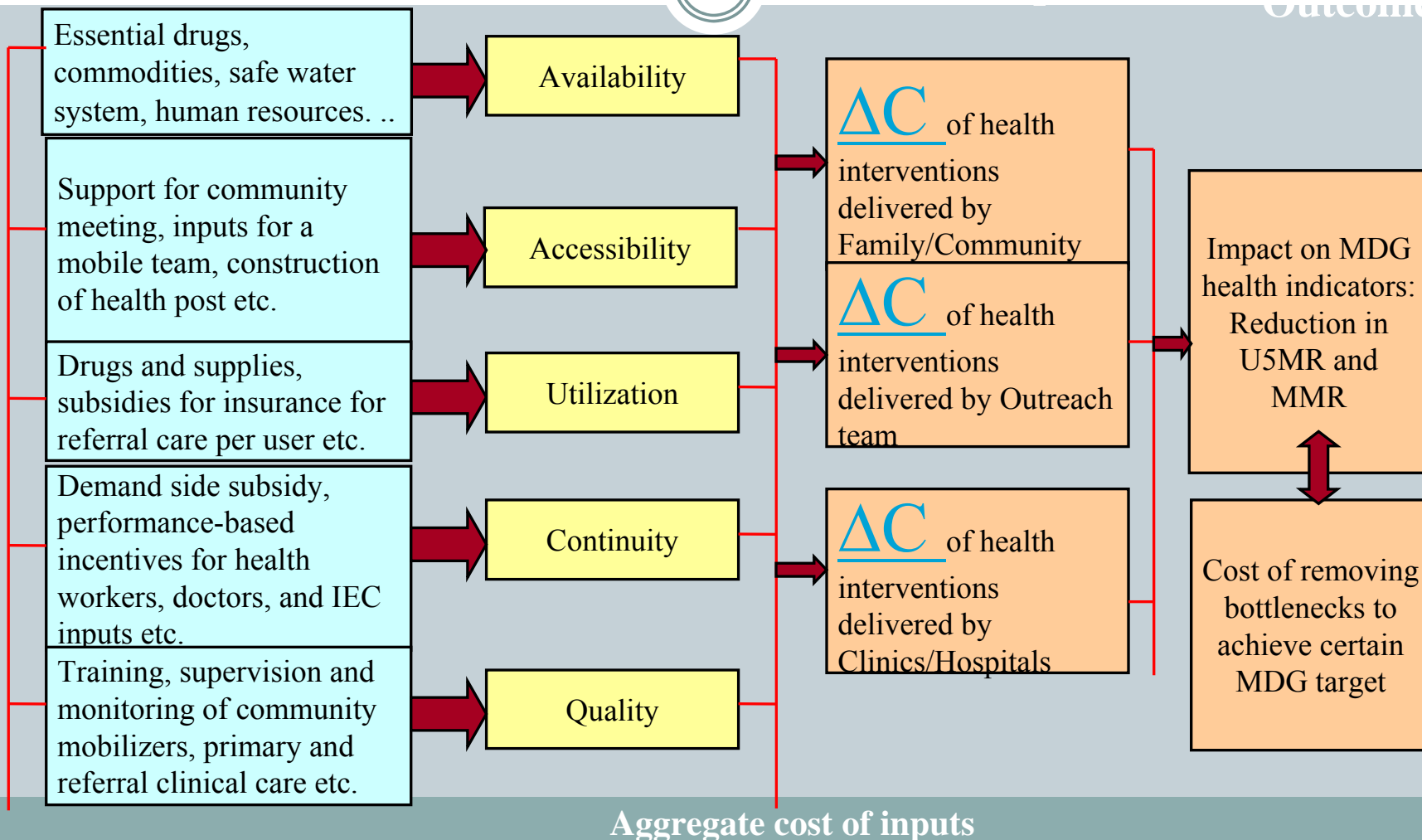


Evidenced based planning and budgeting (MBB)

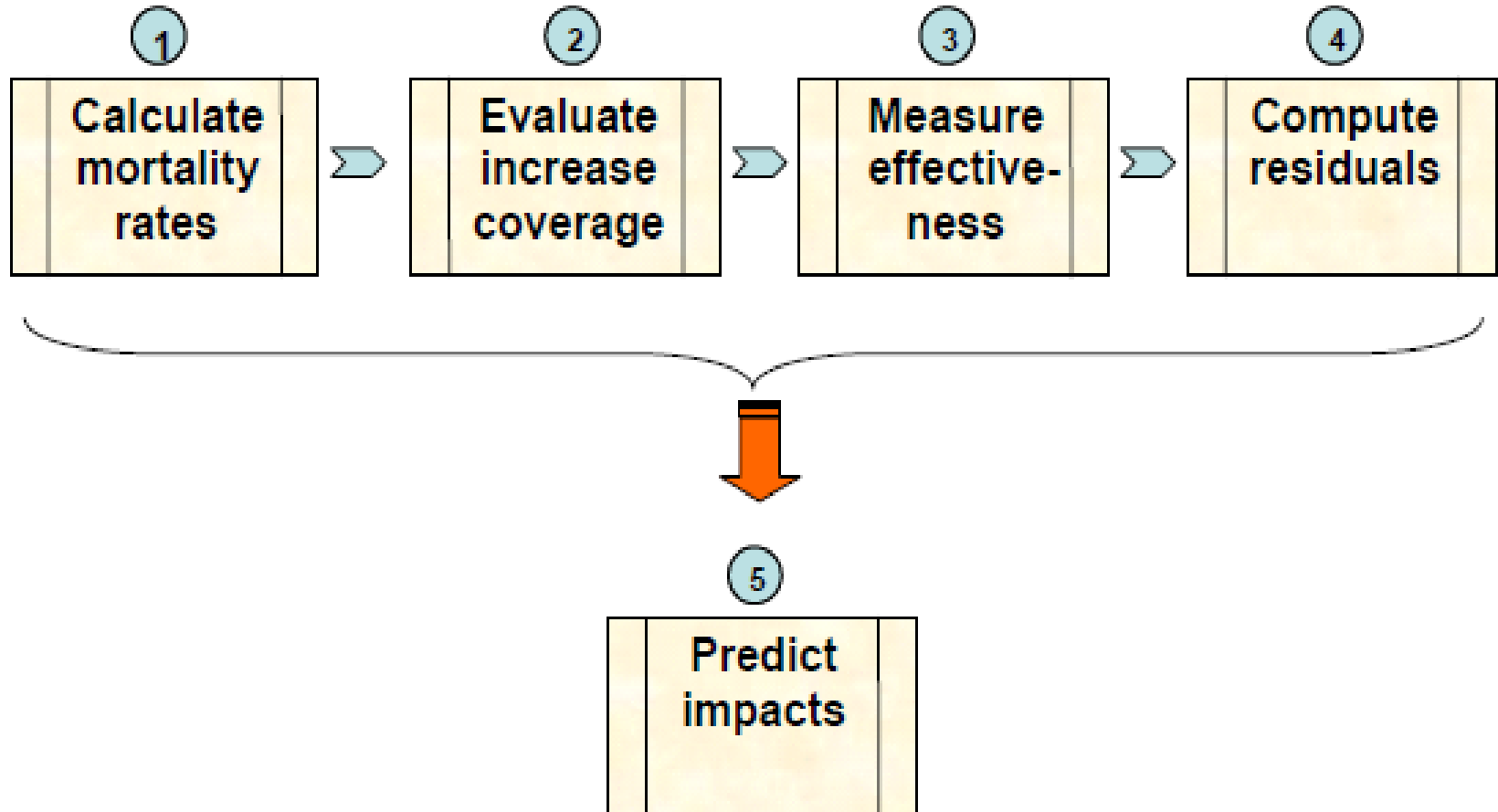


Calculation of Incremental Costs to Increase Coverage of Health Services

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MBB Steps for Impact Calculation



Financial Space Scenario Assumptions

	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 5	Data Source
Annual Growth	IMF Projections	IMF Projections	IMF Projections	IMF Projections	IMF Projections Minus 1%	IMF April 2009 projections
GDP	IMF Projections	IMF Projections	IMF Projections	IMF Projections	IMF Projections Minus 1%	IMF April 2009 projections
Domestic revenue as % of GDP	Increased by the projected rates of GDP growth*	Increased by the projected rates of GDP growth*	Increased by the projected rates of GDP growth*	Increased by the projected rates of GDP growth*	Falls by 10% during 2009 and 2010; returns to 2008 level by 2011 until 2015 *	IMF database; EIU database
Health as % of total government expenditure	Reaches 15% in 2015 in SSA and 12% in non-SSA	Reaches 15% in 2015 in SSA and 12% in non-SSA	Reaches 15% in 2015 in SSA and 12% in non-SSA	Remains at 2008 level	Remains at 2008 level	National Health Accounts
Aid for health	Reaches 0.7% of GDP for all countries by 2015 except for USA **	Doubles by 2015	Increases by 50% by 2015	Increases by the projected rates of GDP growth over the period	Falls by 10% during 2009 and 2010; returns to 2008 level by 2011 until 2015 *	National Health Accounts; OECD database
Private expenditure for health	Increases annually by the projected rates of GDP growth ***	Increases annually by the projected rates of GDP growth ***	Increases annually by the projected rates of GDP growth ***	Increases annually by the projected rates of GDP growth ***	Increases annually by the projected rates of GDP growth ***	National Health Accounts

* Growth elasticity of domestic revenue is considered 1 over the period

** ODA increasing to US\$50 billion in 2015

*** Includes 1.00 growth elasticity of private expenditure on health

Results



Three Implementation Scenarios

- **Minimum Scale-up (low cost/ high impact)**

- Main focus is on primary health care
- Emphasizes low-cost, high-impact interventions and increased efficiency of health systems
 - Less ambitious levels of staffing
 - Reduced investments in infrastructure

Additional per capita cost in 2015: US\$12 (US\$16 SSA; US\$7 non-SSA)

- **Medium Scale-up (MDGs)**

- Achieving the health MDGs in the most efficient way
- Addressing most critical health systems bottlenecks (reducing them by 80% on average)
- Scaling up a package of highly effective interventions

Additional per capita cost in 2015: US\$24 (US\$37 SSA; US\$9 non-SSA)

- **Maximum Scale-up (MDGs ++)**

- Strengthening all building blocks of health systems (remove 100% of supply bottlenecks; achieve universal access).
- Includes additional cost to stimulate demand (remove 100% of demand bottlenecks; achieve universal coverage).

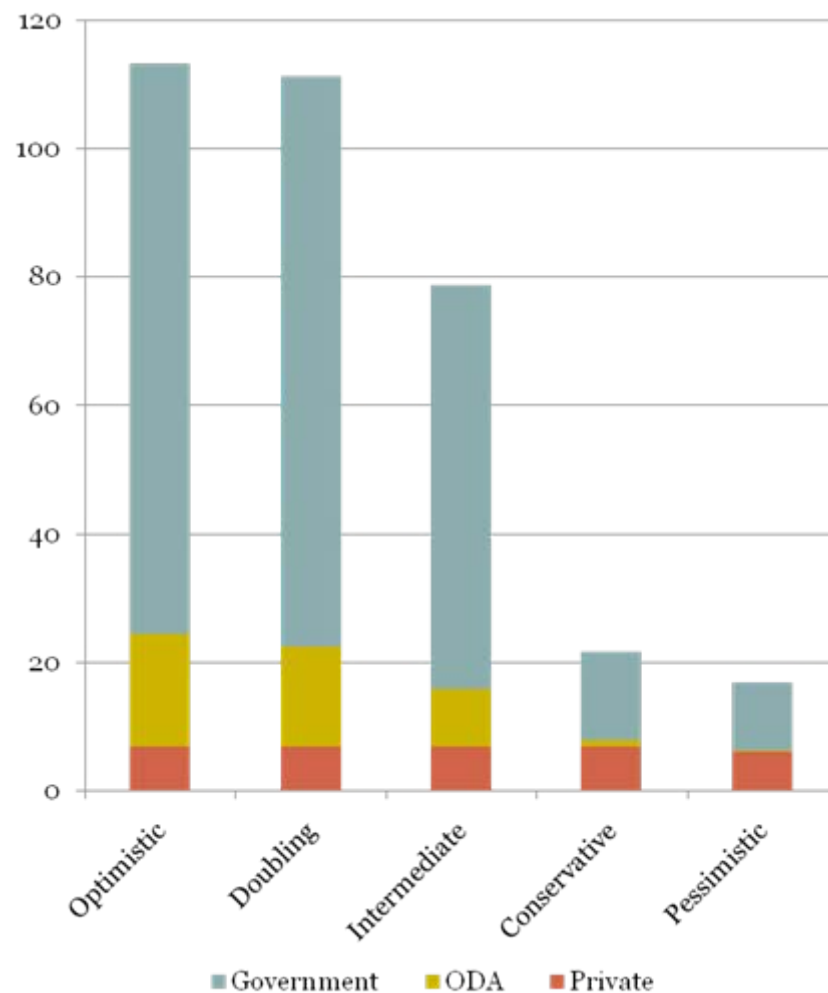
Additional per capita cost in 2015: US\$28 (US\$54 SSA; US\$20 non-SSA).

Additional Costs by Year for 49 Countries (total & per capita) (2009-2015)

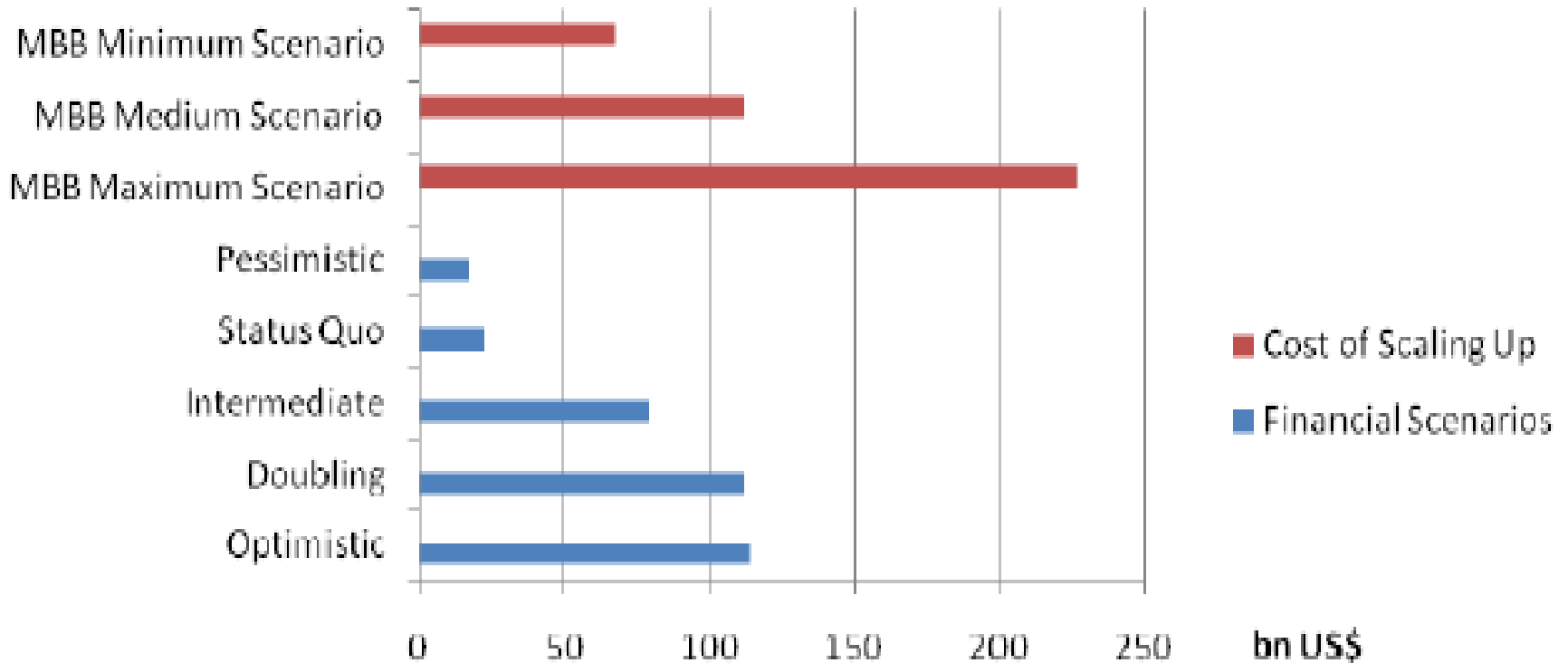
	2009	2010	2011	2012	2013	2014	2015	Total
Total (in US\$ billion)								
MBB Maximum Scenario	\$12.73	\$16.70	\$23.57	\$24.43	\$27.66	\$63.97	\$57.54	\$226.60
MBB Medium Scenario	\$4.30	\$5.65	\$7.31	\$12.64	\$18.61	\$26.62	\$36.48	\$111.62
MBB Minimum Scenario	\$2.95	\$4.42	\$6.57	\$8.47	\$10.78	\$15.65	\$18.61	\$67.46
Per capita (in US\$)								
MBB Maximum Scenario	\$8.90	\$11.67	\$16.47	\$16.41	\$18.58	\$41.48	\$37.31	\$153.09
MBB Medium Scenario	\$3.00	\$3.95	\$5.11	\$8.49	\$12.51	\$17.26	\$23.68	\$75.41
MBB Minimum Scenario	\$2.06	\$3.09	\$4.59	\$5.68	\$7.22	\$10.10	\$12.01	\$45.57

Expected Contributions by Scenario

- **Scenario 1: Optimistic**
 - Government contribution: close to US\$89 billion (80%)
 - External resources: US\$ 17.7 billion
 - Private expenditure: US\$6.9 billion
- **Scenario 2: Ambitious**
 - Government contribution: close to US\$89 billion (80%)
 - External resources: US\$ 15.7 billion
 - Private expenditure: between US\$6.2- 6.9 billion
- **Scenario 3: Intermediate**
 - Government contribution: close to US\$63 billion
 - External resources: US\$ 9.1 billion
 - Private expenditure: between US\$6.2- 6.9 billion
- **Scenario 4: Conservative**
 - Government contribution: close to US\$14 billion (63%)
 - External resources: less than US\$1 billion
 - Private expenditure: between US\$6.2- 6.9 billion
- **Scenario 5: Pessimistic**
 - Government contribution: over US\$10 billion (61%)
 - External resources: less than US\$1 billion
 - Private expenditure: US\$6.2 billion

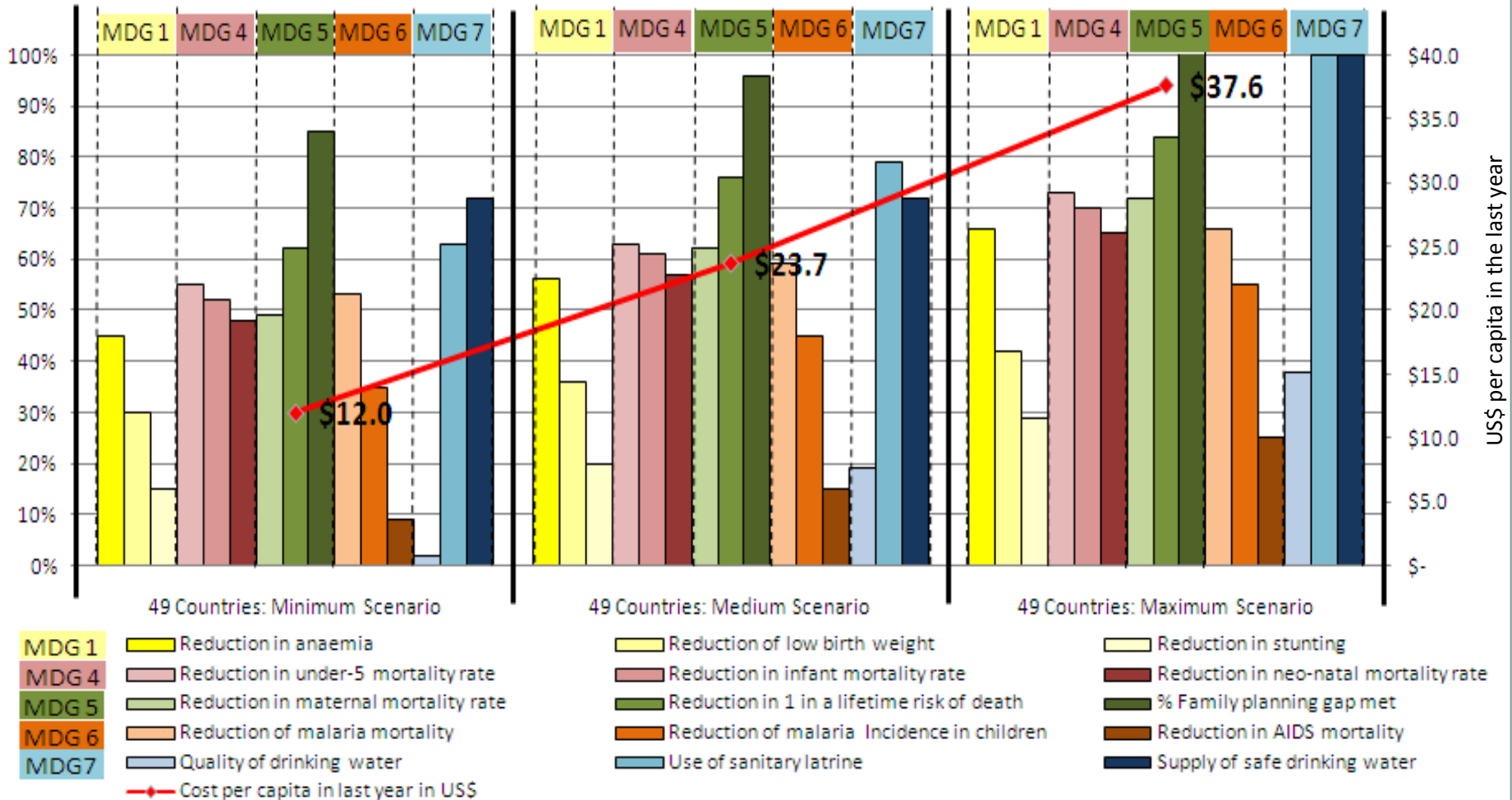


Costs of Scaling Up Versus Potential Available Resources



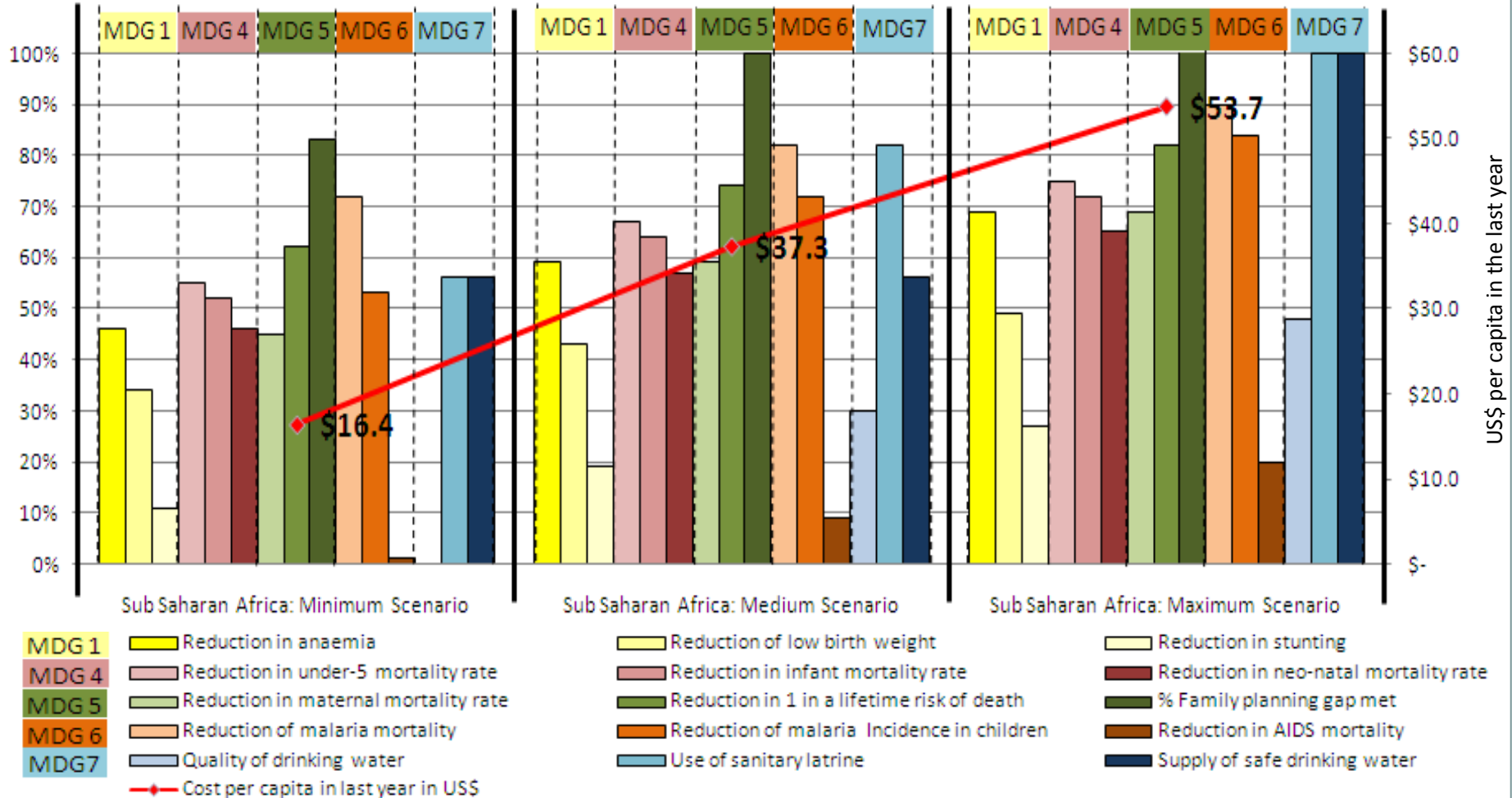
Estimated Impacts & Costs Framework (49 Countries)

Marginal Cost and Progress towards MDGs



Estimated Impacts & Costs Framework (SSA)

Marginal Cost and Progress towards MDGs



Conclusion



- MDGs are ambitious: even lowest scenario will be challenging to implement
- Most resources are to come from countries' contributions : need for domestic advocacy to raise attention to national budgeting processes
- Importance for external aid to be catalytic: need to focus on results and efficiency gains

THANK YOU!

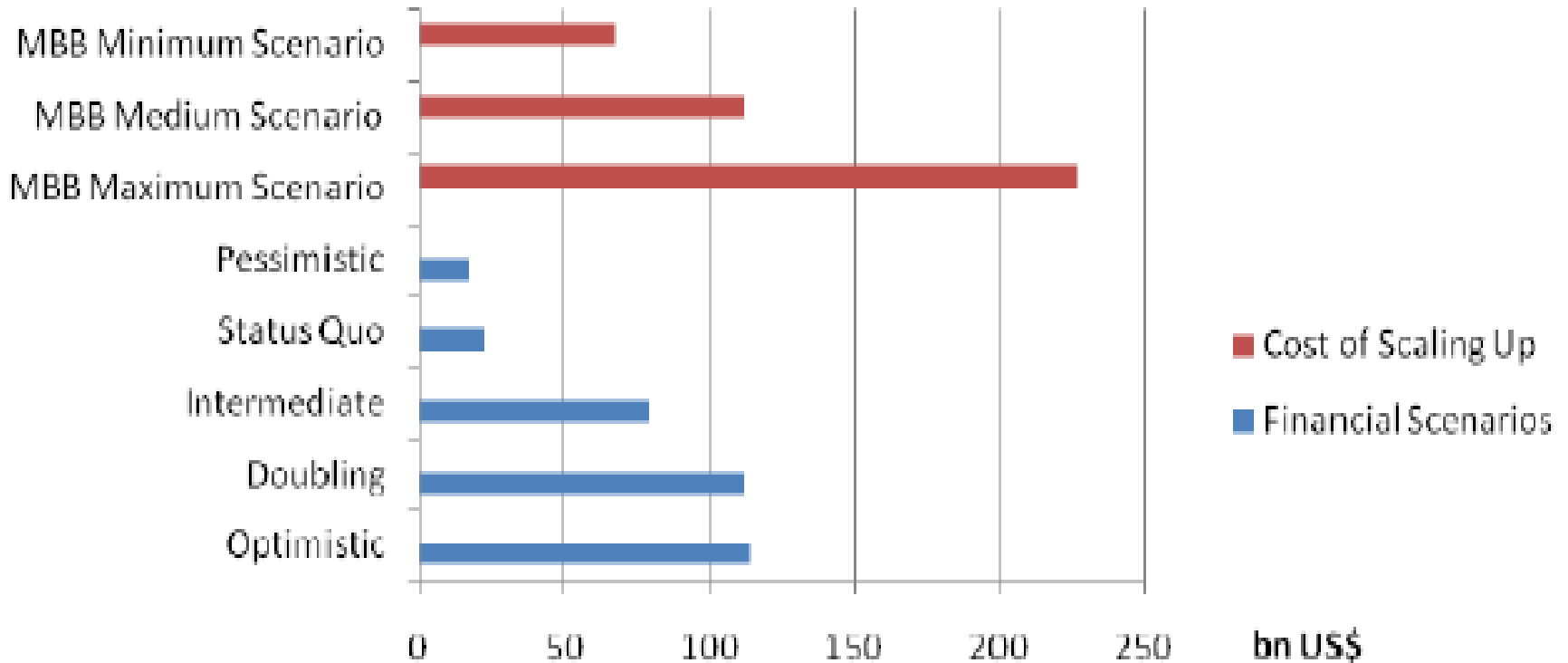
Estimated Additional Cost by Service Packages and Delivery Level in 49 countries (in US\$ billions)

MINIMUM SCENARIO									
	2009	2010	2011	2012	2013	2014	2015	Total	
Family-oriented, community-based services		1.13	1.04	0.9	2.22	1.72	3.85	2.72	13.57
Population-oriented schedulable services		0.43	0.73	1.09	1.37	2.01	2.94	4.06	12.63
Individual-oriented clinical services		0.98	2.11	3.91	3.71	5.6	6.35	9.01	31.68
District, provincial, and national governance and management		0.41	0.54	0.67	1.16	1.46	2.51	2.83	9.58
TOTAL		2.95	4.42	6.57	8.46	10.79	15.65	18.62	67.46
MEDIUM SCENARIO									
	2009	2010	2011	2012	2013	2014	2015	Total	
Family-oriented, community-based services		0.54	1.85	1.68	3.06	2.56	5.2	4.04	18.94
Population-oriented schedulable services		0.24	1.16	1.73	2.07	2.99	3.89	5.03	17.12
Individual-oriented clinical services		0.18	1.11	2.08	5.13	10.36	11.65	20.97	51.48
District, provincial, and national governance and management		0.38	1.53	1.82	2.38	2.71	5.88	6.44	21.16
TOTAL		1.34	5.65	7.31	12.64	18.62	26.62	36.48	108.7
MAXIMUM SCENARIO									
	2009	2010	2011	2012	2013	2014	2015	Total	
Family-oriented, community-based services		5.95	4.25	2.91	8.99	5.85	33.41	17.37	78.74
Population-oriented schedulable services		1.2	1.99	2.88	3.21	4.92	5.68	7.16	27.02
Individual-oriented clinical services		3.48	7.97	14.91	8.82	13.08	13.85	21.28	83.38
District, provincial, and national governance and management		2.11	2.49	2.87	3.41	3.81	11.04	11.74	37.46
TOTAL		12.74	16.7	23.57	24.43	27.66	63.98	57.55	226.6

Funding Requirements & Funding Gaps: 3 Implementation Scenarios, 5 Fiscal Space Scenarios, 49 Countries (US\$ billion), 2009-2015

	Sources of Additional Funding				MBB Maximum Scenario		MBB Medium Scenario		MBB Minimum Scenario	
	Gov't	ODA	Private	Total	Cost	Gap	Cost	Gap	Cost	Gap
All Countries										
Optimistic	88.82	17.69	6.91	113.42	226.6	113.18	111.62	-1.8	67.46	-45.96
Doubling	88.82	15.68	6.91	111.41	226.6	115.19	111.62	.21	67.46	-43.95
Intermediate	62.89	9.11	6.91	78.91	226.6	147.69	111.62	32.71	67.46	-11.45
Conservative	13.84	.99	6.91	21.74	226.6	204.86	111.62	89.88	67.46	45.72
Pessimistic	10.46	.2	6.21	16.88	226.6	209.72	111.62	94.74	67.46	50.58

Costs of Scaling Up Versus Potential Available Resources



THANK YOU!

Funding Requirements & Funding Gaps: 3 Implementation Scenarios, 5 Fiscal Space Scenarios, 49 Countries (US\$ billion), 2009-2015

	Sources of Additional Funding				MBB Maximum Scenario		MBB Medium Scenario		MBB Minimum Scenario	
	Gov't	ODA	Private	Total	Cost	Gap	Cost	Gap	Cost	Gap
All Countries										
Optimistic	88.82	17.69	6.91	113.42	226.6	113.18	111.62	-1.8	67.46	-45.96
Doubling	88.82	15.68	6.91	111.41	226.6	115.19	111.62	.21	67.46	-43.95
Intermediate	62.89	9.11	6.91	78.91	226.6	147.69	111.62	32.71	67.46	-11.45
Conservative	13.84	.99	6.91	21.74	226.6	204.86	111.62	89.88	67.46	45.72
Pessimistic	10.46	.2	6.21	16.88	226.6	209.72	111.62	94.74	67.46	50.58