



Strengthening Macroeconomic and Social Policy Coherence

Overview of capacity development

Rob Vos

UN-DESA

Inception workshop on “**Strengthening Macroeconomic and Social Policy Coherence through Integrated Macro-Micro Modelling**”,
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UN-DESA's capacity development activities

- Focus on training and advising policy-makers in developing countries to enhance their analytical capacities in:
 - designing coherent macroeconomic, social and environmental policies and strategies;
 - enabling LDCs make the most adequate use of benefits derived from the LDC category;
 - reducing vulnerability to volatility in the global economy.
- Training in the use of analytical and training tools, fundamentally for modelling, tailored to country needs.
- <http://www.un.org/en/development/desa/policy/capacity/index.shtml>

Key area:

Financing Human Development

- Policy coherence between macro, sector and social policies
- Policy questions related to achieving millennium development goals (MDGs) at centre:
 - What does it take to achieve the MDGs?
 - Do we know how much it will cost and can we afford achieving the goals on time?
 - Does it matter how we finance the MDG strategy?
 - What might be economy-wide trade offs and synergies?
 - Effects on growth?
 - Effects on employment and real wages?
 - Effects on public indebtedness?
 - Short versus long-run effects?

Key assumptions and methodology

- Key role for public policies
- Public spending policies targeting the MDGs and their financing mechanisms have strong effects throughout the economy.
- These feed back on the MDG indicators through markets for labour, capital, commodities, and foreign exchange.
- Hence:
 - Economy-wide framework to assess MDG ...
 - ... to complement social sector studies (education, health, etc.)...
 - ... and micro level analysis of poverty and inequality impact

Framework extensively applied

- UN-DESA/UNDP/World Bank application in 19 Latin America and the Caribbean countries (with support from UN-ECLAC and IADB)
 - Lessons learned to improve integrated modelling framework
 - Publication with Palgrave
- Follow-up applications (UN-DESA/UNDP /World Bank) covered:
 - 5 Arab States (Egypt, Jordan, Morocco, Tunisia and Yemen)
 - 3 Asian countries (Uzbekistan, Kyrgyzstan and Philippines)
 - 3 African countries (Senegal, South Africa and Uganda)
 - Publication with Bloomsbury forthcoming
- Lessons learned on how to strengthen capacities in developing countries in support policymaking

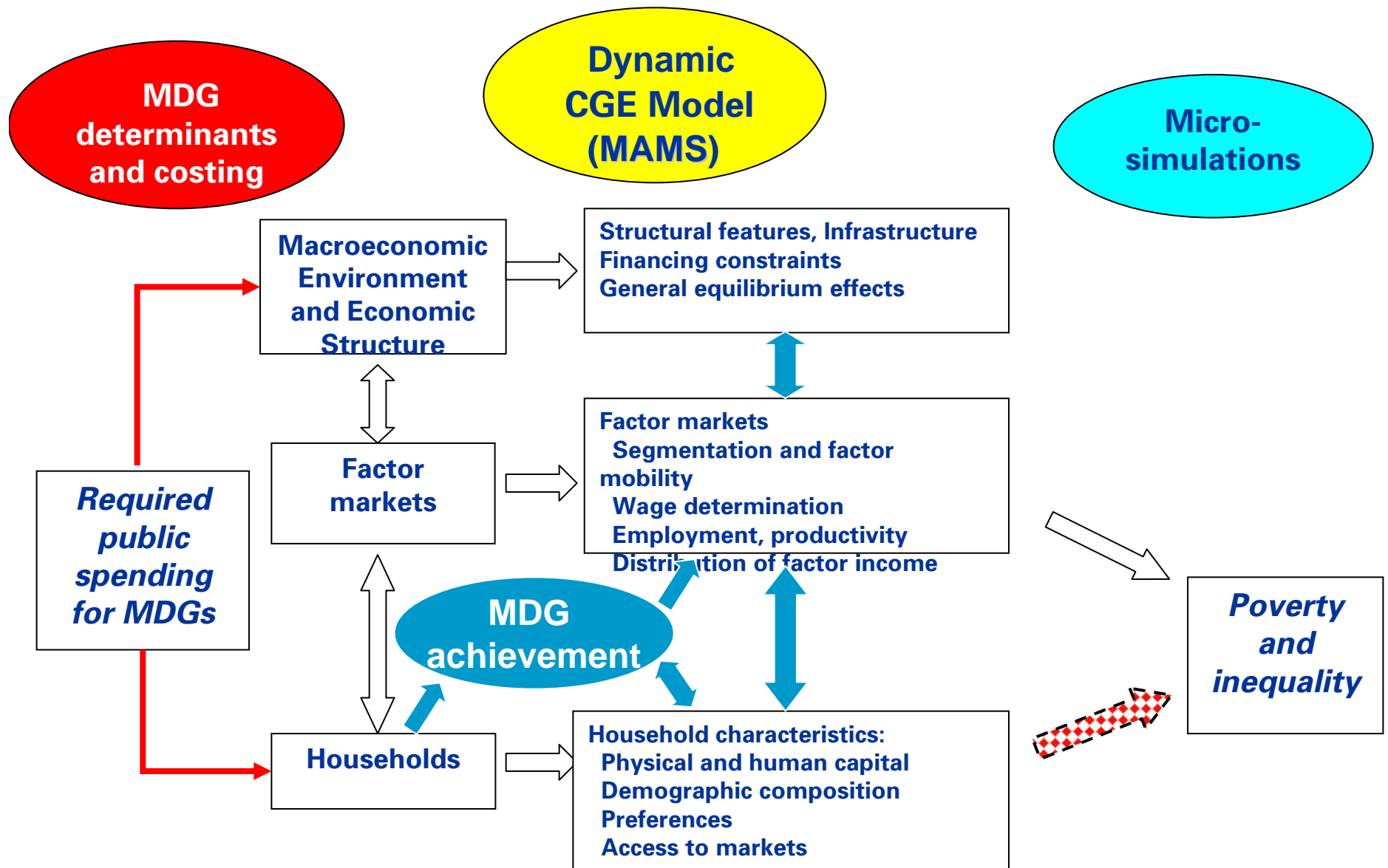
Some alternative approaches

- Elasticities approaches – RPC-Brasilia and others
 - Too aggregate, constant elasticities, past trends need not be predictor of future
- UN Millennium Project: Needs Assessments
 - Partial analysis, some costing estimates seem unrealistic, linear projections
- Integrated macro framework (RCC-Colombo): MDG costing plus macro model
 - Useful macro framework but no real feedback mechanisms, no supply constraints, fixed prices, no dynamic effects

UN-DESA's integrated framework

- **MAMS: *Maquette* for MDG Simulations.**
 - Economy-wide (dynamic-recursive CGE) model to analyze MDG financing strategies in different countries.
 - Dynamic MDG module, with MDG determinants
- **Sector analysis of MDG determinants and of interventions** needed to achieve MDGs in education, health, water and sanitation
 - Microeconomic analysis of determinants of access to schooling, child and maternal mortality, etc.
 - Cost-effectiveness analysis
- **Microsimulation approach**
 - Translate labour market outcomes of CGE simulations into impact on poverty and income distribution at household level using micro datasets

Macro-micro linkages



Methodology considers

- **MDGs 2, 4, 5 and 7a and 7b:** universal primary education, reduce child and maternal mortality, increase access to drinking water and sanitation
- All endogenous in MAMS and can be influenced by sector-specific interventions
- **MDG 1 (income poverty reduction):** no specific policies to redress, but seen as outcome of overall economic process
- **MDG 3 (gender):** implicit as part of MDG2
- **MDG 6 (HIV/AIDS, etc.):** “under construction”
- Extendible beyond “MDGs”

MDG determinants

- **What is needed to get all children in school and make them complete all grades?**
 - Build more school infrastructure?
 - Improve quality of other school inputs (teachers, textbook supplies)?
 - Increase access to school by improved household income and demand subsidies?
 - All of the above?
- **What is needed to reduce child mortality?**
 - Better nutrition?
 - Expansion of immunization programs?
 - Improving maternal-child health facilities?
 - Better education?
 - All of the above?
- **Are there synergies across the MDGs?**
- **What is the direct cost of interventions to achieve MDGs?**
- **Are there diminishing marginal returns to the inputs?**

MAMS: economy-wide framework

- Originally developed by the World Bank.
- Refinements and extensions made through UN-DESA's capacity development projects.
- Most features are familiar from standard open-economy, dynamic-recursive CGE models.
- Dynamic MDG block
 - Typically covers a number of MDGs (see next slide)
 - Feeds back on labour market, prices, etc.
- Flexible in classification of commodities, production sectors, labour categories, institutions.
- Assess trade-offs of alternative financing strategies and accounts for synergies during MDG achievement

Determinants of MDG outcomes in MAMS

MDG	Service per capita or student	Consumption per capita	Wage incentives	Public infrastructure	Other MDGs
2-Primary schooling	X	X	X	X	4
4-Under-five mortality	X	X		X	7a,7b
5-Maternal mortality	X	X		X	7a,7b
7a-Water	X	X		X	
7b-Sanitation	X	X		X	

MAMS scenarios

- **Baseline scenario ('Business-as-usual'):**
 - Plausible benchmark for comparisons
 - GDP growth calibrated to historical trend and also social spending follows historical trend
 - ➔ Model estimates MDG outcomes for baseline
- **Alternative economic scenario, e.g.**
 - Oil price shock ➔ impose change in oil price
 - Global crisis ➔ e.g., impact through reduced export earnings or recalibrate baseline to capture crisis conditions and, if applicable, reduced government spending
 - ➔ Impact on MDGs: Compare new MDG outcomes with baseline
- **MDG scenarios:** public spending and interventions are “scaled up” as required to reach MDGs 2, 4, 5 and 7 by 2015 under different financing strategies
 - Additional cost of achieving MDGs = MDG scenario - baseline
 - Crisis impact = MDG scenarios before – after crisis

Microsimulation approach

- MDG 1: Income poverty is endogenous to overall economy-wide interactions
- MAMS/CGE: only few household categories (insufficient detail of income/consumption distribution)
- Microsimulations:
 - Use full household survey data
 - Impose counterfactual factor market outcomes from MAMS/CGE simulations on full distribution
 - So far mostly through labour market outcomes
 - Extensions to include non-labour incomes
 - Generate new income/consumption distribution
 - Calculate poverty and distribution outcomes
- “Top-down” approach: no feedback to CGE

Framework: yes

Model for Jordan: not yet

- Adapt framework to policy needs of Jordan
- Institutionalise use according to needs for policy analysis
- We train and provide technical support; countries implement and become owners of the tools, update them, and put them to work
- Who do we train? Typically, staff of “technical unit” supporting policy makers that maintains model and inform policy dialogue with simulation results

Project implementation in ten steps

1. *Scoping mission and first workshop:*

- Identify key policy questions; how to adapt framework; available country expertise; data availability

2. Formation and consolidation of “technical unit”

3. Disaggregation of Social Accounting Matrix, completion of MAMS dataset

4. Calibration of MAMS for Jordan with new dataset

5. *First intensive training:* MAMS (and ISIM-MAMS), updating of data set, initial runs of scenarios

6. Final calibration of MAMS for Jordan; definition baseline scenario

Slide 16

MVSC10 I would add more detail on how country teams are ideally expected to be formed, work and organize themselves.

Important is to highlight that there should be a team leader and that country-team members must have some specific qualifications.

Make explicit the point that we expect the "right" people to be participating in the workshops.

All of this can be brought up in light of the experience for LAC and the Arab countries.

Marco Sanchez, 14/08/2008

Project implementation in ten steps

7. *Second training workshop*: policy assessments through scenario simulations in MAMS and microsimulations
8. Implementation of policy simulations and elaboration of policy notes/briefs in selected areas
9. *Final (policy) workshop*: presentation/discussion of policy notes/briefs, definition of follow-up steps for maintenance of modelling tools, uses to support policymaking, and engagement of policy makers in a dialogue.
10. Strengthening the policy dialogue: presentations of results to policy makers and stakeholders; identification of new demands for policy analysis

Objectives of inception workshop

- Present and discuss the key policy questions to be addressed through the capacity building activities.
- Explain and confirm agreement on the institutional arrangements under which capacity building activities will be undertaken.
- Describe the integrated macro and micro modelling framework.
- Present results of recently completed projects on MDG financing strategies and real-time simulation results as an introduction to the application of the modelling framework.
- Take stock of data availability and agree on future data collection.
- Agree on a timeline.

Programme: main sessions

- Overview of envisaged capacity development activities: objectives and modelling framework
- How to adapt framework for Jordan:
 - What policy (coherence) questions?
 - Are any specific breakdowns (e.g. by sector) needed?
 - Are there any major data constraints?
- Show results of applications to other countries
- Explain core elements of methodology:
 - MAMS
 - Core data base: SAM for MAMS and rest data set
 - How to identify MDG determinants
 - Microsimulation approach to assess poverty and inequality impact
 - ISIM-MAMS interface: an introduction and real-time simulations
- Summary of workshop; define next steps

Discussion: What would be key policy questions for Jordan?

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 - Short versus long-run effects?
- All relevant? What else? Who for?