



Assessment of socio-economic RDP impacts in Greece

PROFESSOR DEMETRIS PSALTOPOULOS

RESEARCHER

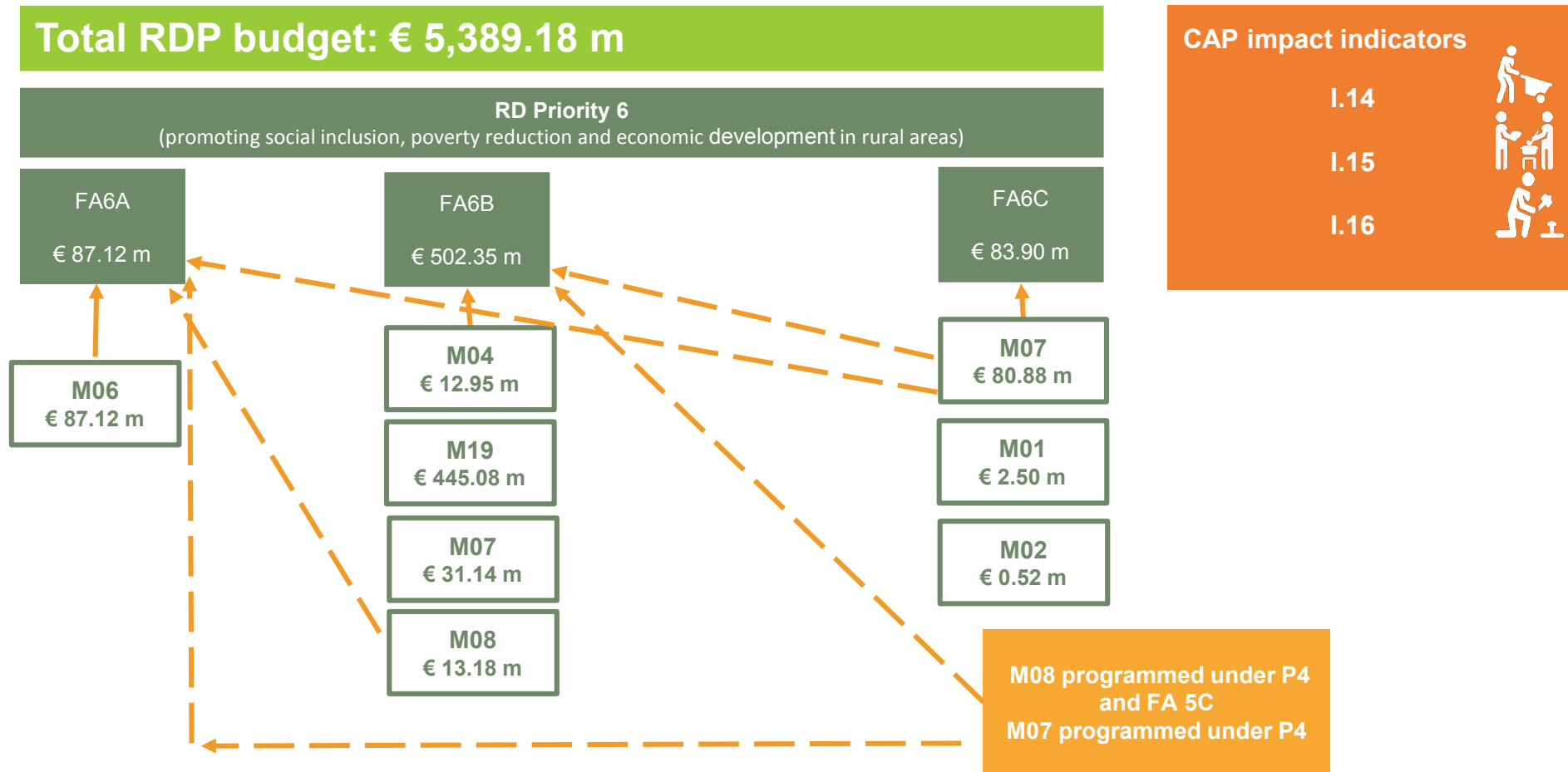
DEPARTMENT OF ECONOMICS, UNIVERSITY OF PATRAS, GREECE

Outline

- RDP overview
- Evaluation purpose and questions
- Evaluation approach and Data
- Major findings
- Strengths and weaknesses
- Lessons learnt and recommendations

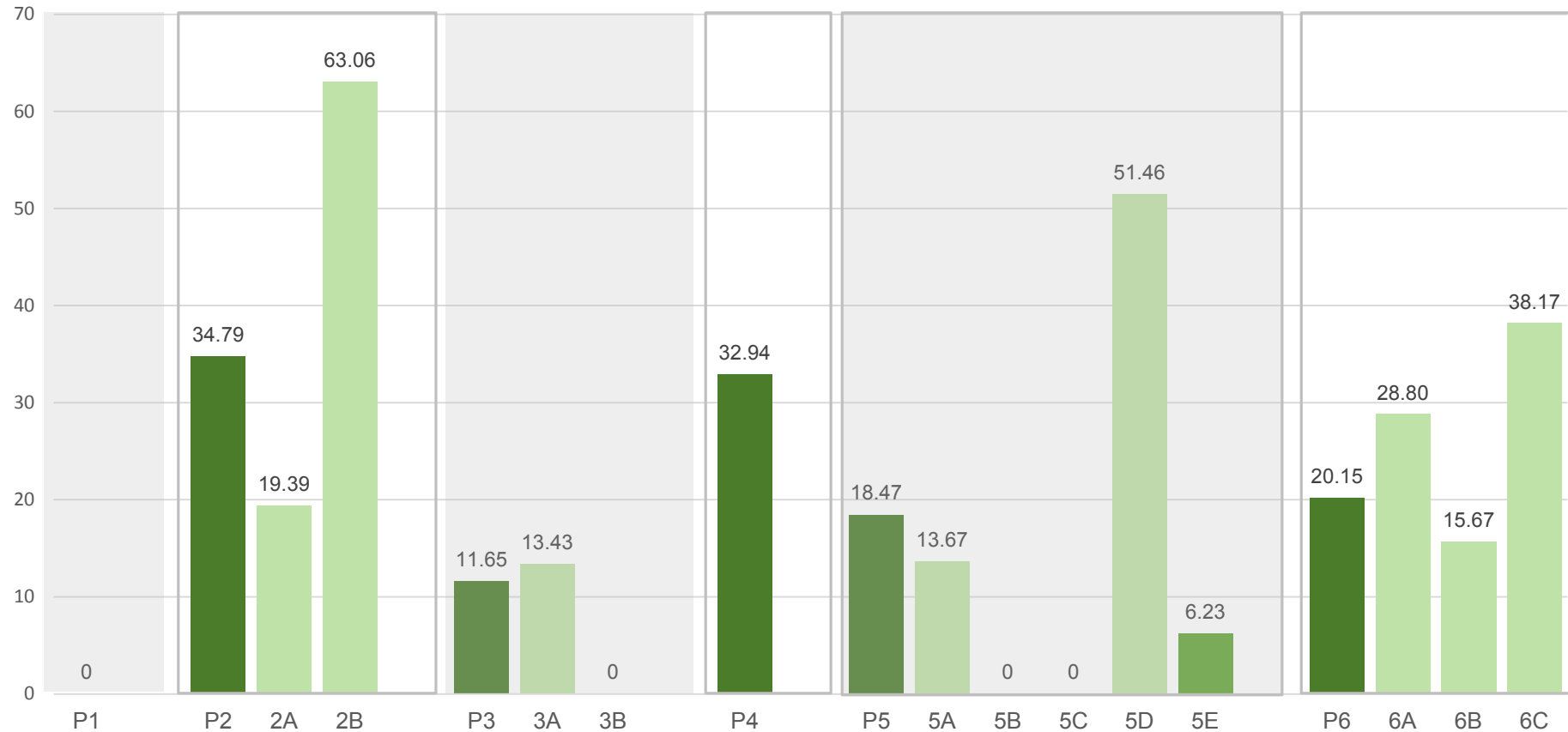
RDP GR (national)

Intervention logic linked to socio-economic indicators



RDP uptake in Greece

Uptake in %, August 2018



Evaluation purpose

- **Background:** research study on Recursive – Dynamic Computational General Equilibrium (CGE) Model for Greece
- **Commissioning institutions:** Managing Authority and Directorate for Agricultural Policy
- **Purpose:** construct a tool to assess CAP (Pillars 1 and 2) impacts and support the Ministry of Rural Development and Food in the assessment of economy-wide impacts of different CAP measures and policy mixes
- **Timeline:** started in August 2017 and just completed

Evaluation elements

Research Question: What are the effects of alternative CAP (Pillars 1 and 2) mixes on crucial rural economic variables, such as rural GDP, agricultural GDP, rural employment and rural household incomes (distinguished by income level)?

The model output includes variables on the economy-wide impacts of policy shocks

It can be applied to estimate CAP impact indicators:

- I.14: Rural employment rate
- I.15: Degree of rural poverty
- I.16: Rural GDP per capita

Evaluation approach

- **Evaluation approach:** Rural/Urban Recursive-Dynamic CGE Model
- **How does it work:** a set of simultaneous (non-linear) equations capturing production and consumption activities and inter-relationships between economic actors
- **It accounts for different effects:** displacement, deadweight, primary, secondary, intended, unintended and allocative efficiency
- **Unit of analysis:** regional (rural) macro level

Evaluation approach and data (1)

Important steps for the application of this approach:

1. Obtain Social Accounting Matrix (SAM) for Greece from Global Trade Analysis Project (GTAP) database (tri-annual)
2. Use NUTS 3 data on sectoral employment to generate rural/urban control totals (annual data)
3. Disaggregate agriculture into 14 sub-sectors through the use of FADN data (annual data)
4. Use Eurostat Structural Business Survey results to superiorise data on manufacturing & services (annual)
5. Disaggregate households into different categories through the use of Household Income and Expenditure data (annual)
6. Obtain production, trade and consumption elasticities from GTAP (tri-annual)

Evaluation approach and data (2)

7. Consult various studies to define macroeconomic and production factor closure rules
8. Consult various official documents to specify trajectory paths (annual)
9. Obtain detailed expenditure per RDP measure (MA data - annual)
10. Map RD expenditure by sector (for each measure – annual MA data)
11. Implement model runs and obtain estimations

Data situations for common indicators

- **I.14:** Study-area data on “*changes in population aged 15-20 and over since the start of the programming period due to the RDP*” – application of qualitative method
- **I.15 and I.16:** Study-area data on “*changes in total population since the start of the programming period due to the RDP*” – application of qualitative method
- **I.16:** PPP Conversion rates (Eurostat)
- **No control groups are needed** as the method can account for the counterfactual
- **No confidentiality issues are involved**

Major findings

Impact Indicators

- I.14 – Rural Employment rate: 54.38% (-0.04% per annum for 2015-2017, compared to 2014)
- I.15 – Degree of rural poverty: 52.95% (-0.27% per annum for 2015-2017, compared to 2014)
- I.16 – Rural GDP per capita: 13,785.55 EUR (+0.081% per annum for 2015-2017, compared to 2014)
- National GDP per capita: 14,977.42 EUR (+0.020% per annum for 2015-2017, compared to 2014)

Other findings

- Agricultural GDP: -0.41%
- Rural Manufacturing GDP: +0.85%
- Rural Employment: -0.04%
- Employment in Agriculture: -3.56%
- Employment in Rural Manufacturing: +0.69%
- Middle Rural Households Income: +0.169%
- Rich Rural Households Income: +0.168%

Strengths and weaknesses

Strengths	Weaknesses
<ul style="list-style-type: none">• Comprehensive and rigorous assessment of policy impacts vs no-policy• Method takes full account of counterfactual• Estimates based on concrete principles of economic behavior• Capacity of the method to generate a large number of “impact” indicators	<ul style="list-style-type: none">• Rather advanced theoretical and model skills are necessary• Impossible to isolate specific impacts to specific factors (black-box problem of CGE Models)

Lessons learnt and recommendations

for AIRs in 2019 and ex post evaluation

What should the Managing Authorities and evaluators know if they want to apply this approach for the AIR in 2019 or the ex post evaluation in 2024?

- The method is rather costly; estimate of at least 2.5 FTE experienced economists
- No survey needed for non-beneficiaries
- The evaluator should be contracted at least 14 months before the delivery deadline
- GTAP software (GEMPACK) and GAMS software are essential in order to apply the method

Thank you

Demetris Psaltopoulos

Professor, University of Patras, Greece

dempsa@upatras.gr

Further information:

<http://www.agrotikianaptixi.gr>