

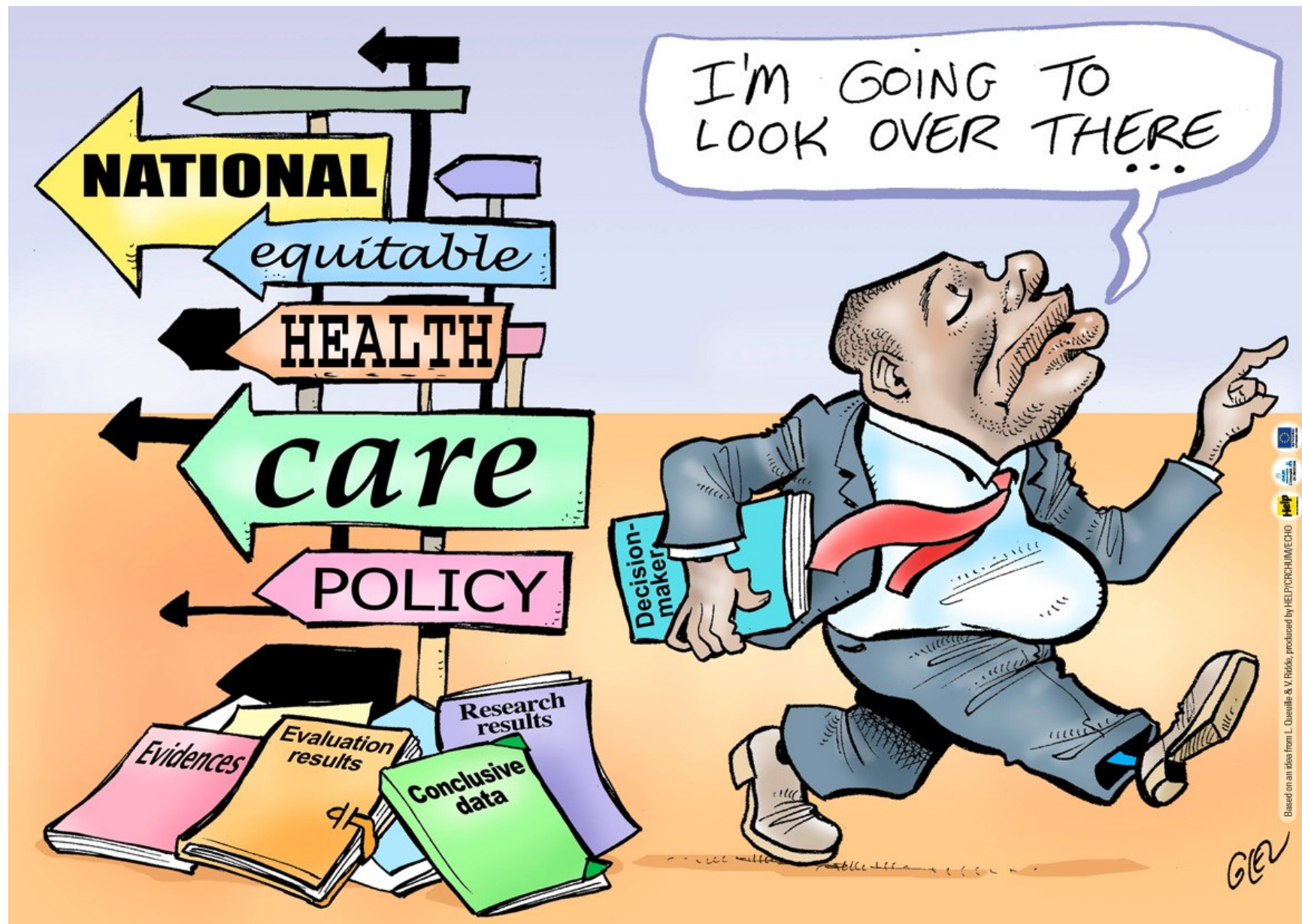
MUNI
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Policy evaluations – funds and programs

Filip Hruza

This lecture aims to provide an overview and introduction of both general type of evaluation methods and tools with focus on their use in practice: micro- and macro-evaluations.

Meanwhile the **qualitative microevaluations** can provide decision-makers with very deep insight in functioning of evaluated policy/program/intervention, **quantitative macroevaluations** can contribute to policy evaluation with top-down analytical view of how chosen policy setting influences greater area such as region, country or etc.



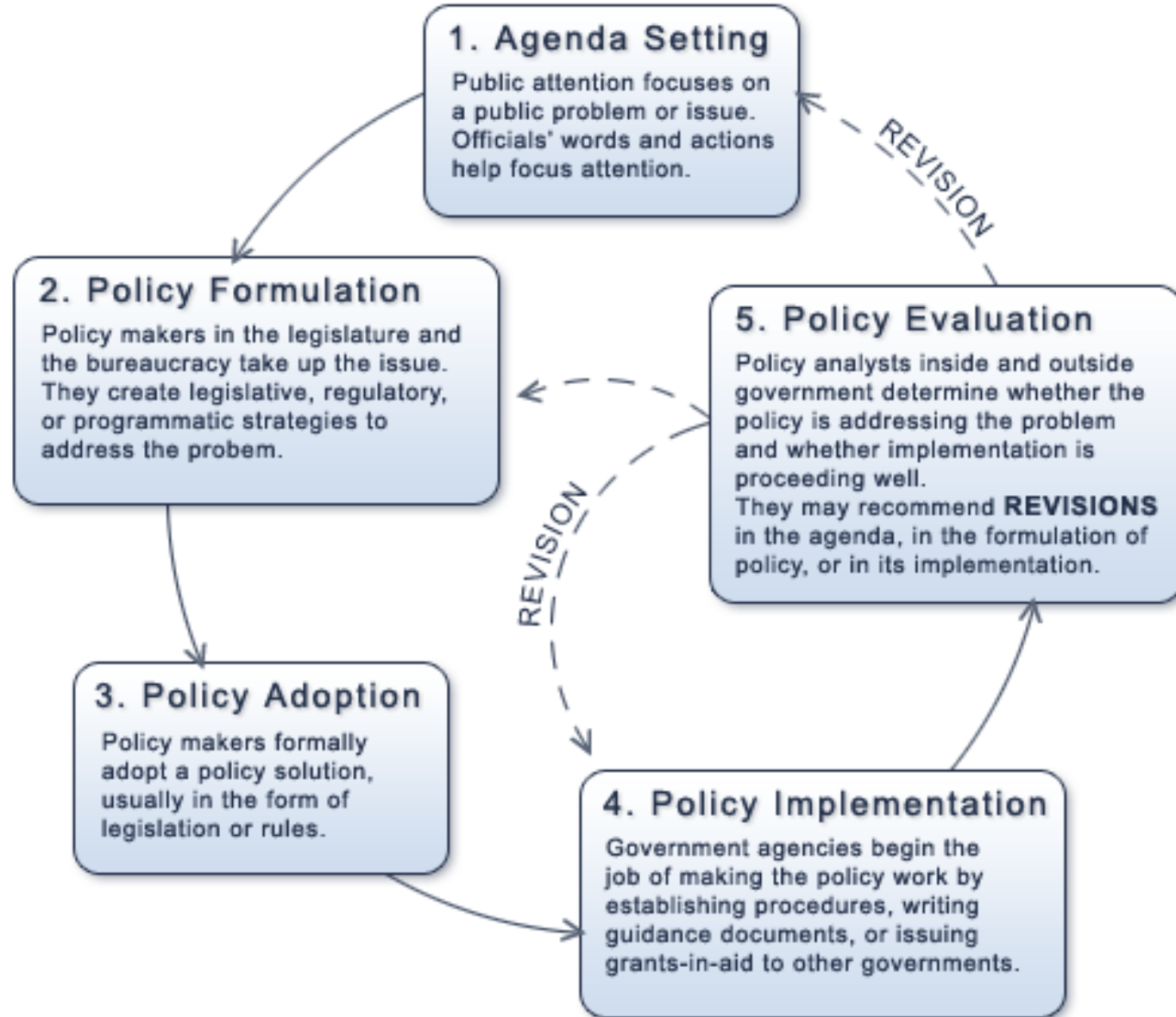
- every public policy => political assignment and ideas (political parties) => goals, tools and funds
- how to find out whether PP goals are fulfilled by chosen tools? => needs to have a set of relevant tools to evaluate it all properly
- major development in 20th century
- generally there can be identified two general approaches - microeconomic (bottom-up approach) and macroeconomic (top-down approach)
- recent development is significantly powered by growing role and use of ICT and internet, open and big data and participation tools
- according to growing complexity it is becoming highly desirable to use different tools to evaluate policies because of its complementarity (different views => **BIG PICTURE**)



	<i>1977 Evaluation Policy</i>	<i>1992 Evaluation Policy</i>	<i>1994 Review Policy</i>	<i>2001 Evaluation Policy</i>	<i>2009 Policy on Evaluation</i>
Evaluation Issues	<ul style="list-style-type: none"> • Effectiveness • Efficiency 	<ul style="list-style-type: none"> • Relevance • Success • Cost-effectiveness 	<ul style="list-style-type: none"> • Relevance • Success • Cost-effectiveness 	<ul style="list-style-type: none"> • Relevance • Success • Cost-effectiveness 	<ul style="list-style-type: none"> • Relevance issue 1: Continued need for program • Relevance issue 2: Alignment with government priorities • Relevance issue 3: Alignment with federal roles and responsibilities • Achievement of expected outcomes • Resource utilization (demonstration of efficiency and economy)

Hallet and Untiedt (2001) present three main reasons why public spending should be monitored and evaluated:

- 1) To evaluate the effectiveness or efficiency of expenditures associated with certain policy in order to achieve certain objectives and the possibility of comparison with alternative policies;
- 2) To provide a guide to decision-makers on how to achieve the intended goals by using the most efficient way of spending public funds;
- 3) 3) To ensure liability to taxpayers through a view to the most efficient use of public funds.



Lopez-Rodriguez and Faina (2014) and the European Commission outline two main approaches of impacts of EU cohesion policy assessments:

- 1) Theory-based evaluations (literature reviews, text analysis, interviews and questionnaires or case studies etc.);
- 2) Counterfactual analysis (econometrics, macroeconomic models or input-output models etc.).

The complementarity of both (qualitative and quantitative) approaches lies in the interconnection of the knowledge acquired by the individual methods.

Other policy evaluation typology:

1) Ex-ante evaluations
(planning and forecasting)

2) Process evaluations
(implementation)

3) Ex-post evaluations
(assessment and accountability)

DSR Evaluation Method Selection Framework	Ex Ante	Ex Post
Naturalistic	<ul style="list-style-type: none"> •Action Research •Focus Group 	<ul style="list-style-type: none"> •Action Research •Case Study •Focus Group •Participant Observation •Ethnography •Phenomenology •Survey (qualitative or quantitative)
Artificial	<ul style="list-style-type: none"> •Mathematical or Logical Proof •Criteria-Based Evaluation •Lab Experiment •Computer Simulation 	<ul style="list-style-type: none"> •Mathematical or Logical Proof •Lab Experiment •Role Playing Simulation •Computer Simulation •Field Experiment

Causal versus non-causal models

1) Causal models

- Measuring the impacts of various factors (independent variables) on results of certain programs or projects (dependent variables)
- E.g. Simulation models, input-output models, microeconomic models or statistic models
- Used to assess of impacts of different projects/programs/politics, when you are able to prove the relationship between dependent and independent variables
- Presence of risks => potential risk of misleading results

- Example:

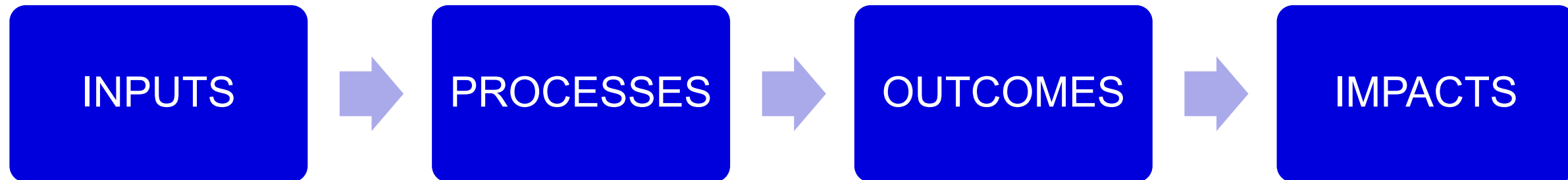
Development of infrastructure (e.g. Highway network) around cities and its impact on influenced cities => economic development of influenced cities (in comparison to others). Is the economic growth the consequence of development of such infrastructure or the growth would be reached even without this infrastructure because these cities have bigger potential for economic growth than other cities.

The solution could be reached by using further suitable detailed method (case study, interviews, document analysis etc.)

2) Non-causal models

- E.g. Observing of participants, interviews, case study, ethnographic methods, preference revealing etc.
- Political dimension problem within taking the political decisions when deciding about the projects/programs/politics in public sector
- Primary vs secondary data

Policy evaluation: How it should be?



Policy evaluation: How it usually is?



Table 4.1 Recommended input, output, outcome and impact indicators to measure the effect of research and innovation programmes

Input	Output	Outcome	Impact
Investments	Activities	Results	Effects
Development	Behaviour		
<ul style="list-style-type: none"> Public R&D expenditure in relation to GDP Public R&D expenditure by scientific fields Public R&D expenditure for selected strategic areas Private R&D expenditure in relation to GDP Private R&D by sector Offshoring of research Private expenditure for innovation (excl. R&D expenditure) EU's 7th Framework Programme Funding and grants from the European Research Council Funding and grants from the European Institute of Innovation and Technology External funding of university research Flow of resources from research-funding to research-performing R&D employees in the public sector R&D employees in the public sector by scientific fields R&D employees in the private sector R&D employees in the private sector by industry Private expenditure for innovation Share of companies with high skilled employees Share of academics in the workforce 	<ul style="list-style-type: none"> Granted PhD certificates PhD certificates by scientific fields Average annual growth in number of publications (15 countries most active in publishing) Number of research publications Number of research publications in leading scientific journals Share of research publications with cooperation by scientific fields Share of research publications with cooperation by type of partners Research publications with co-authors 	<ul style="list-style-type: none"> Citations of scientific journals Impact of publications with respect to scientific fields (Nordic countries) EPO-patents and licences Public research institutions license agreements, patent applications and spin-outs Share of companies with innovation activities Share of PP innovative companies Share of PP innovative companies with innovation cooperation The 100 most R&D active companies ("EU Industrial R&D Investment Scoreboard") Innovations and new technologies Start-ups 	<ul style="list-style-type: none"> Growth in labor productivity Growth in Total Factor Productivity Growth in real wages GDP growth Employment growth Growth in trade turnover or gross profits
Economic investments	Non-economic investments	Non-economic additionalities	Economic additionalities

Best practice:
Denmark

- Case study
- Cost-benefit analysis
- Expert panels
- Focus groups
- Interviews
- Multi-criteria analysis
- SWOT analysis

SWOT analysis

- Analysis of strong (S) and weak (W) sides, opportunities (O) and threats (T)
- Aim: get the sujet/service/product from A => B (positioning)
- Originally from private sector within the strategic planning Framework and then followed by use in public sector for evaluation of public projects or development...
- Paradigms: general vs concrete, shallow vs deep (detailed), subjective vs objective, pragmatic empiricism
- Disadvantages (limits):
 - poor performance / method usage (speed of execution, depth of execution, poor interpretation (see causal analysis),
 - replacing a location in a matrix),
 - creating an analysis for already decided goals (bias),
 - brainstorming limits,
 - organization goals vs. community goals,
 - the width of the working team

Focus groups

- length: app. 60-90 min.
- a narrow group of interested people (about 7 people)
- together talks about a pre-selected theme
- the advantage it is not time-consuming
- the positive of method is the development of the debate and the raise of new opinions / views

Round table

- length: 90 minutes +
- a large to potentially representative group
- more issues and themes
- advantage is the interconnection and confrontation of the city / city management with the citizens
- higher objectivity => objectification of the findings

Case study

- for a more detailed description and analysis of the project
- data collection both qualitative and quantitative
- critical analysis, implementation analysis, or project impact analysis
- structure and form

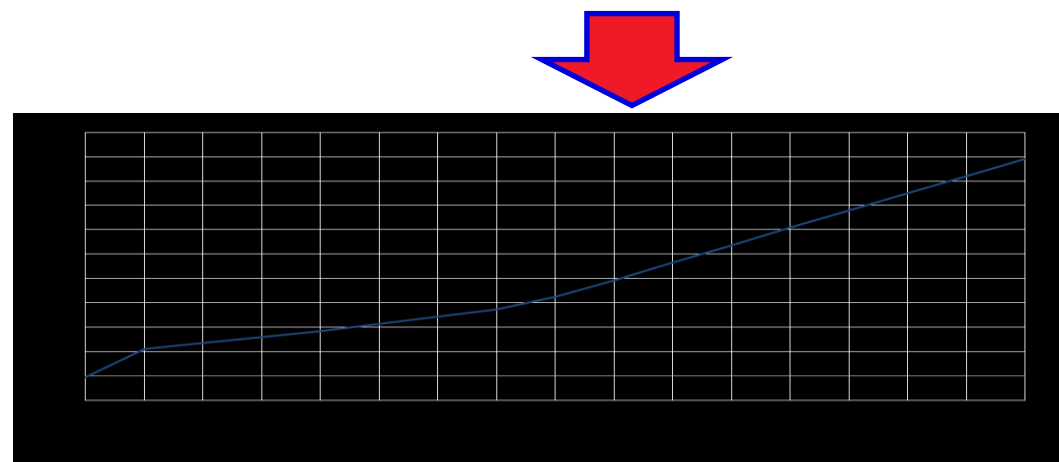
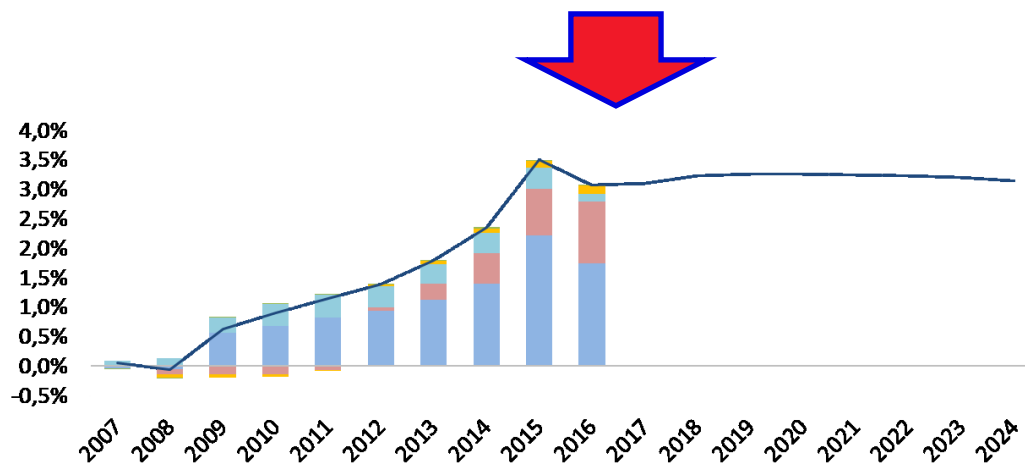
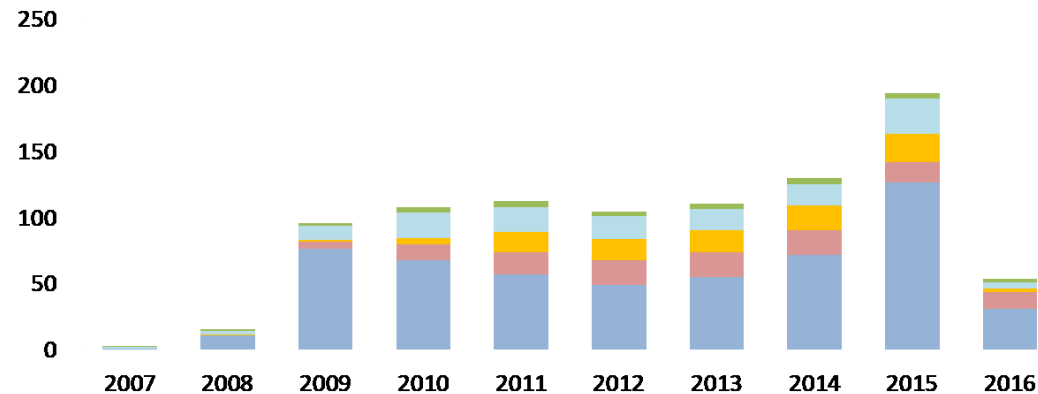
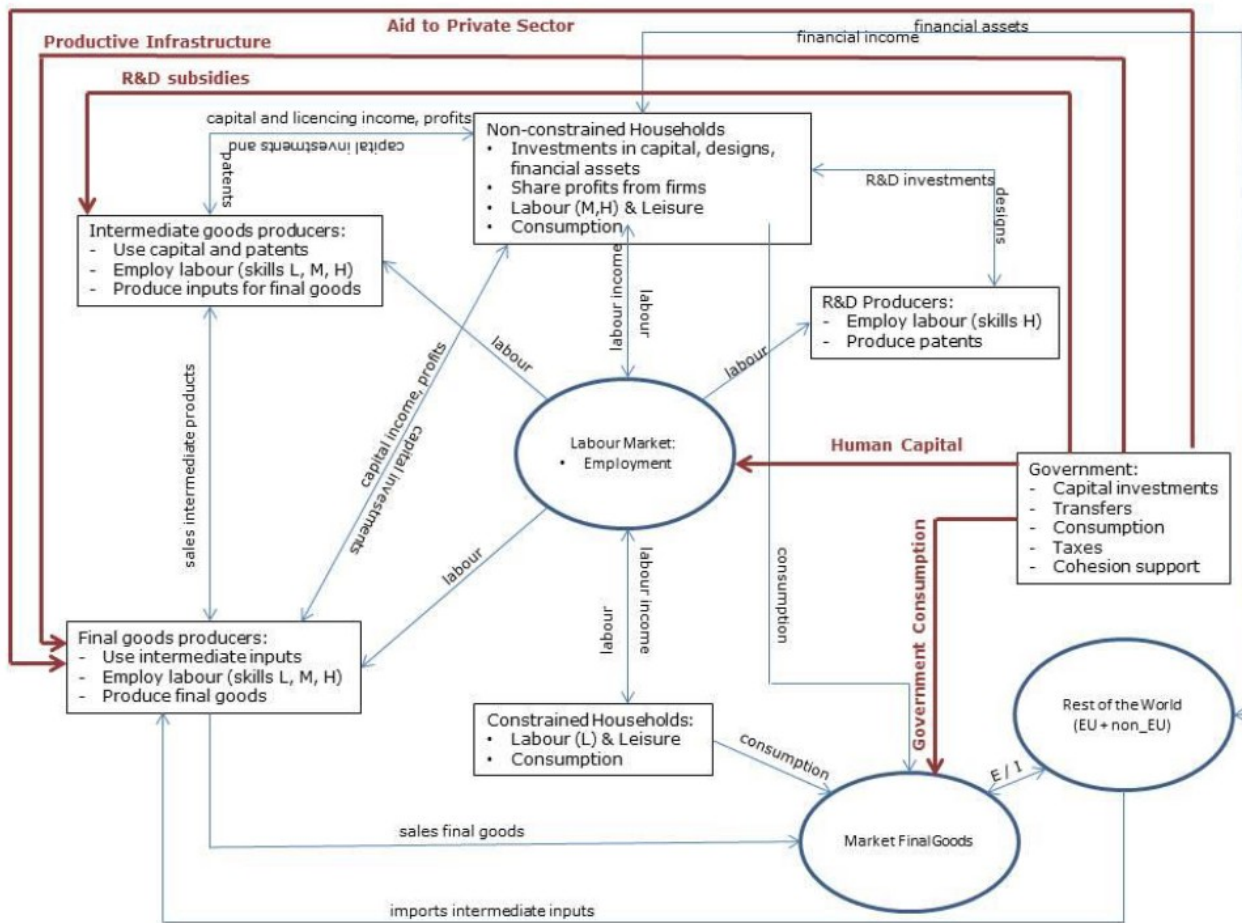
Interview

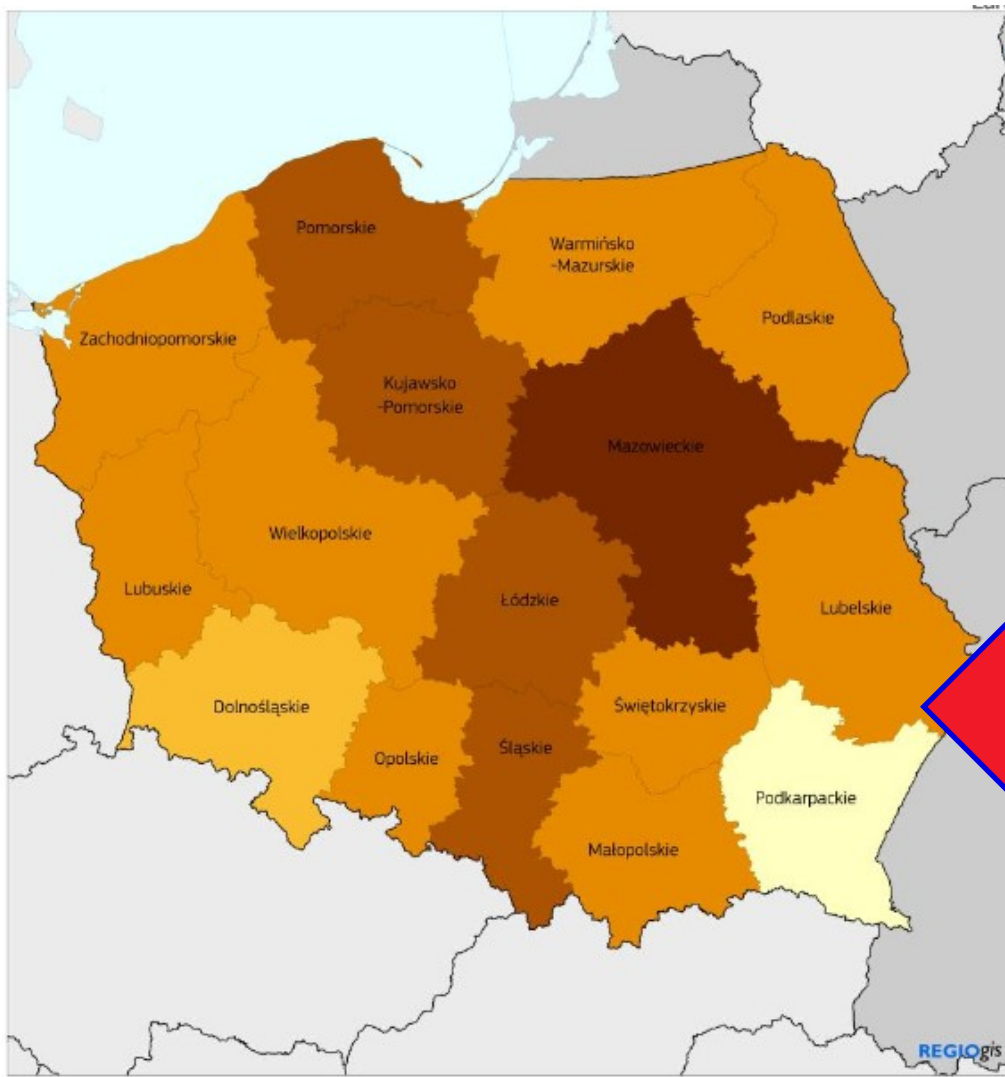
- we need to find out a specific type of information or get a more comprehensive view
- types of interviews: free, semi-structured and structured
- appropriate sample selection + interviewer experience

Survey

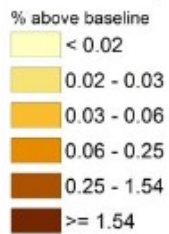
- generalize to the segment of the population they represent (a representative sample of respondents).
- rules for creating a questionnaire
- closed questions vs. open vs. semi-open questions (other answer)
- test the questionnaire
- encoding data for further processing

MUNI ECON QUEST III R&D





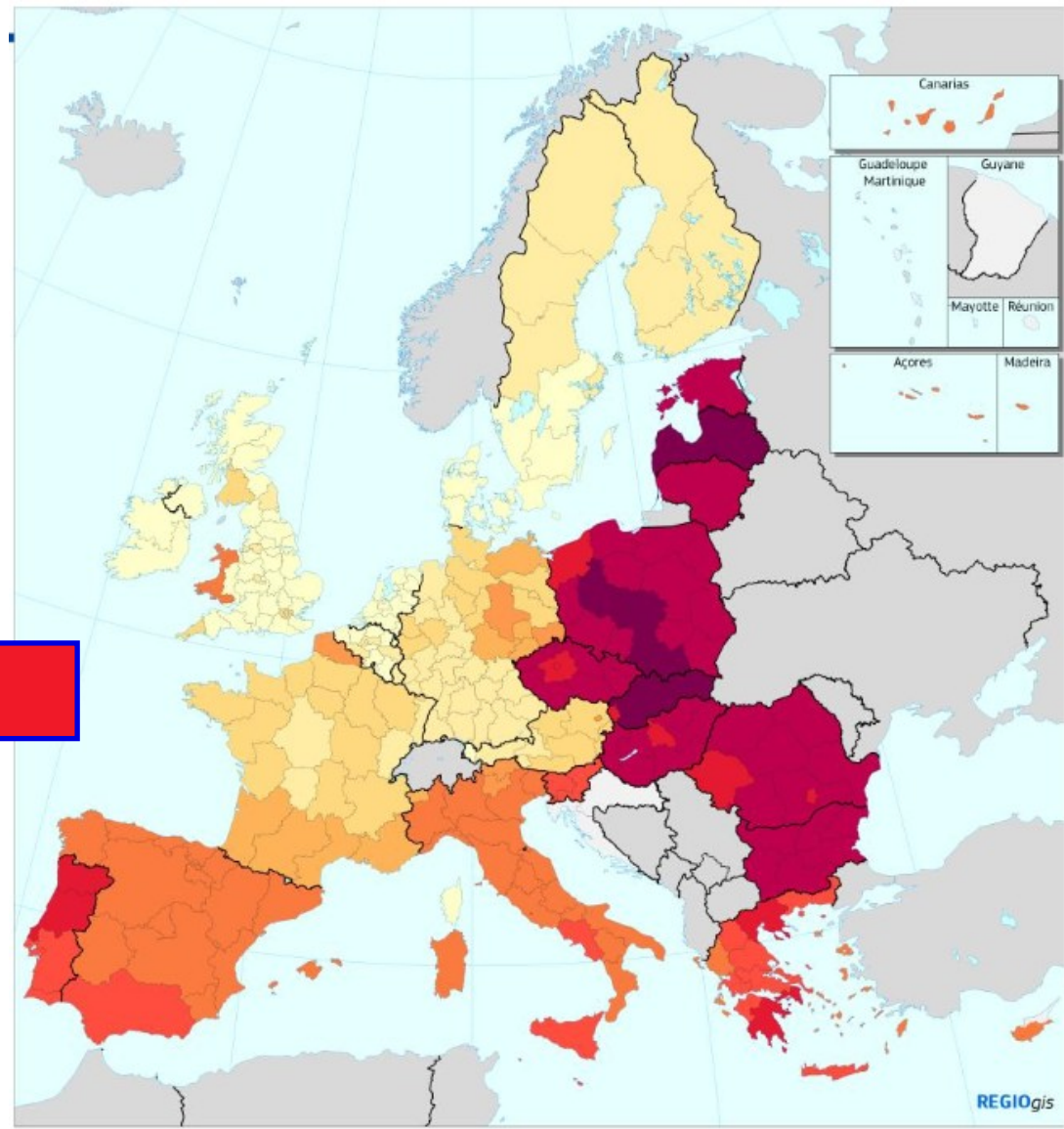
Poland
Short run impact on GDP of a reduction in transport costs in five Polish regions



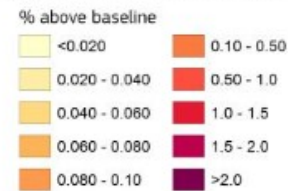
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on (2016)



Impact of transport infrastructure interventions on GDP, 2030



Source: RHOMOLO

Examples and case studies

Government of Canada: Evaluation of the 2009 Policy on Evaluation
<https://www.canada.ca/en/treasury-board-secretariat/services/audit-evaluation/centre-excellence-evaluation/evaluation-2009-policy-evaluation.html>

EVALSED - The resource for the evaluation of Socio-Economic Development :
Sourcebook - Method and techniques
http://ec.europa.eu/regional_policy/en/information/publications/evaluations-guidance-documents/2013/evalsed-the-resource-for-the-evaluation-of-socio-economic-development-sourcebook-method-and-techniques

Hallet, M. a Untiedt, G. (2001) The potential and limitations of macroeconomic modelling for the evaluation of EU Structural Funds illustrated by the HERMIN model for East Germany. Informationen zur Raumentwicklung. Heft 6/7.2001, s. 451-463.

López-Rodríguez, J. a Faína, A. (2014) Rhomolo and other methodologies to assess The European Cohesion Policy. Investigaciones Regionales, 29, s. 5-13.

European Commission (2014) Sixth report on economic, social and territorial cohesion. [online]. Available at: <http://ec.europa.eu/regional_policy/sources/docoffic/official/reports/cohesion6/6cr_en.pdf>

Venable, J.R., Pries-Heje, J. and Baskerville, R. (2012) A Comprehensive Framework for Evaluation in Design Science Research. Proceedings of the 7th international conference on Design Science Research in Information Systems: advances in theory and practice

Office of the Government of the Czech Republic (2018) Dopad ESI fondů na HDP ČR: simulace modelů QUEST III a RHOMOLO. Available at: <<https://www.vlada.cz/assets/evropske-zalezitosti/analyzy-EU/Dopad-ESI-fondu-na-hospodarstvi-CR.pdf>>