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TARIFF POLICY AND FINANCIAL MODEL

SHARING APPROACHES BASED ON MISP EXPERIENCE

Giel Verbeeck, Financial Expert

OUTLINE OF THE PRESENTATION

1. TARIFF POLICY

- What defines the tariff policy?
- What can and what should be taken into account?

2. FINANCIAL MODEL

- What makes a good financial model?
- What issues do you typically encounter?

TARIFF POLICY

Definition: Tariff policy determines how the price for water is calculated and fixed, according to a defined set of parameters, derived from verifiable current and future data.

Tariff policy is determined by:

1. Service agreement (between Provider and Client)
   →Measurement, payment, recoverable costs
2. Applicable regulation (subnational, national and supranational)
   → Recoverable costs, price discrimination, affordability, measurement

EU principles for water pricing

1. Polluter pays principle (PPP)
   - Volumetric tariffing
   - Shadow costs of water services

2. Full costs recovery (FCR)
   - Operating costs
     - Operation and Maintenance
     - Costs of asset depreciation
   - Capital costs
   - Environmental remediation costs

Conclusion on tariff policy:

1. Tariff policy defines the tariff, model only reflects and calculates
2. National and sub national tariff policy increasingly needs to consider EU acquis and in particular PPP and FCR:

"3D" expansion of tariff policy

- Volumetric charging (per m^3) and user harmonization
- Cost items (costs of asset depreciation, capital costs, environmental costs)
- Time frame over which costs are considered (20 years or more)

FINANCIAL MODEL

What makes a good model? A good financial model:

- **Transparently reflects the tariff policy;**
- **Separates inputs/assumptions from calculations and these from output;**
- **Shows how each input item affects the output;**
- **Shows how input is obtained from its sources (official data sources, accounting systems, operational databases etc.)**

Once the tariff policy is agreed in principle the financial model can be made.

Issues in model development

	Issue	Solution
1.	Cost centres not clearly defined	Agreed provisional estimates, operationalization of tariff policy (see graphical illustration)
2.	Staff unwilling or sceptical	Involve senior staff (and youngsters!) in the design and development
3.	Accounting system unable to accommodate	Accounting system renewal, but for this one must reserve at least a year
4.	Outcomes not welcome…	…Change the tariff policy ☹

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Type	Sector roll-up	Cost Centre Number	Code in financial database	Name of cost centre	Cost centre type	# staff
Management, administration & sales (overhead)	1. General Management	1.1	00011	General Management	Indirect	7
	5. Economic Affairs	5.1	00051	Economic affairs management	Indirect	-
		5.2	00052	Accountancy unit	Indirect	18
		5.3	00053	Water meter reading & billing unit	Indirect	34
	6. Common Affairs	6.1	00061	Common affairs management	Indirect	1
		6.2	00062	Legal unit	Indirect	11
		6.3	00063	Security unit	Indirect	26
		6.4	00064	IT unit	Indirect	15
Direct / productive departments	2. Maintenance	2.1	00021	Maintenance management	Direct	1
		2.2.1	00022	Water network unit	Direct	35
		2.2.2	00026	Transmission main unit	Direct	-
		2.3	00023	Sewerage unit	Direct	32
		2.4	00024	Waste water treament unit	Direct	-
		2.5	00025	Vehicle maintenance unit	Direct	39
	3. Investment, construction & developmen	3.1	00031	Investment, constr. & dev. management	Direct	2
		3.2	00032	Investment & development unit	Direct	2
		3.3	00033	Construction unit	Direct	25
		3.4	00034	Technical service & design unit	Direct	11
	4. Water production & dam	4.1	00041	Water production & dam management	Direct	2
		4.2	00042	Water production unit	Direct	13
		4.3	00043	Chemical water quality control unit	Direct	10
		4.4	00044	Microbiological water quality control unit	Direct	12
		4.5	00045	Treatment plant maintenace unit	Direct	16
		4.6	00046	Celija dam maintenance unit	Direct	6
TOTAL						318

Management, administration & sales
Regional bulk water scheme
Water distribution
Sewerage collection
Waste water treatment
Construction

Indirect	112
Direct	206
Total	318

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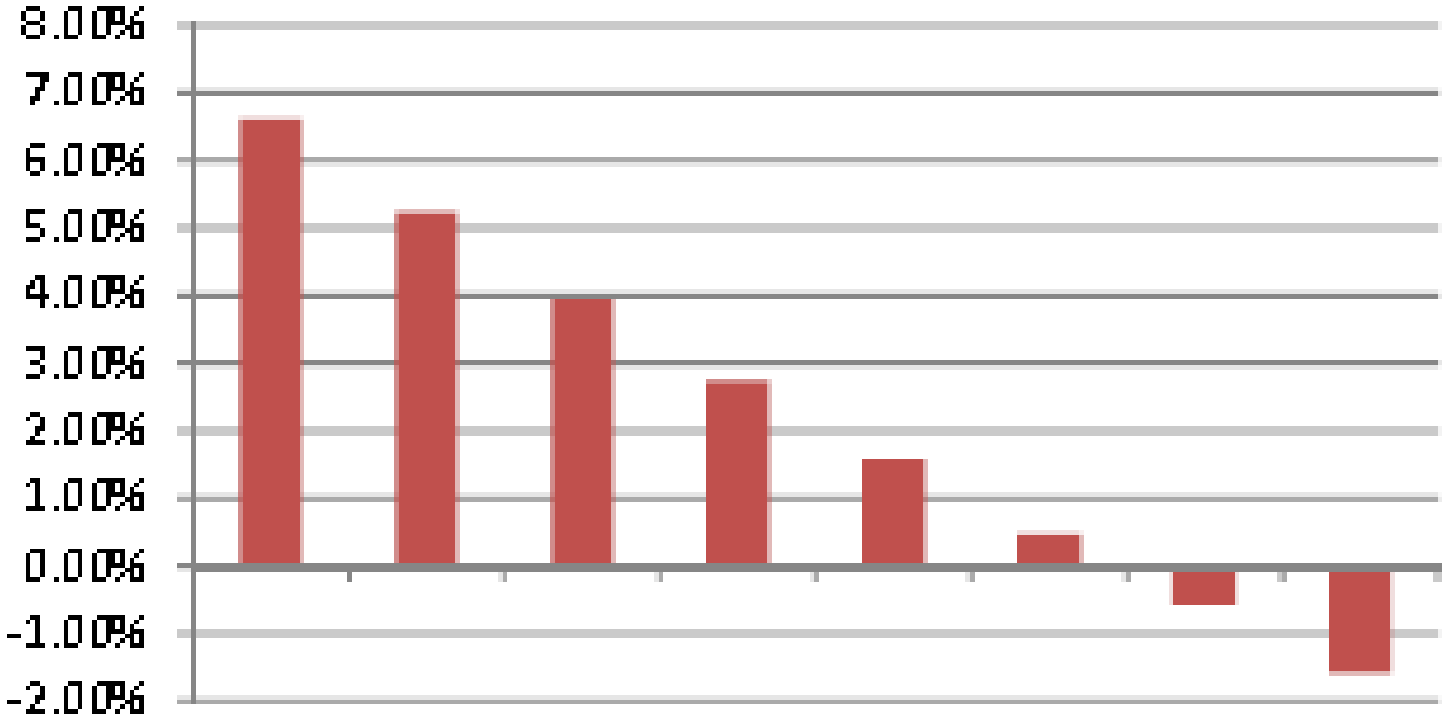
Issues in fine tuning tariff policy (1)

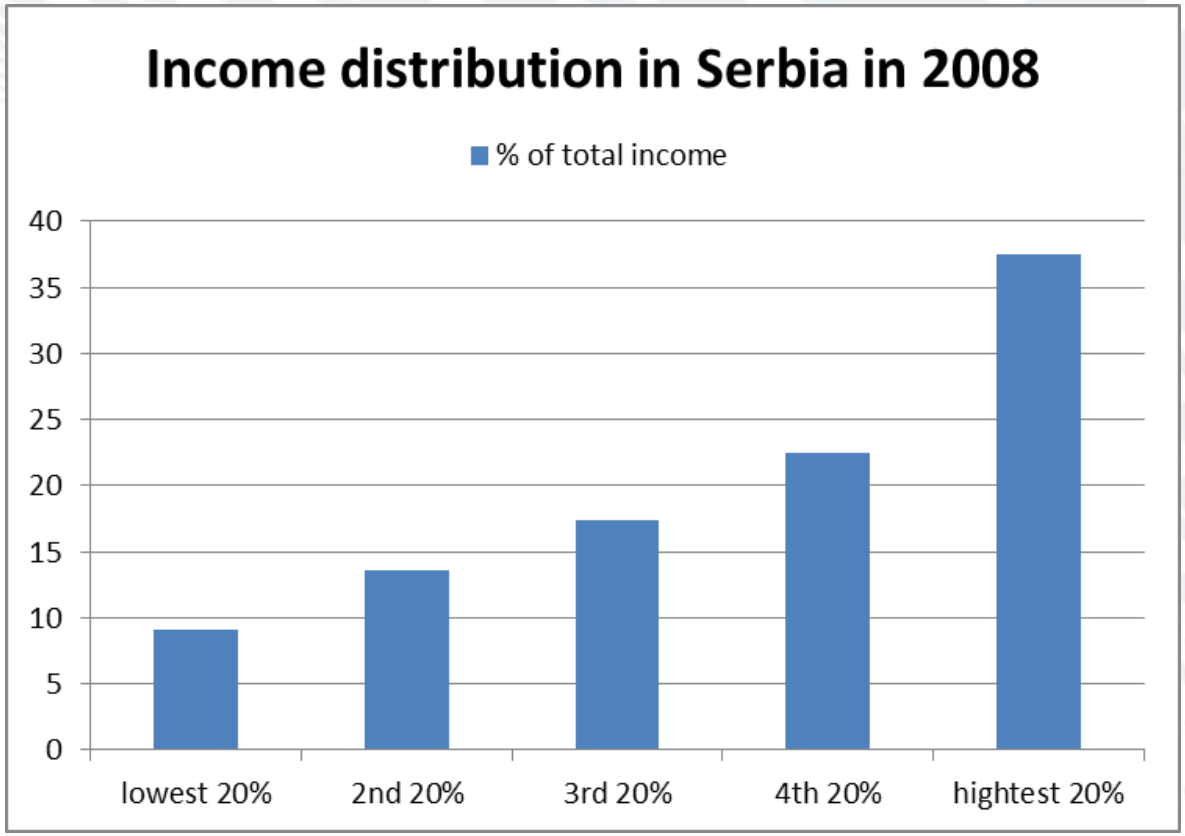
	Issue	Solution
1.	Affordability	Distinguish: 1. Agree % of estimated average household income; 2. Agree municipal support for truly vulnerable through voucher or reimbursement system.
2.	Contradiction between FCR, debt covenant and affordability	Agree which precedes over what in a formula like: Tariff=Max(IFI, DC, Min(IFI, AFF, FCR)) showing in what case which principle sets the maximum or minimum.
3.	Low initial use of the facility	Levelised tariff, taking into account discounted future water consumption (see graphical illustration)

Issues in fine tuning tariff policy (2)

	Issue	Solution
4.	Levelised tariff initially too high	Dynamic full cost recovery (determining a steady real tariff increase to align the water bill better to affordability over time whilst ensuring full cost recovery (see graphical illustration)
5.	Full cost recovery would lead to unproductive accumulation of funds in one entity	Create depreciation fund that would invest in projects that improve municipal infrastructure and generate sufficient returns to carry out capital replacement. Romanian MRD mechanism may be applied by regional stakeholders.

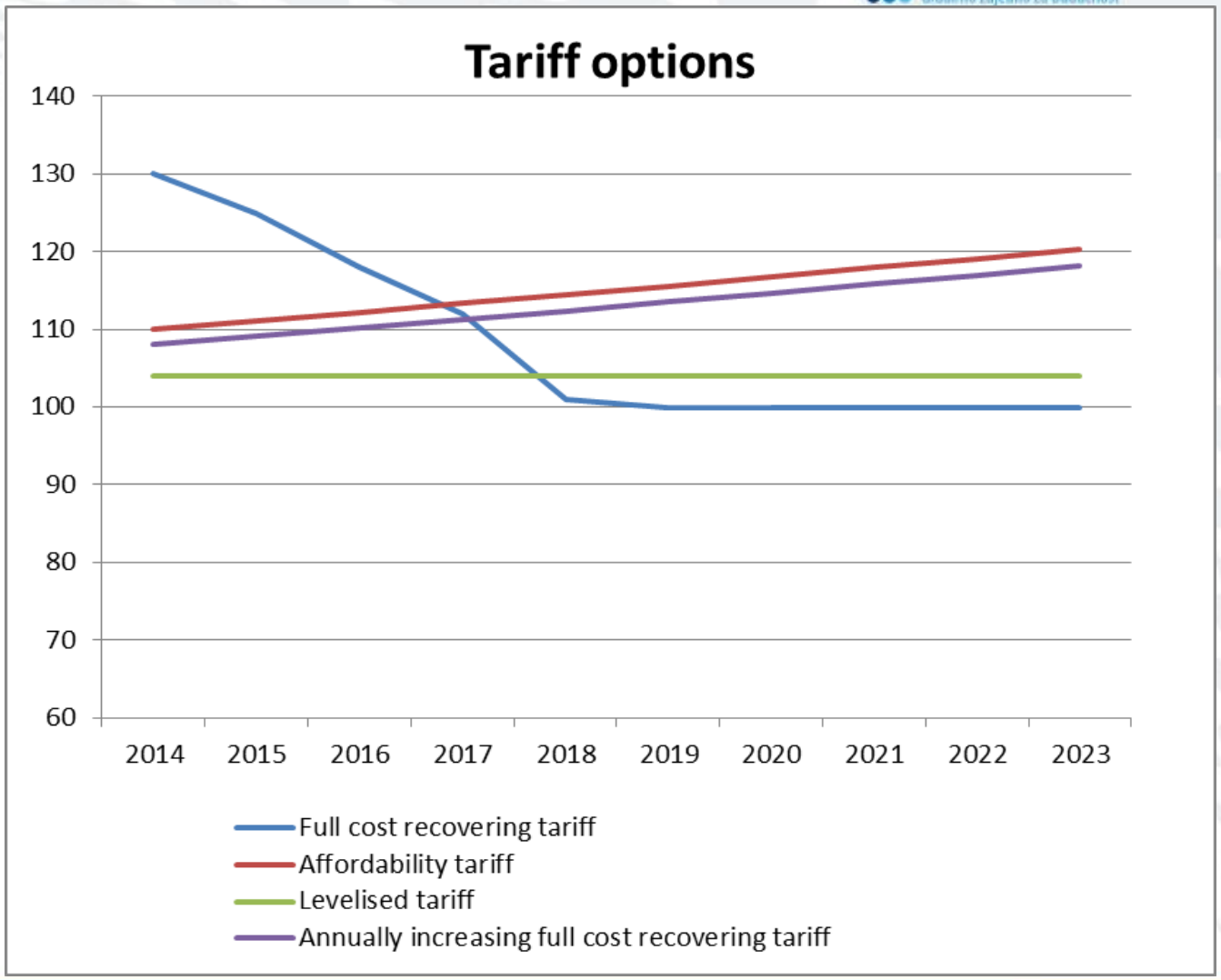
Required annual % real increase




Income distribution in Serbia in 2008
% of total income
40
35
30
25
20
15
10
5
0
lowest 20%
2nd 20%
3rd 20%
4th 20%
hightest 20%

Personal household consumption, monthly average		
	2010	%
RSD		
Total budget		
Total	43,723	100.0%
Food and non-alcoholic beverages	16,467	37.7%
Alcoholic beverages, tobacco and narcotics	1,995	4.6%
Clothing and footwear	2,121	4.9%
Housing, water, electricity, gas and other fuels	7,751	17.7%
Furnishings, household equipment and routine household maintenance	2,220	5.1%
Health	1,902	4.4%
Transport	4,073	9.3%
Communication	1,879	4.3%
Recreation and culture	1,944	4.4%
Education	365	0.8%
Restaurants and hotels	778	1.8%
Miscellaneous goods and services	2,228	5.1%

Source: Statistical Office of the Republic of Serbia


Tariff options
140
130
120
110
100
90
80
70
60
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
Full cost recovering tariff
Affordability tariff
Levelised tariff
Annually increasing full cost recovering tariff

Conclusion on financial model

1. The financial model is only a tool, not a policy;
2. It can be used to assess the tariff policy which can then be fine tuned to accommodate conflicting needs;
3. The model can be instrumental for parties to engage in a longer term price agreement. This enhances balance of power, predictability of services and tariffs and therefore the business climate and the general well being of the population.
4. Quality financial models enhance understanding, rather than obscure it.
5. Good financial modeling practice actively includes staff in the four defined steps of the process.

Groupwork job 1

1. Group A: You are part of the management team of a bulk water service provider;
   Group B: You are part of the management team of a water distribution company (with limited own water resources)
2. Prepare a briefing for your Board on the Bulk Water Agreement (BWA) that you foresee;
3. Take into account the important elements of the service agreement in the presentation of Nenad Colic (see flipchart);
4. Present the outline of the BWA in a concise presentation of less than 10 minutes.

Groupwork job 3

1. You are part of the financial team of a bulk water service provider;
2. Prepare an outline of the tariff model that is needed based on the foreseen methodology and bulk water agreement;
3. Do not go into relations, just outline the relationships and steps in a drawing;
4. Present the drawing and explanation in a concise presentation of less than 10 minutes.

QUESTIONS AND ASSISTANCE

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Thank you for your attention!