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Smart policies, strong utilities, sustainable services

WATER AND WASTEWATER SERVICES IN THE DANUBE REGION

THE STATE OF THE SECTOR

SUMMER SCHOOL TSLR
TORINO, SEPTEMBER, 2015

STRUCTURE

- A Framework for Sustainable Services
- The State of the Sector in the Danube region
  - *Context*
  - *Access*
  - *Service Providers*
  - *Financing*
  - *Policies and Institutions*
- Conclusions and way forward

SUSTAINABLE SERVICES
A FRAMEWORK

THE STATE OF THE SECTOR REVIEW

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- Is the region providing sustainable (i.e. universal, good quality, efficient and properly funded) services to all?
- Drawing on public data from many of your institutions – thank you!
- 30 authors and contributors
- Dozens of commenters and quality reviewers

- Regional report, and 16 country notes, available at: SoS.danubis.org

STATE OF THE SECTOR

- Context

ECONOMIC PRESSURE

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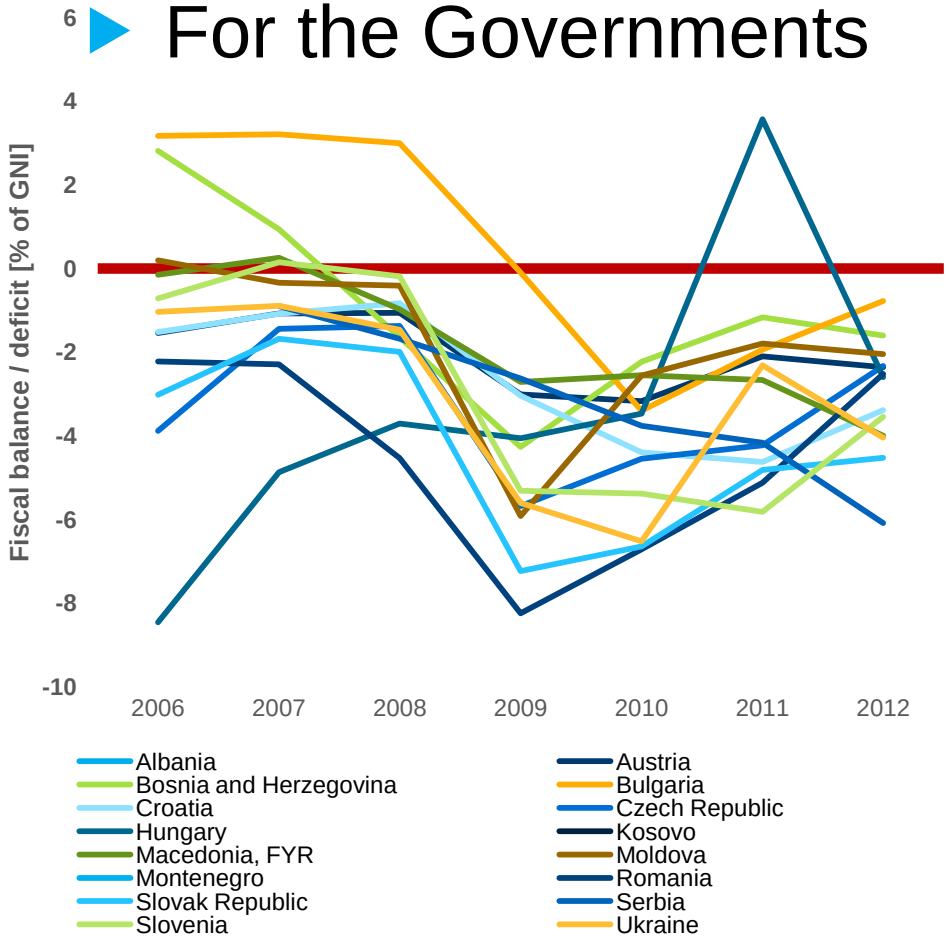
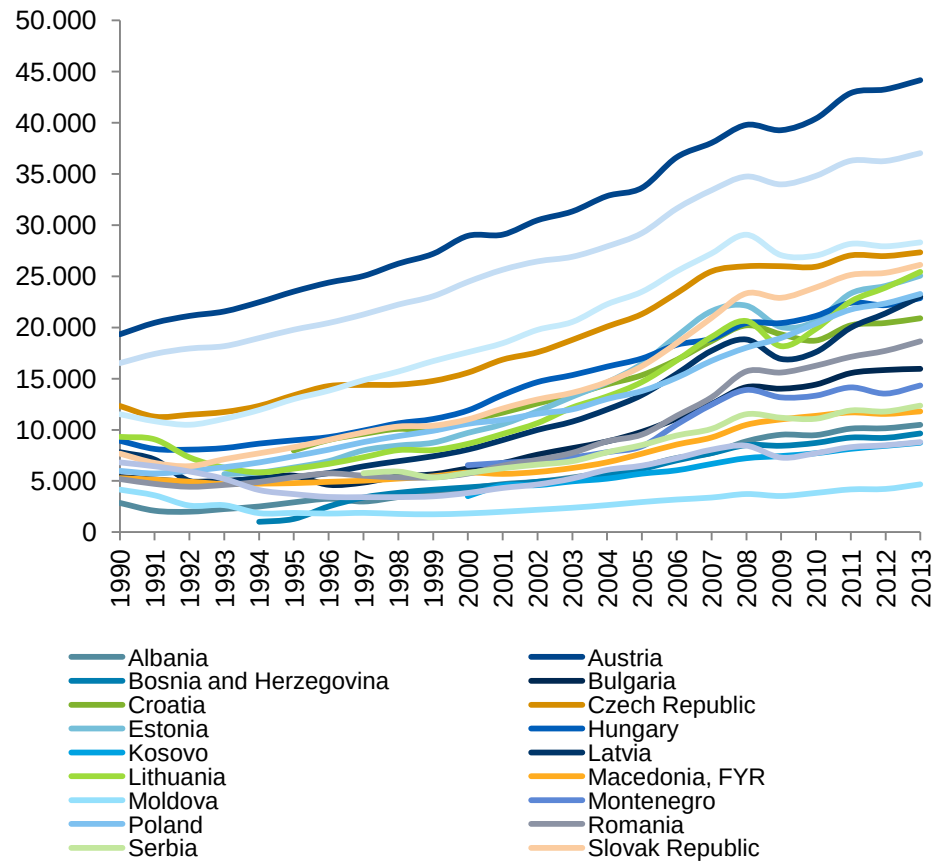
For the Governments



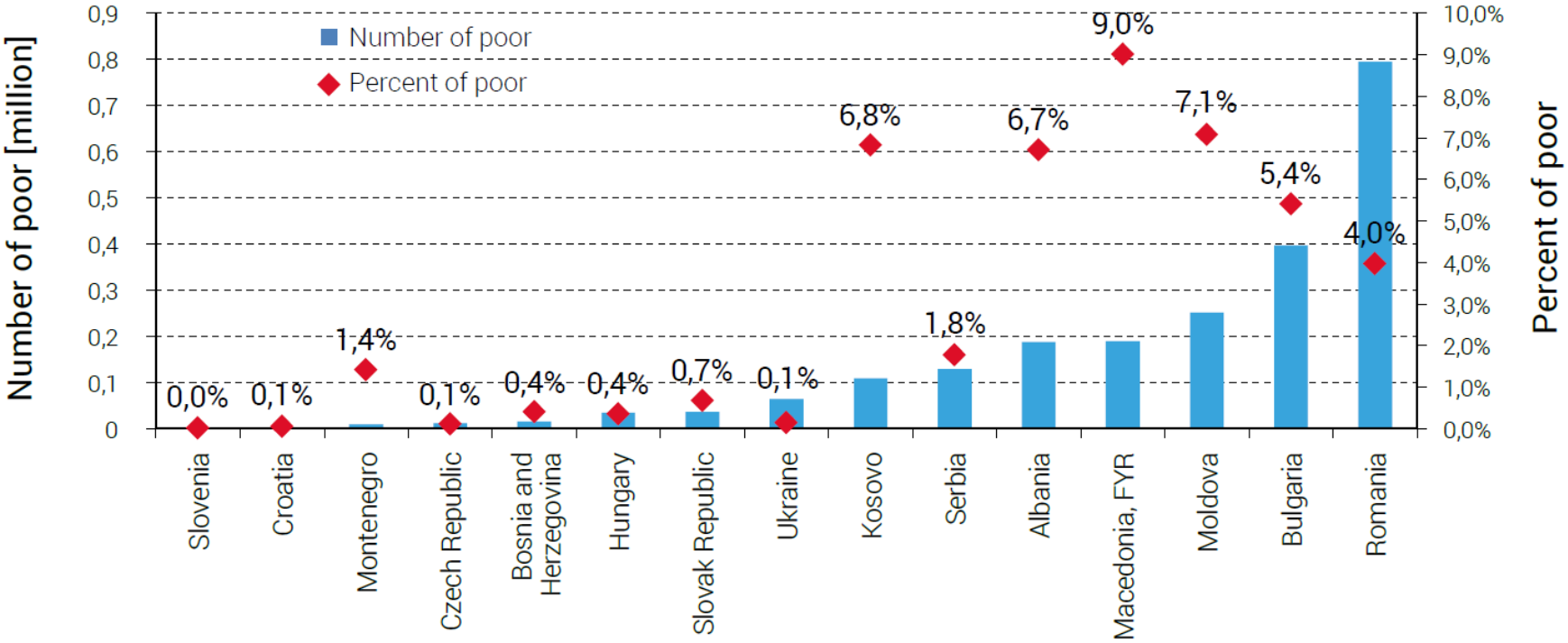
For the people



Source: World Bank 2013, 2015

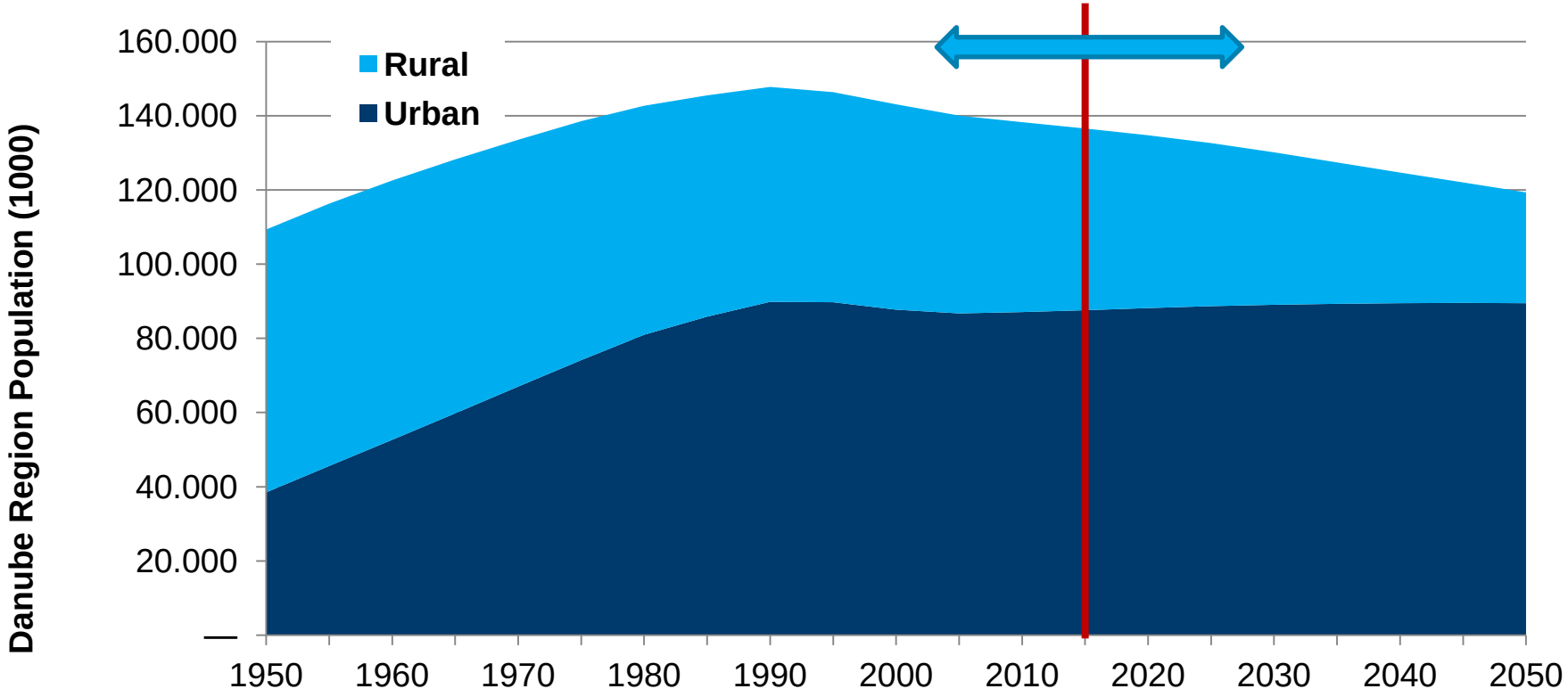
2.3 M EXTREME POOR

- Rural areas, minorities over-represented



DEMOGRAPHIC PRESSURE

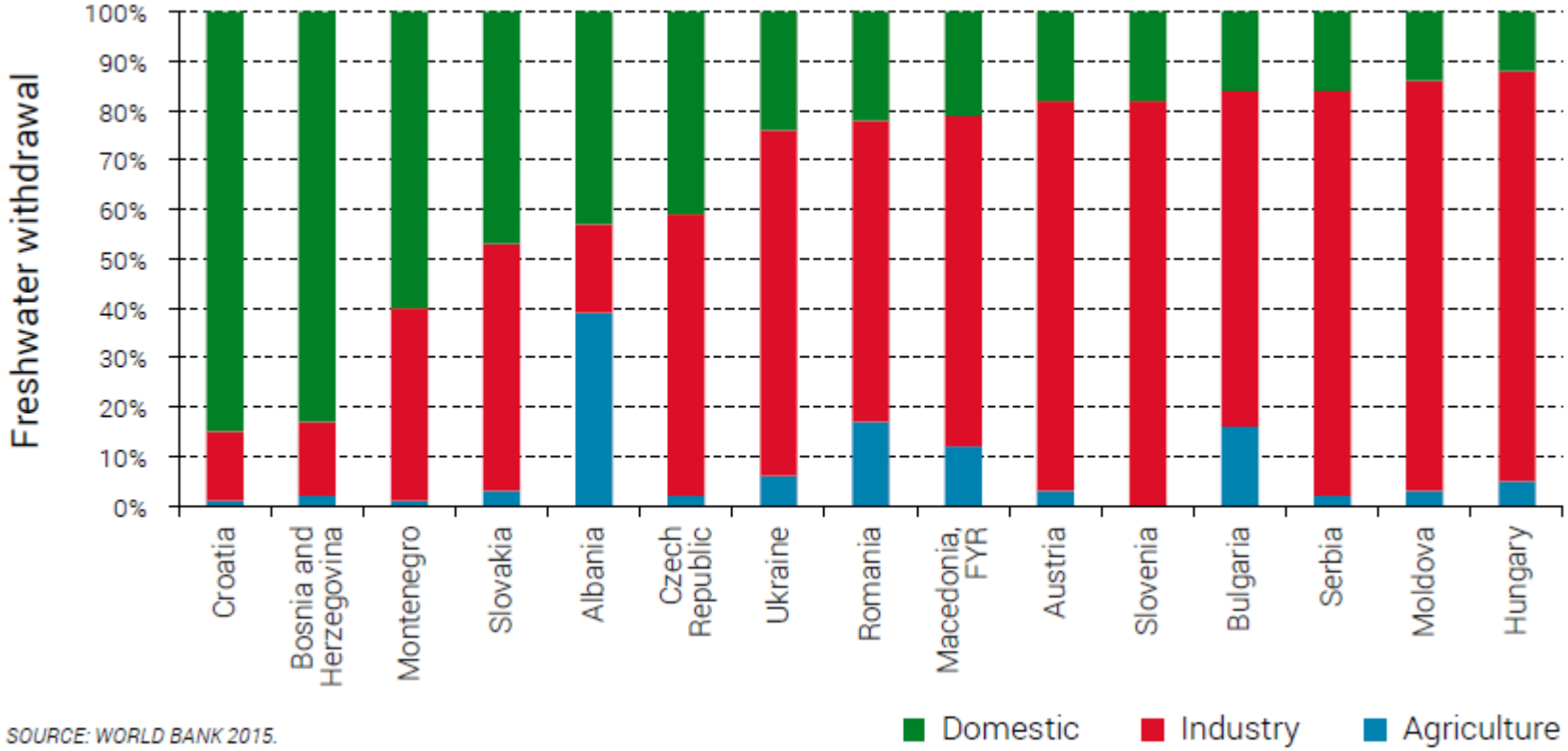
- Rural depopulating, urban stagnating



Source: own elaboration from UN ESA data

WATER USE AND CLIMATE PRESSURE

- Water withdrawal driven by industry in most countries, groundwater as main drinking water source in most countries



SOURCE: WORLD BANK 2015.

WATER USE AND CLIMATE PRESSURE

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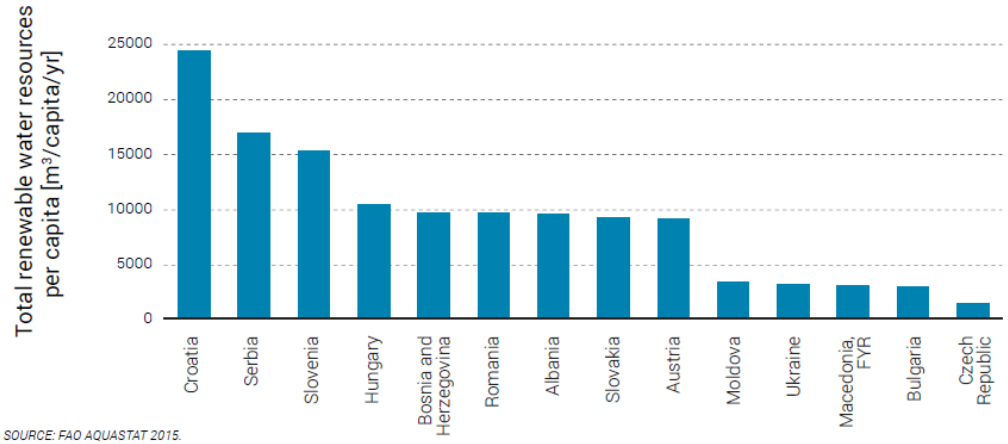
- Water rich but…



SOURCE: FAO AQUASTAT 2015.
NOTE: DATA FOR KOSOVO AND MONTENEGRO UNAVAILABLE.

FIGURE 12: ANNUAL MEAN TEMPERATURE CHANGE, 2021-2050

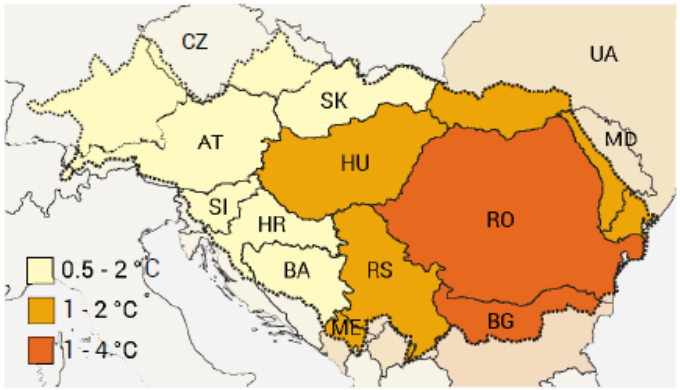


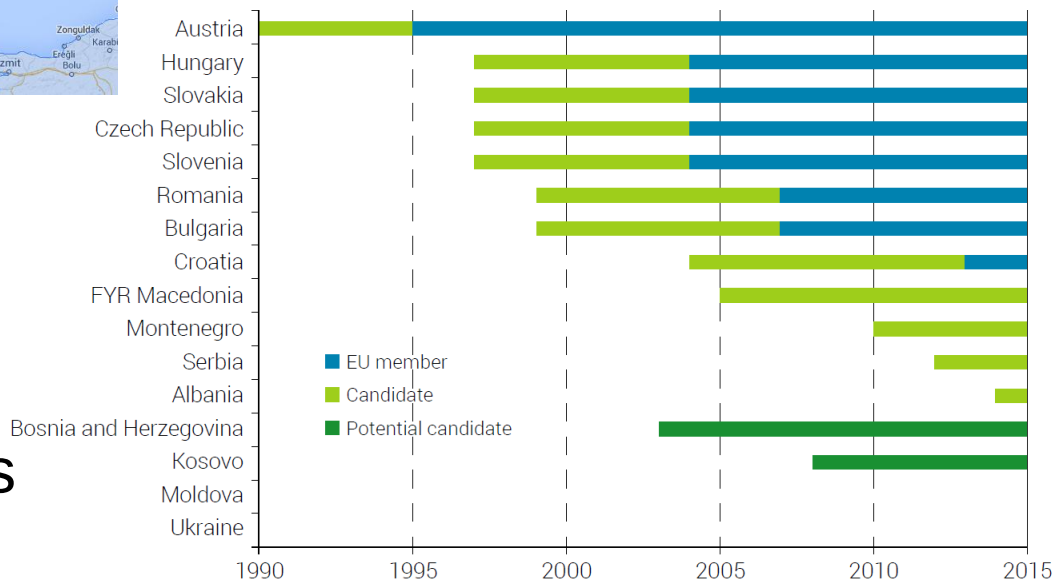
FIGURE 13: SUMMER MEAN PRECIPITATION CHANGE, 2021-2050

SOURCE: LMU 2012.

EU ACCESSION

European integration drives the water agenda in the most of the region…

- Eight members states
- Four candidates
- Two potential candidates

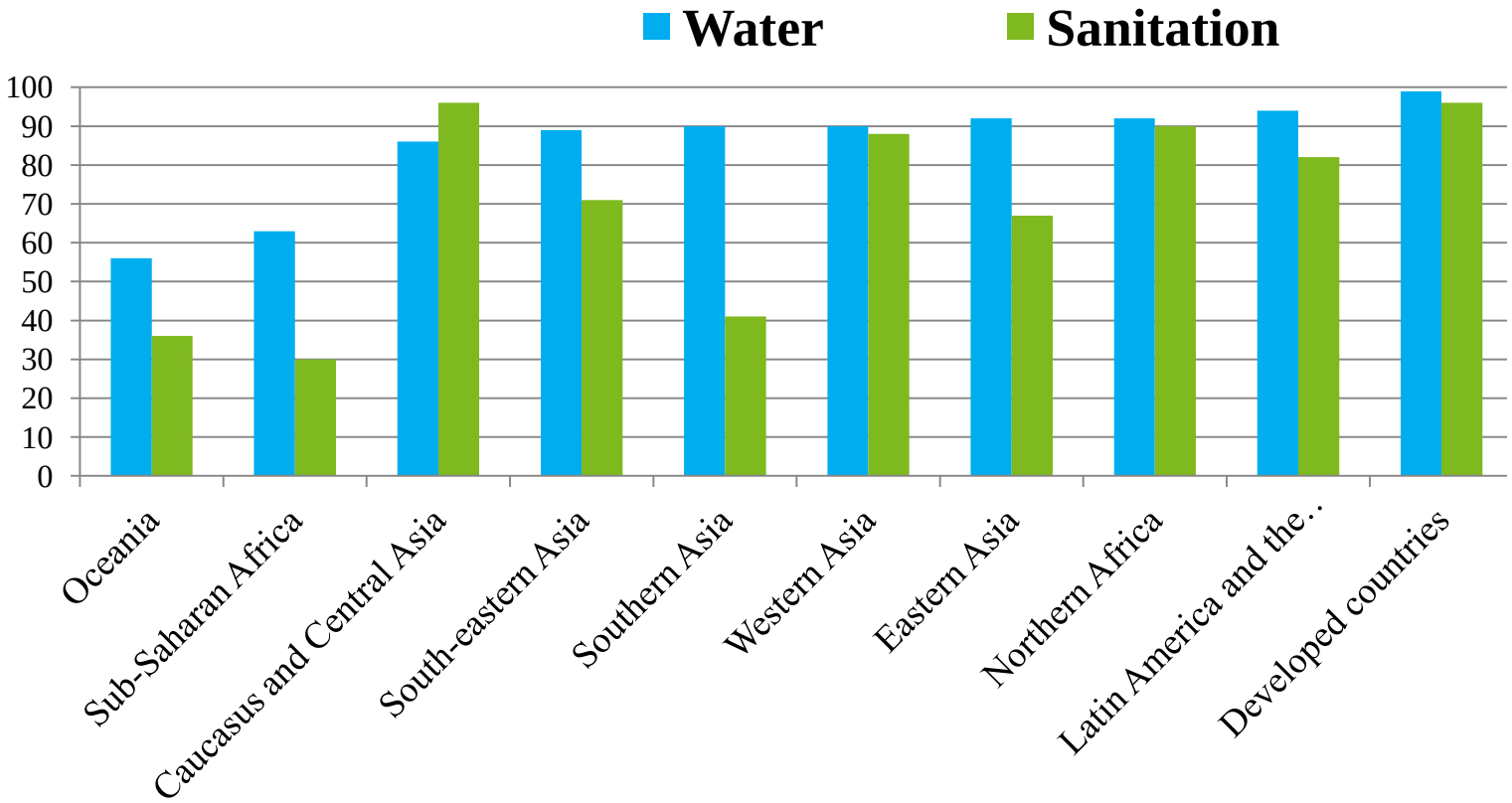


STATE OF THE SECTOR

- Access

ACCESS TO IMPROVED WSS

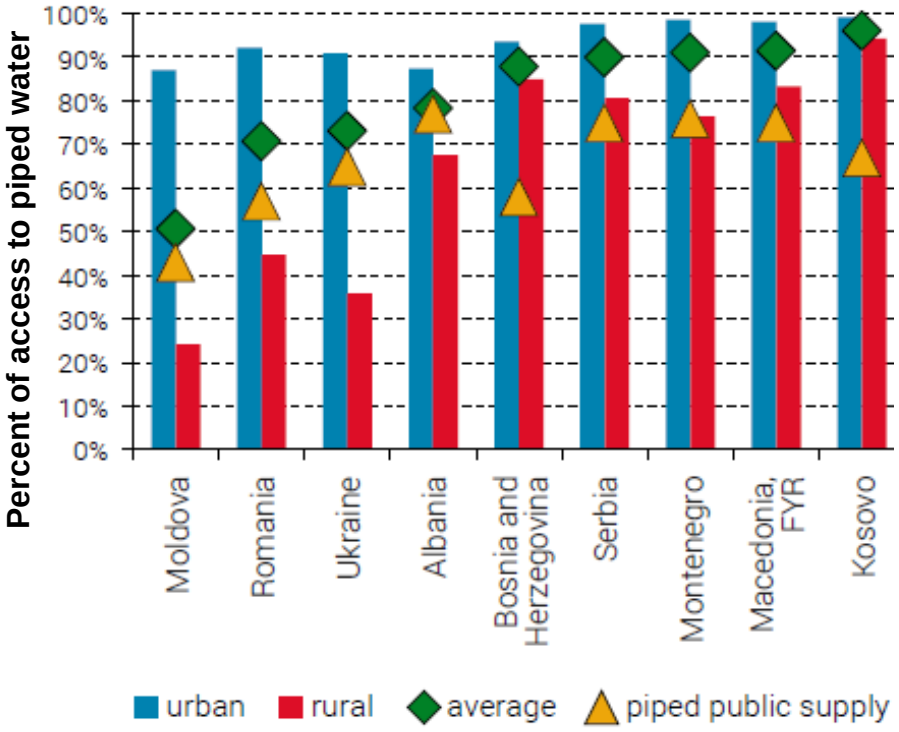
- Overall high in international comparison

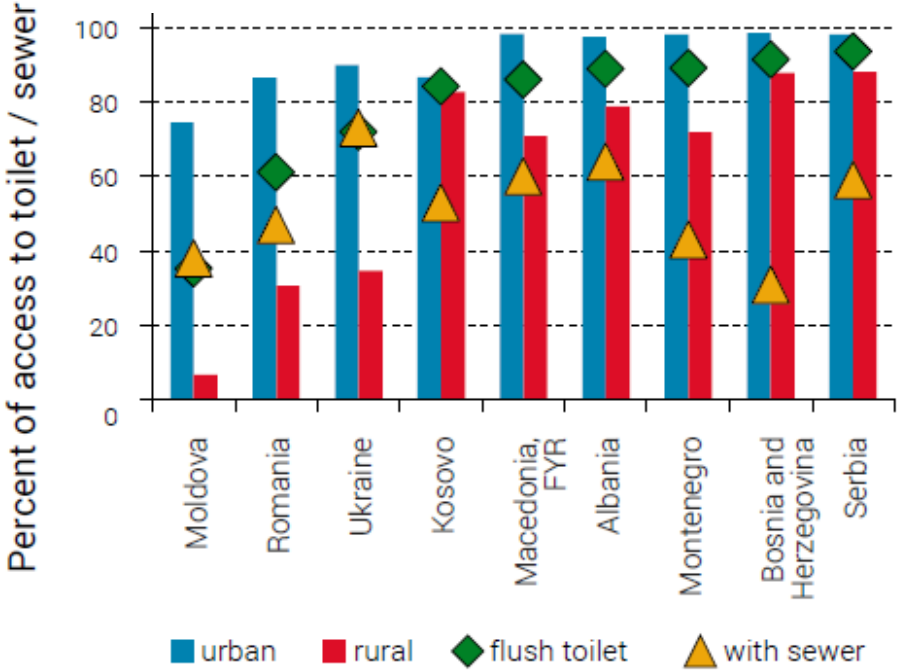


Source: Joint Monitoring Program

SERVICE QUALITY / VULNERABILITY

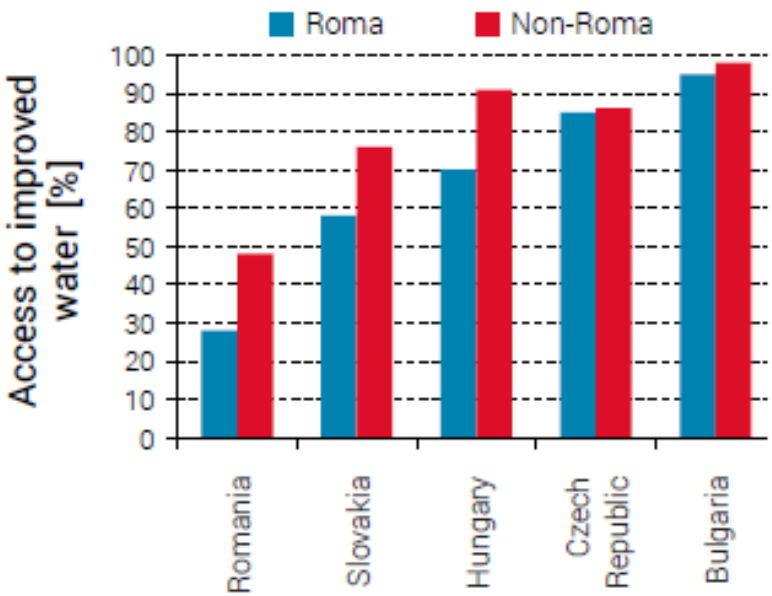
- Rural population with lower access to piped water and flush toilets

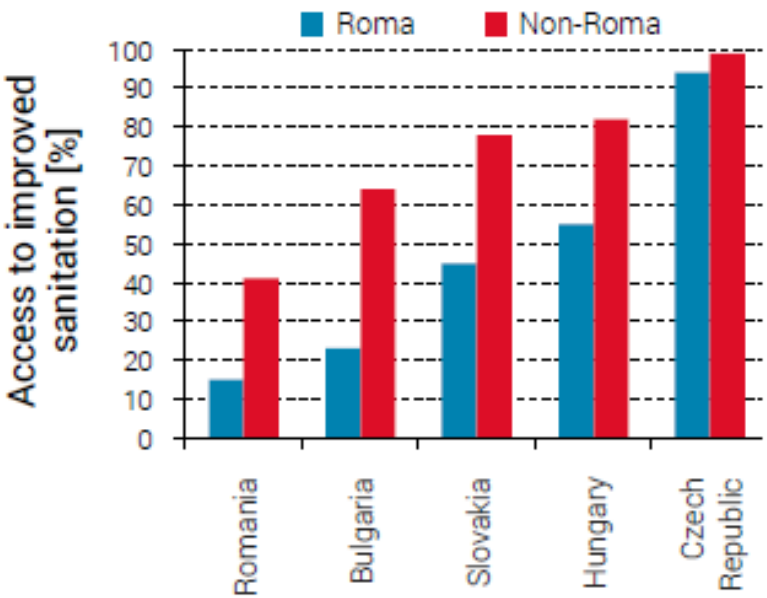




SERVICE QUALITY / VULNERABILITY

- Minorities with lower access to piped water and flush toilets

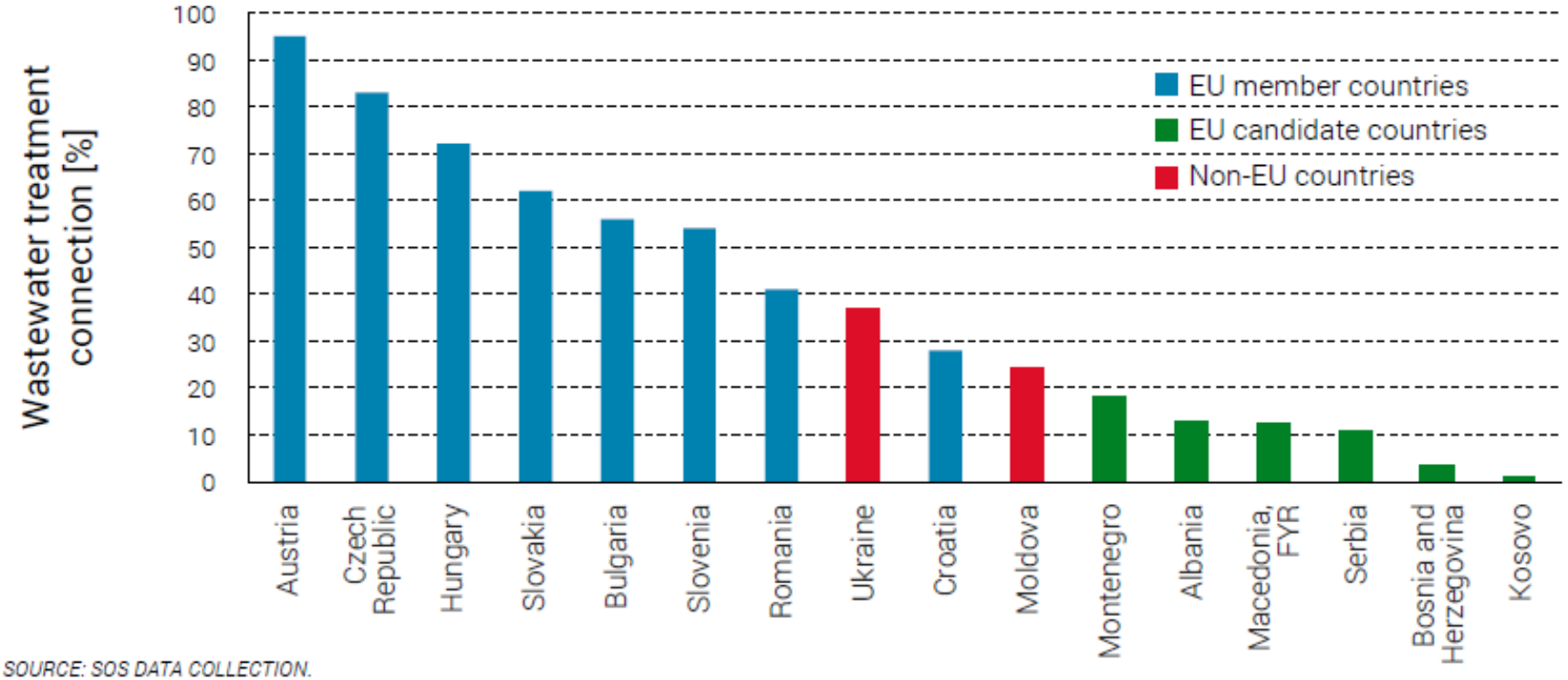




SOURCE: ADAPTED FROM WORLD BANK 2014, 154.

WASTEWATER TREATMENT

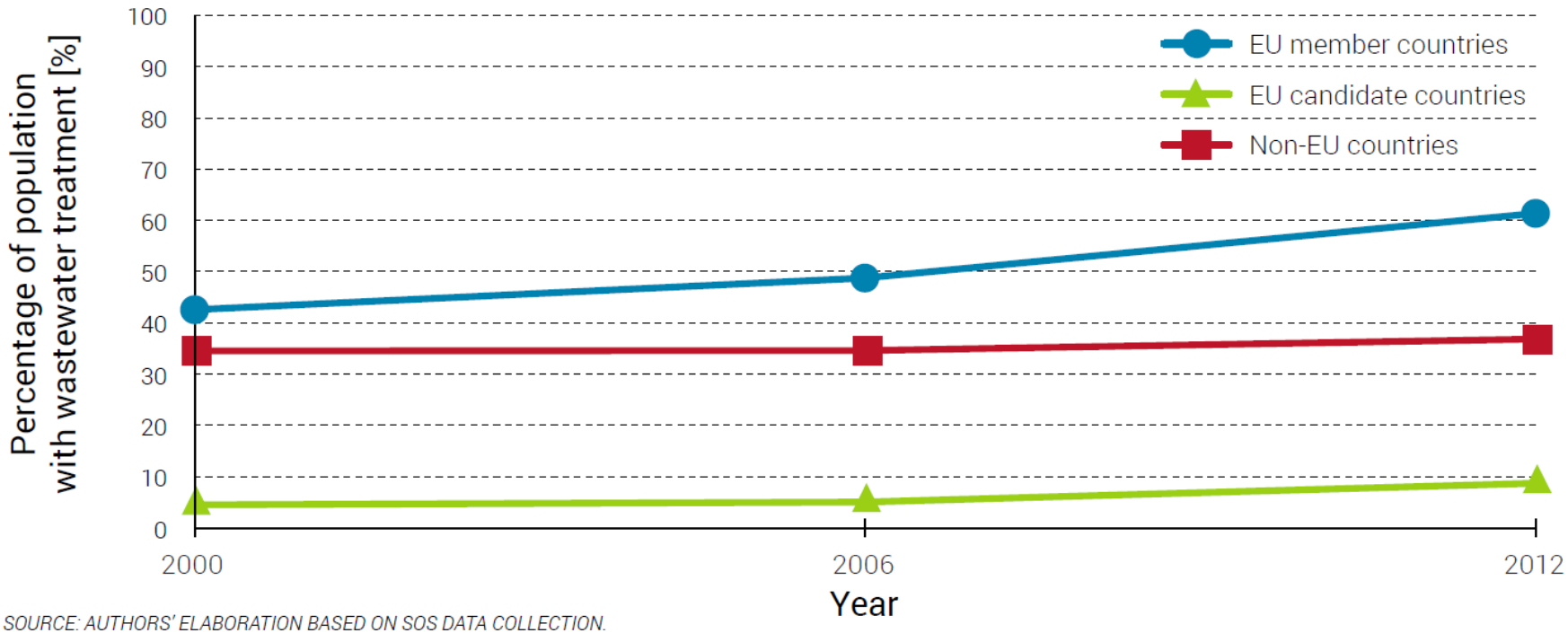
- Higher in EU countries…



SOURCE: SOS DATA COLLECTION.

WASTEWATER TREATMENT

- … but increasing in particular in EU countries



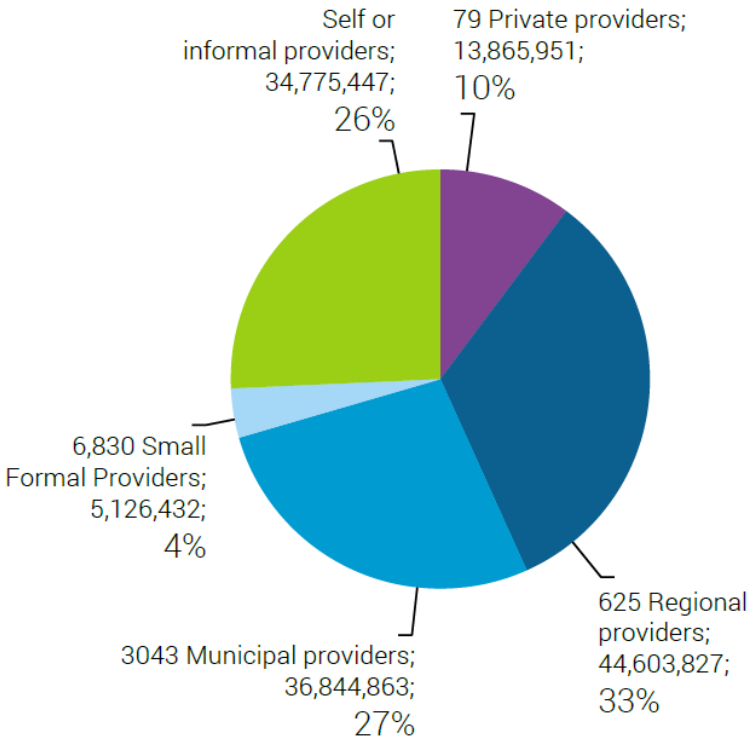
SOURCE: AUTHORS' ELABORATION BASED ON SOS DATA COLLECTION.

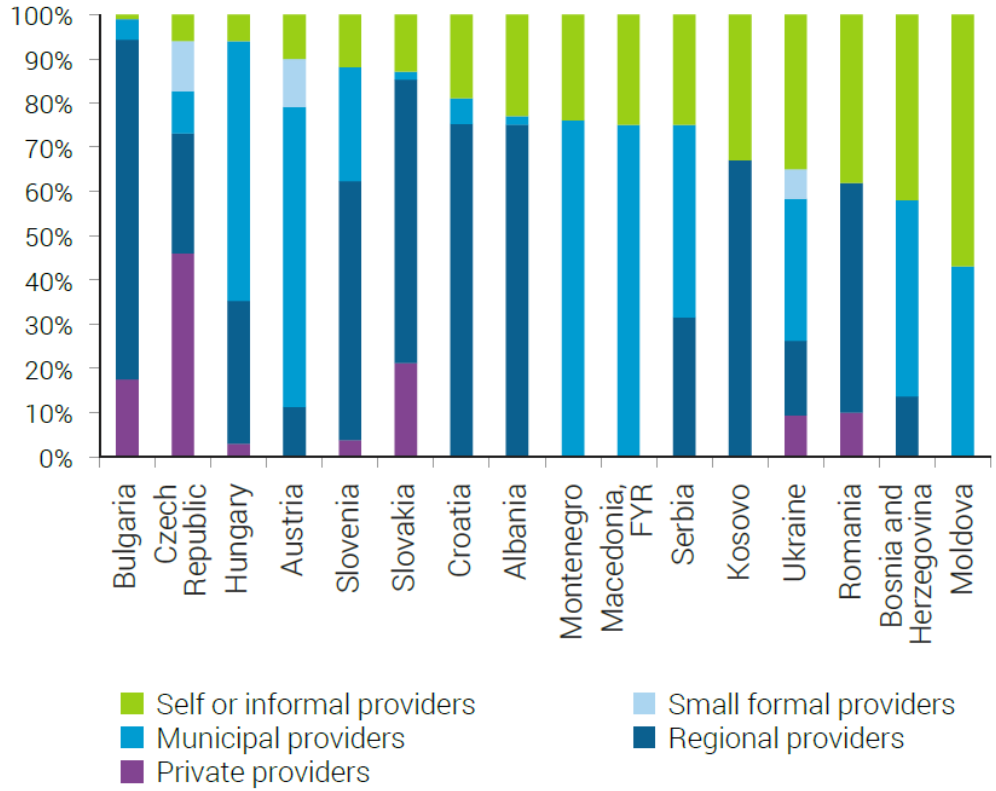
STATE OF THE SECTOR

- Service Providers

SERVICE PROVISION

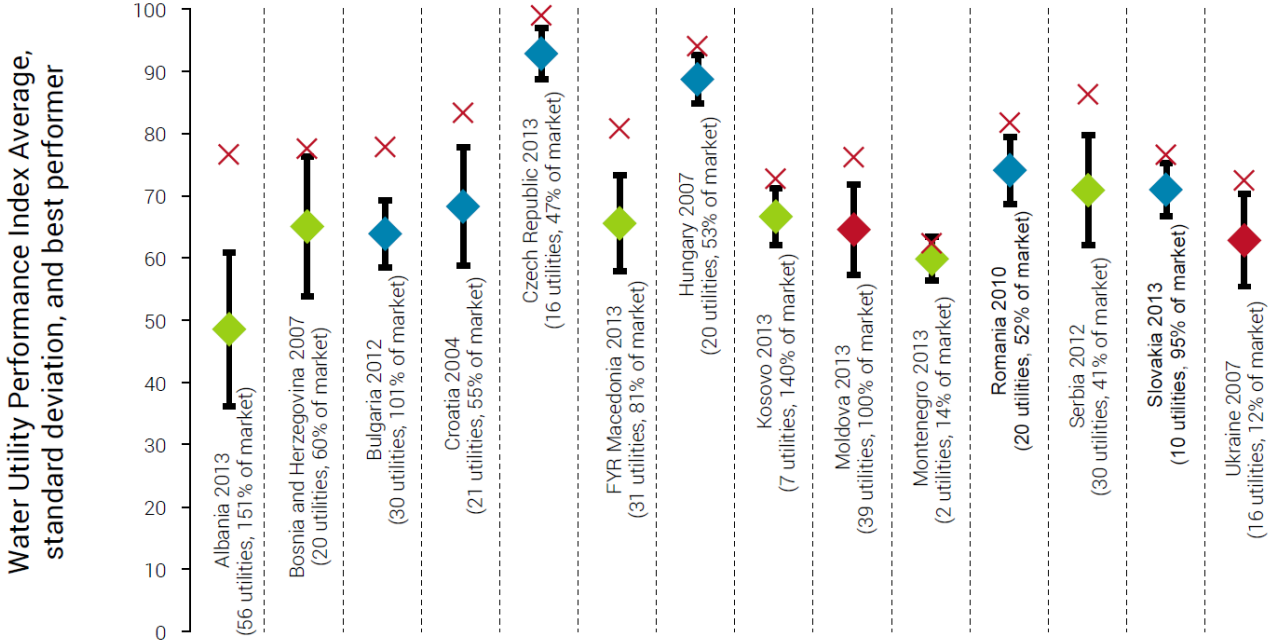
- 10,000 providers supply 74% population
  (from which 700 provide 45%)





OVERALL PERFORMANCE

- Significant variation within and between countries of the region



SOURCE: AUTHORS' ELABORATION FROM IBNET / DANUBIS.ORG DATA. [20]

Based on a sample of 400 utilities in 14 countries

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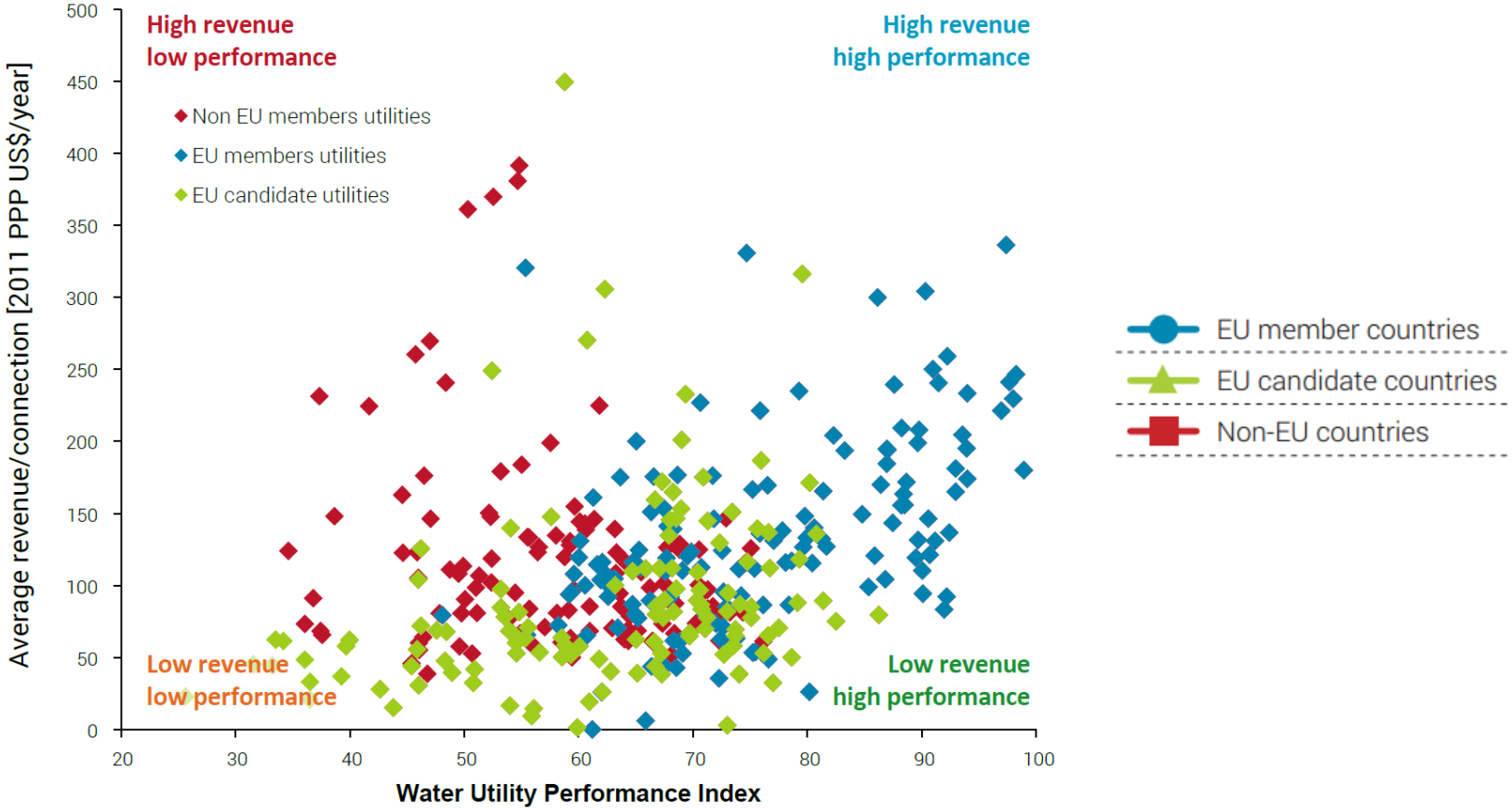
Water Utility Performance Index

Best practice and lower bound definition for WUPI in the Danube region

Indicators	Danube region Best Practices	Danube region Lower Bound	Unit
Water coverage	100%	-	%
Sewerage coverage	100%	-	%
WW treatment coverage	100%	-	%
Metering level	100%	-	%
Continuity of service	24 hours	-	hrs/days
Non-revenue water	3	80	m^3/km/day
Staffing level	1	5	#/'000 W&WW pop served
Collection ratio	100%	-	%
Operating cost coverage	180%	50%	%
Sewerage blockages	0.11	19.13	#/km

VALUE FOR MONEY

- Higher performance, higher revenue need?

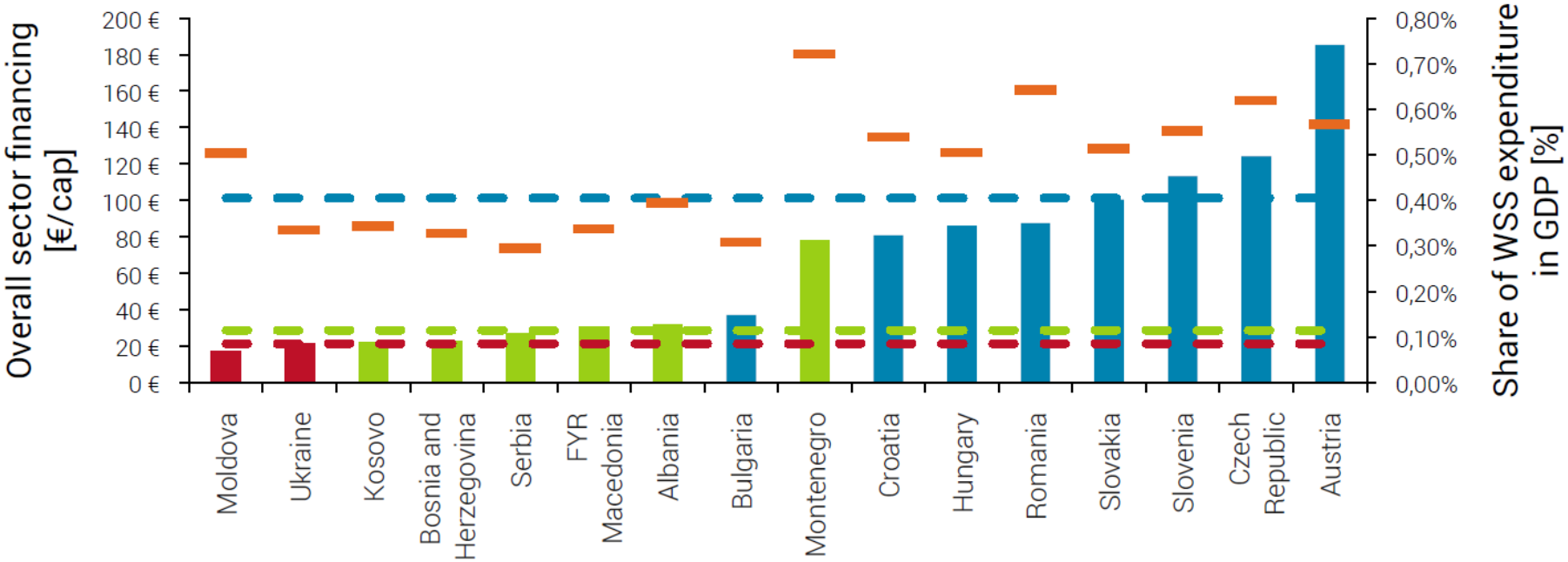


STATE OF THE SECTOR

- Financing

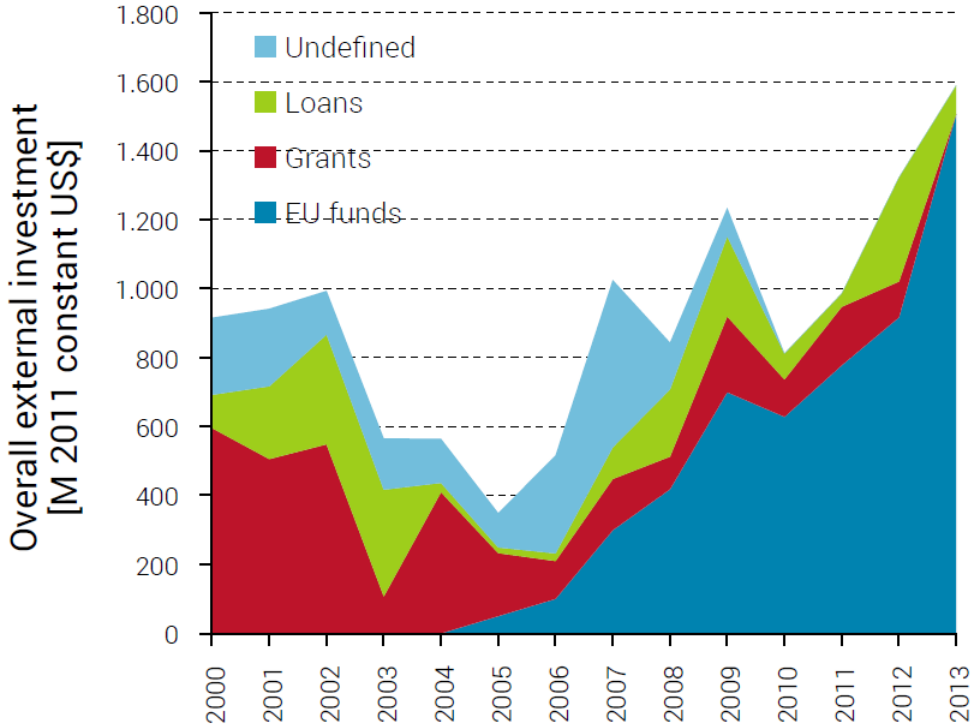
OVERALL FINANCING

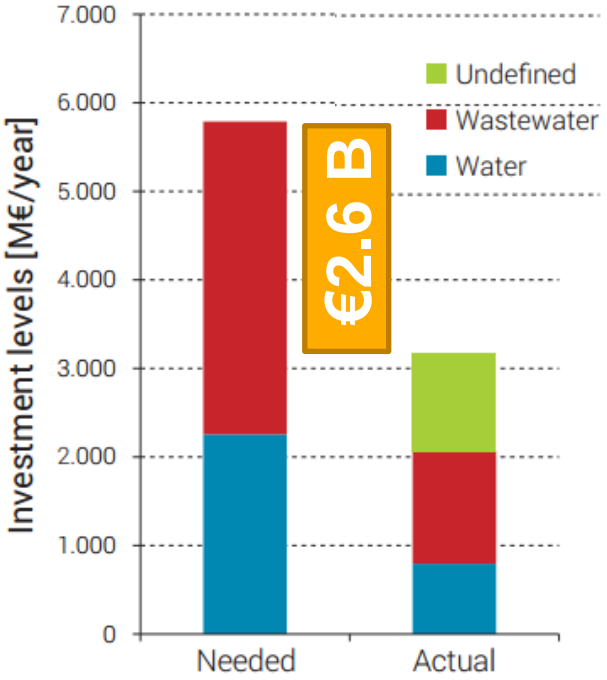
- Rather lower than OECD recommendations (0.5-1.0% of GDP) especially in non EU countries



INVESTMENT FINANCING

- EU funding predominant investment source, but 2.6B Euros gap annually





SOURCES: AUTHORS' ELABORATION FROM OECD 2015; EC 2015.[24]

FINANCING OF SERVICES

- In 2009, OECD proposed an overall framework to describe the financing sources of water & sanitation services
- Purpose of this framework: increase transparency, facilitate reporting activities, provide useful diagnosis & decision-making tool, raise awareness
- 3T framework: tariffs, taxes and transfers

FINANCING OF SERVICES

Tariffs

Taxes

Transfers

- Tariffs: user fees or contributions (access to a service - connection charges - and service delivery – flat/volumetric charge)
- Taxes: funds raised by national, regional and/or local taxes used to fund WSS sector
- Transfers: grants from foreign sources, official development assistance and private philanthropic contributions

Loans, bonds and private investors are not considered as transfers as they need to be repaid by a combination of the 3Ts.

FUNDING OF SERVICES

In Danube region, sector financing structure varies but:

- Taxes & transfers generally fund investments
  Opex generally covered by tariffs
- Taxes represent 10 to 20% of overall funding
  0.1% GDP = not a significant national fiscal burden
- 2 countries (Moldova & Austria) rely on tariffs to finance around 90% of the sector; in other countries, taxes & transfers represent 25 to 75% of sector funding
- Share of transfers higher for new EU members & share financed by tariffs lower

EXPENDITURE OF SERVICES

Average total expenditure = 0.4% of GDP with 50% for O&M – 50% for investments

- But variation w/investments ranging from 1/3 to 2/3
- Logically, countries w/high O&M have low investments = potential concerns for long-term sustainability of services
- Actual investments = 3.5 billion€/yr but 5.5 billion€ needed (40% water, 60% wastewater)
- Most countries have higher investment needs than current level
- EU members & candidate countries show higher investment needs than non EU members

COST RECOVERY

- Recent investments induced opex increase
  Utilities have increased their tariffs
- Despite decreasing consumption, revenues from tariffs grew by more than 10% (real terms) in EU member States and about 5% in other countries for last 20 yrs
- Costs & tariffs both went up = cost recovery ratio not changing
- Utilities should have an operating cost coverage > 1 to fully cover O&M and maintain service quality in long run

FIGURE 53: EVOLUTION OF WATER AND SEWERAGE UNIT OPERATING COSTS IN SELECTED UTILITIES / COUNTRIES

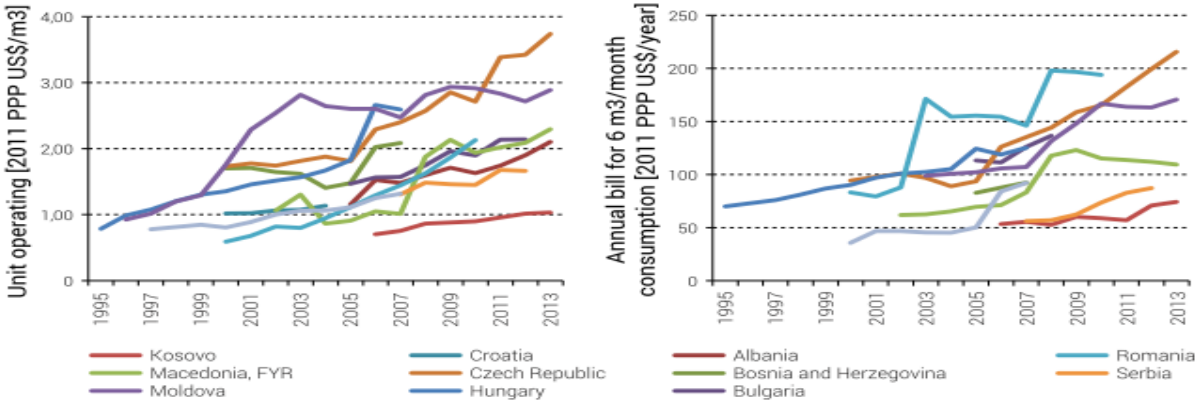
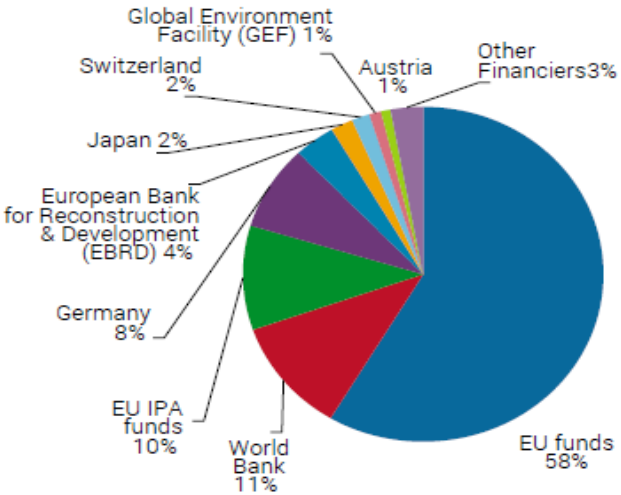


FIGURE 54: EVOLUTION OF WATER AND SEWERAGE UNIT AVERAGE BILL IN SELECTED UTILITIES / COUNTRIES

EU FUNDS

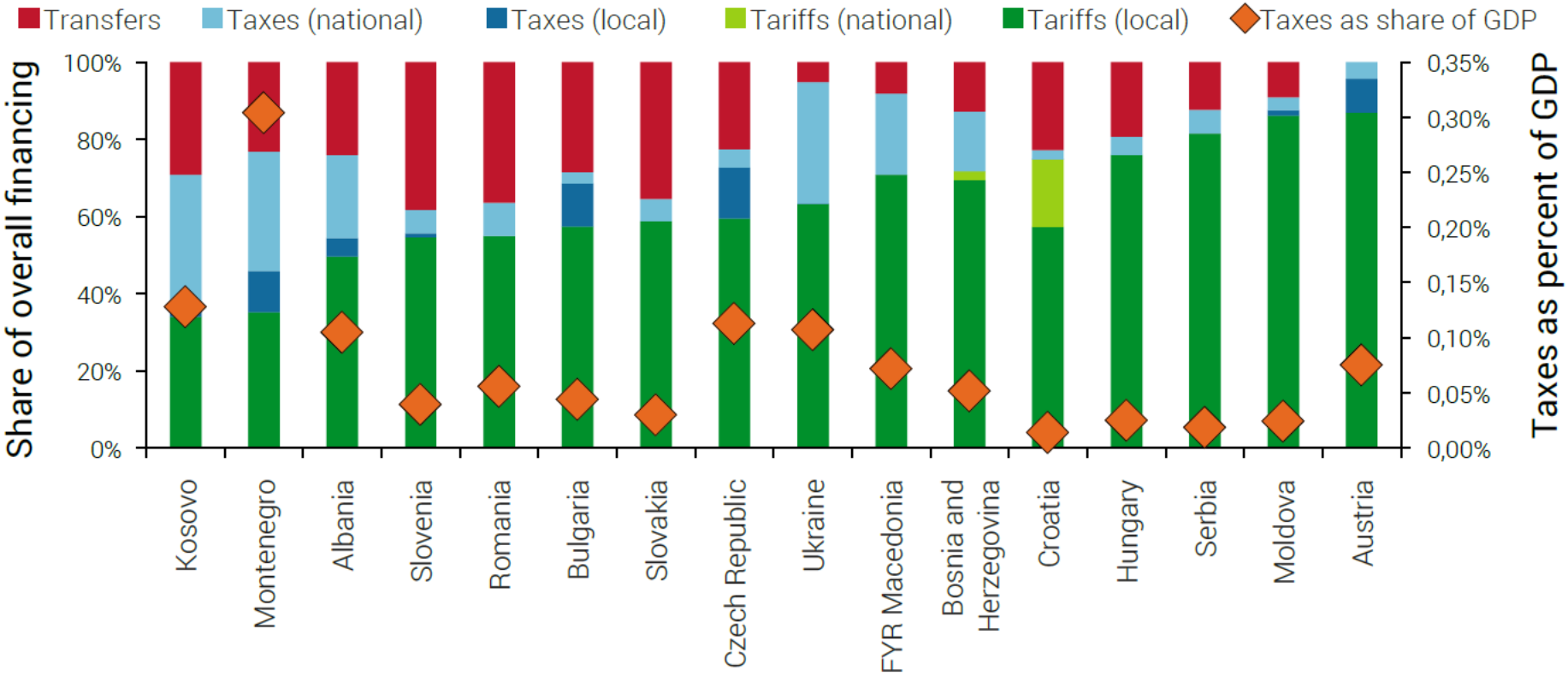
In Danube region, 8 EU member States (/16):



- EU cohesion funds 58% of external financing in WW investments
  EU IPA = 10%
- EU funds represent 10% Czech Rep., 30% Romania or 60% Bulgaria of investment funding share → Absorption issues for some countries
- EU member & candidate countries show higher investment needs than non EU members → drive to invest
  but challenge for maintenance as revenues from tariffs are lower in EU new member States → drive to be more efficient

OVERALL FINANCING

- Tariffs only 2/3 of the story…



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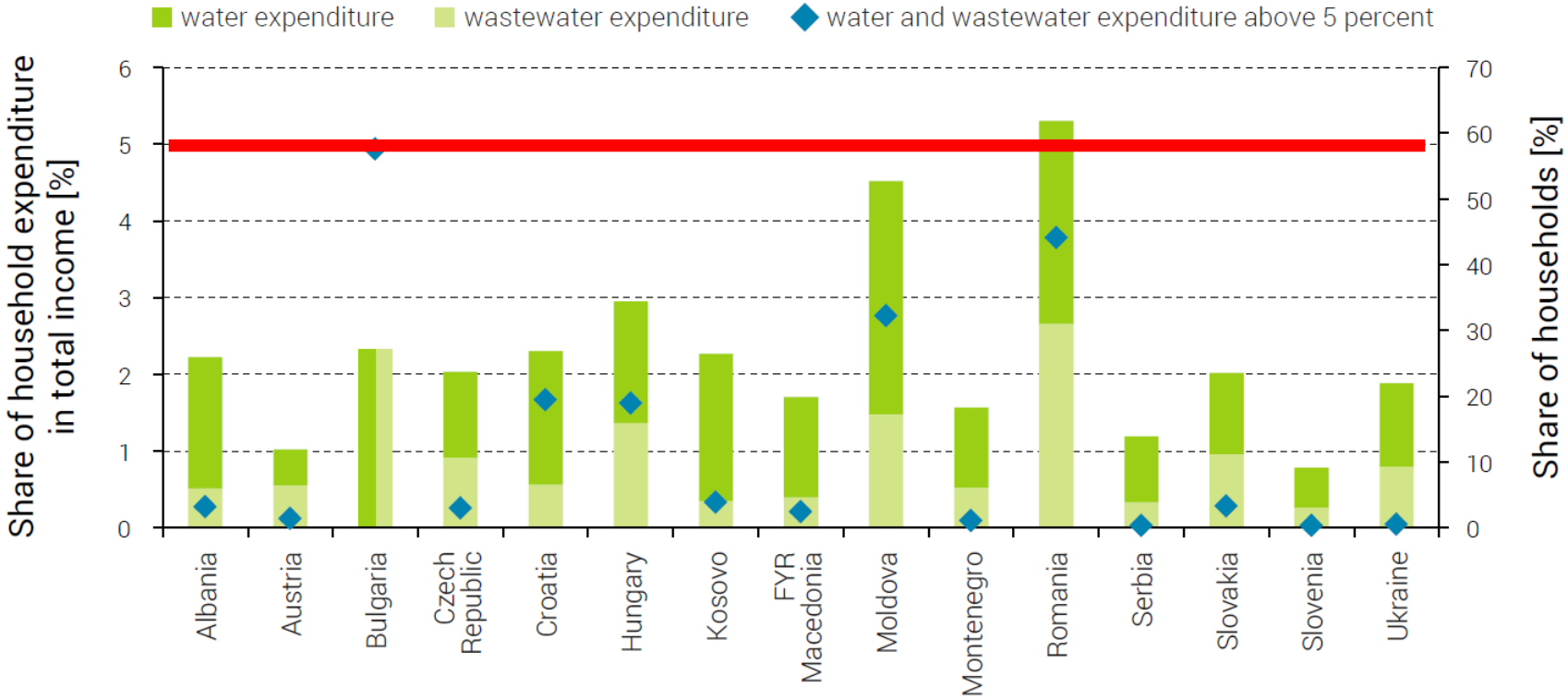
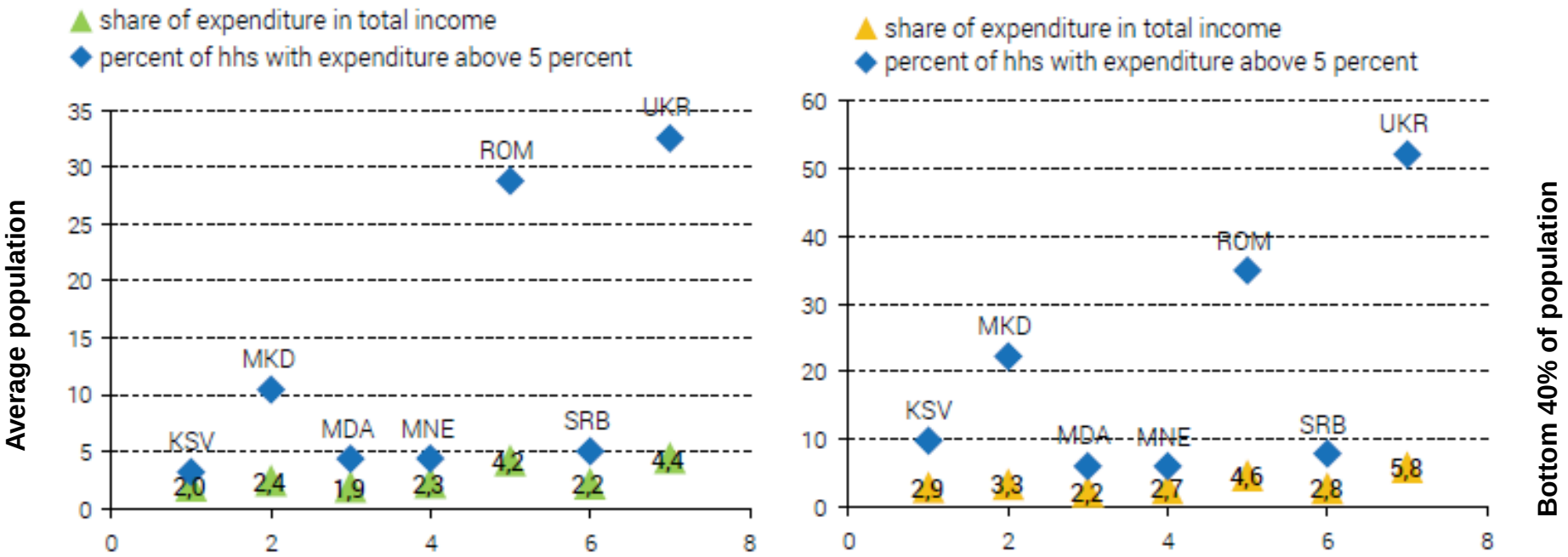
Social space for tariff increases?



SOURCE: AUTHORS' ELABORATION FROM VARIOUS HOUSEHOLD SURVEYS, USING ASSUMPTIONS ON AVERAGE CONSUMPTION AND AVERAGE TARIFF PROVIDED BY SOS DATA COLLECTION.
NOTE: BULGARIA REPORTS A COMBINED WATER AND WASTEWATER TARIFF. UKRAINE'S MUCH LOWER INCIDENCE OF HOUSEHOLDS WITH POTENTIAL WATER EXPENDITURE ABOVE 5 PERCENT CAN ONLY BE EXPLAINED BY DIFFERENCE IN SAMPLES OR LOWER HYPOTHESIZED CONSUMPTION.

AFFORDABILITY



SOURCE: AUTHORS' ELABORATION FROM VARIOUS HOUSEHOLD SURVEYS.
NOTE: SHARES FOR FYR MACEDONIA AND MONTENEGRO INCLUDE REPORTED WATER SUPPLY EXPENDITURE ONLY.
HHS = HOUSEHOLDS.

STATE OF THE SECTOR

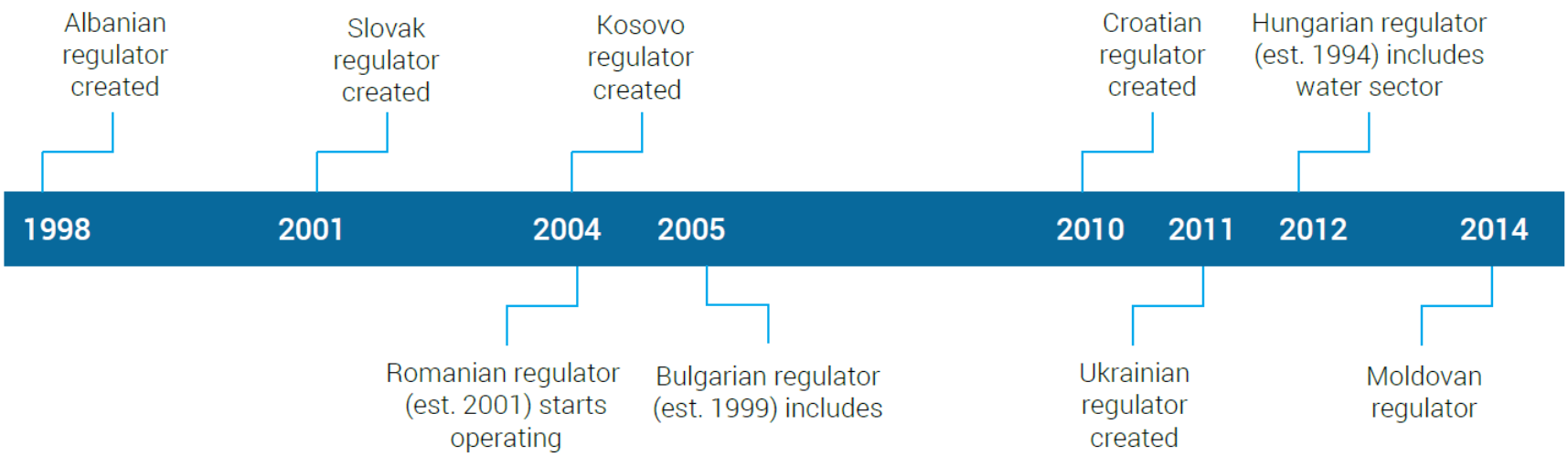
- Policies and institutions

THE POLICY SETUP

- National Governments formally in charge:
  - In EU countries, largely working
  - In candidate countries: uncertainty on leading ministry for water services
- Role of local governments vs. national governments often in flux
- Limited push for transparency and accountability (*right to information*)

REGULATION TRENDS

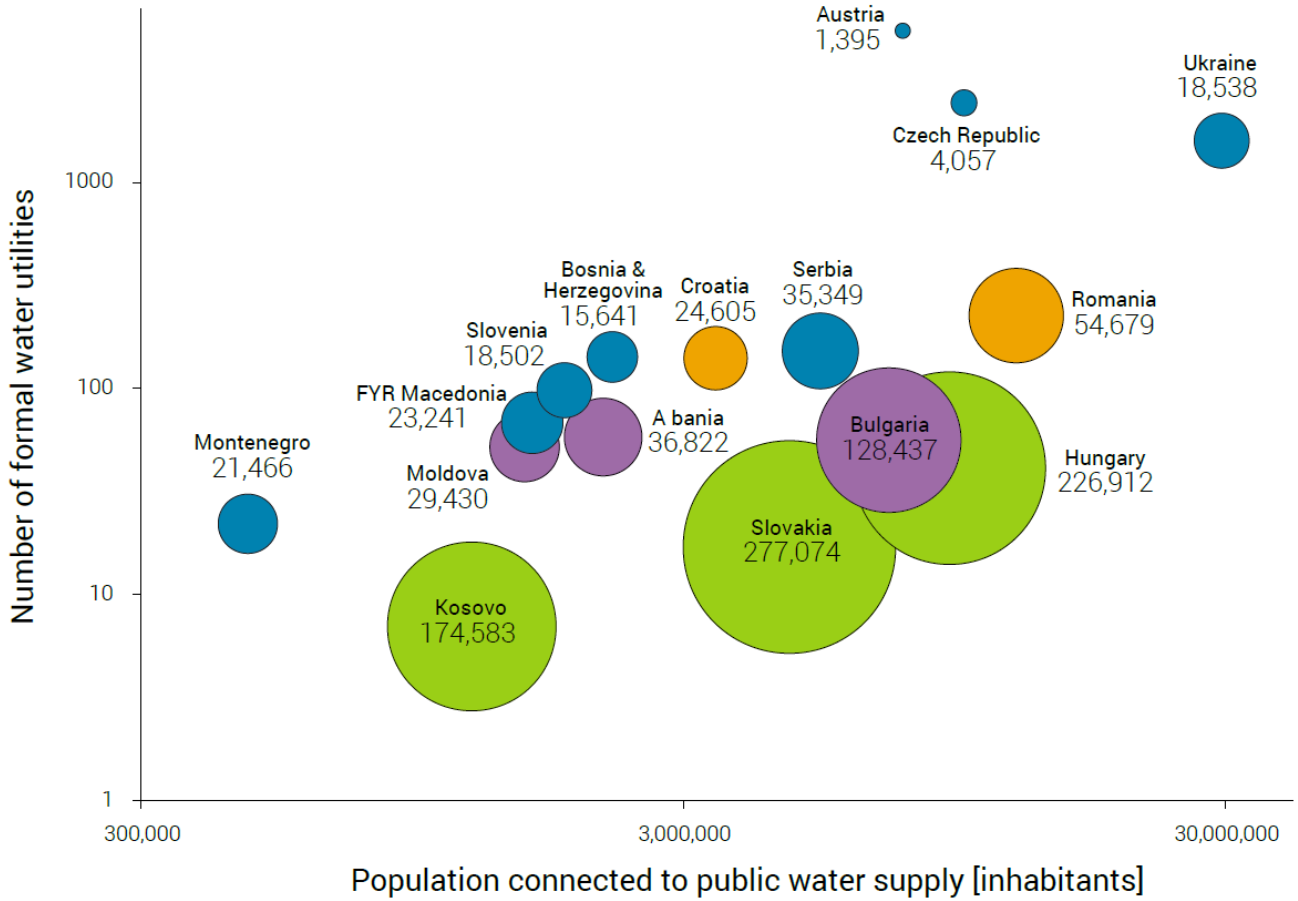
- Seen as the way out of local politics, but can it deliver policy outcomes?



SOURCE: AUTHORS' ELABORATION FROM SOS DATA COLLECTION.

REGIONALIZATION TRENDS

- Driven by economies of scale, x-subsidies



Completed

On-going

In discussion

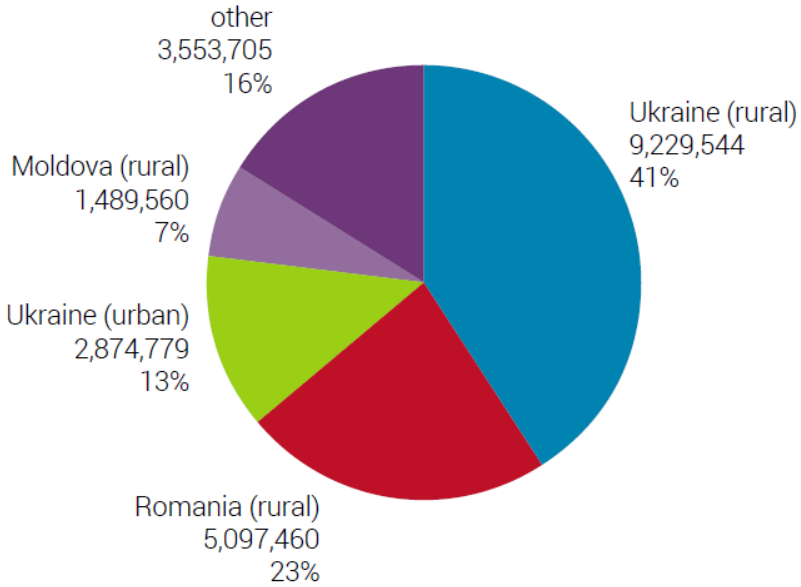
Not planned

CONCLUSIONS AND WAY FORWARD

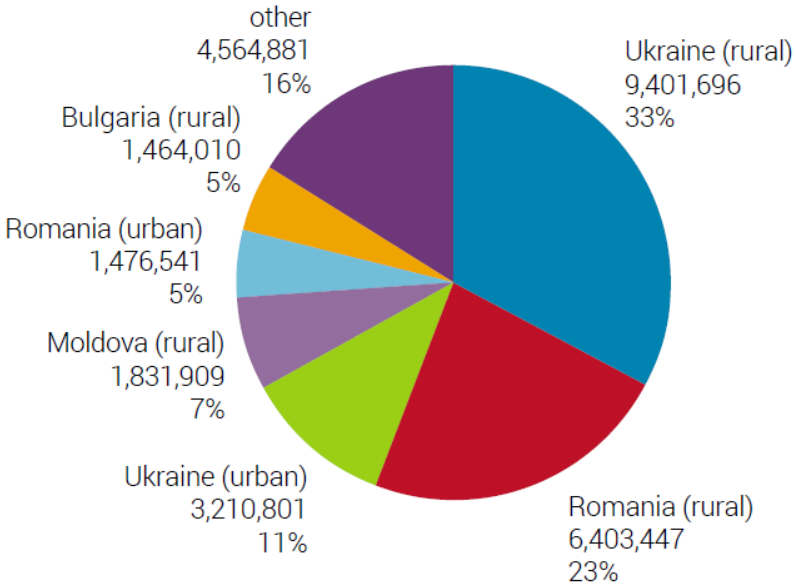
ACCESS

- Still millions lacking modern services at home

22.5 million
Without piped water



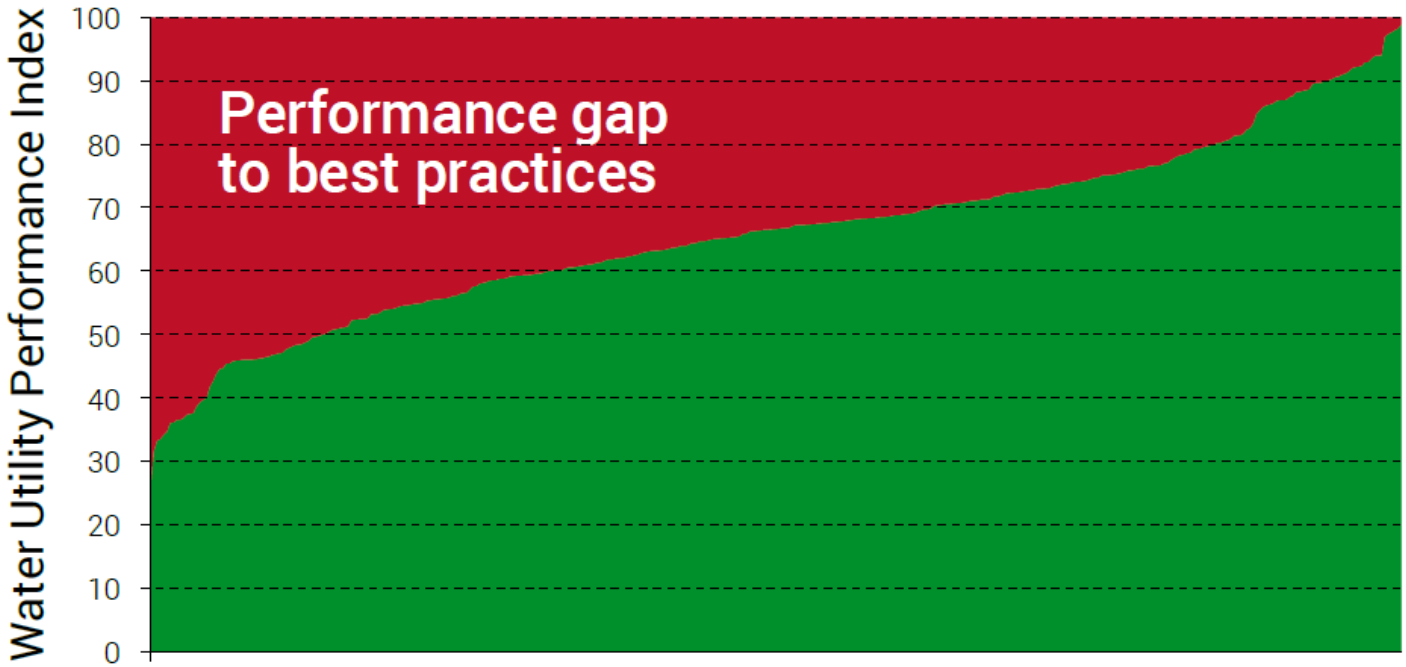
28 million
Without flush toilets



SOURCE: AUTHORS' ELABORATION FROM SOS DATA COLLECTION.

SERVICE PROVIDERS

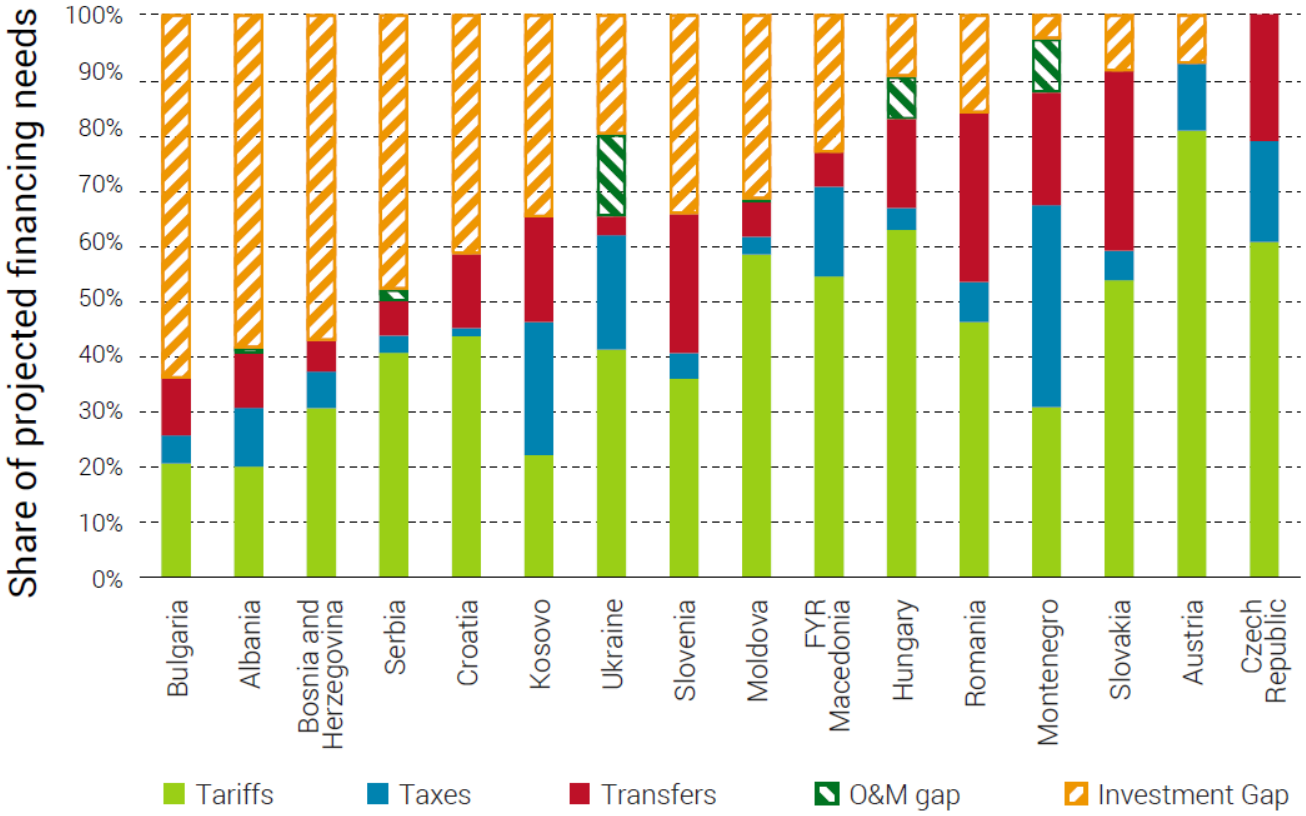
- Significant gap to international best practices



Sample of 380 utilities in the Danube region, ranked by performance

FINANCING

- Space and need to increase financing, tariffs

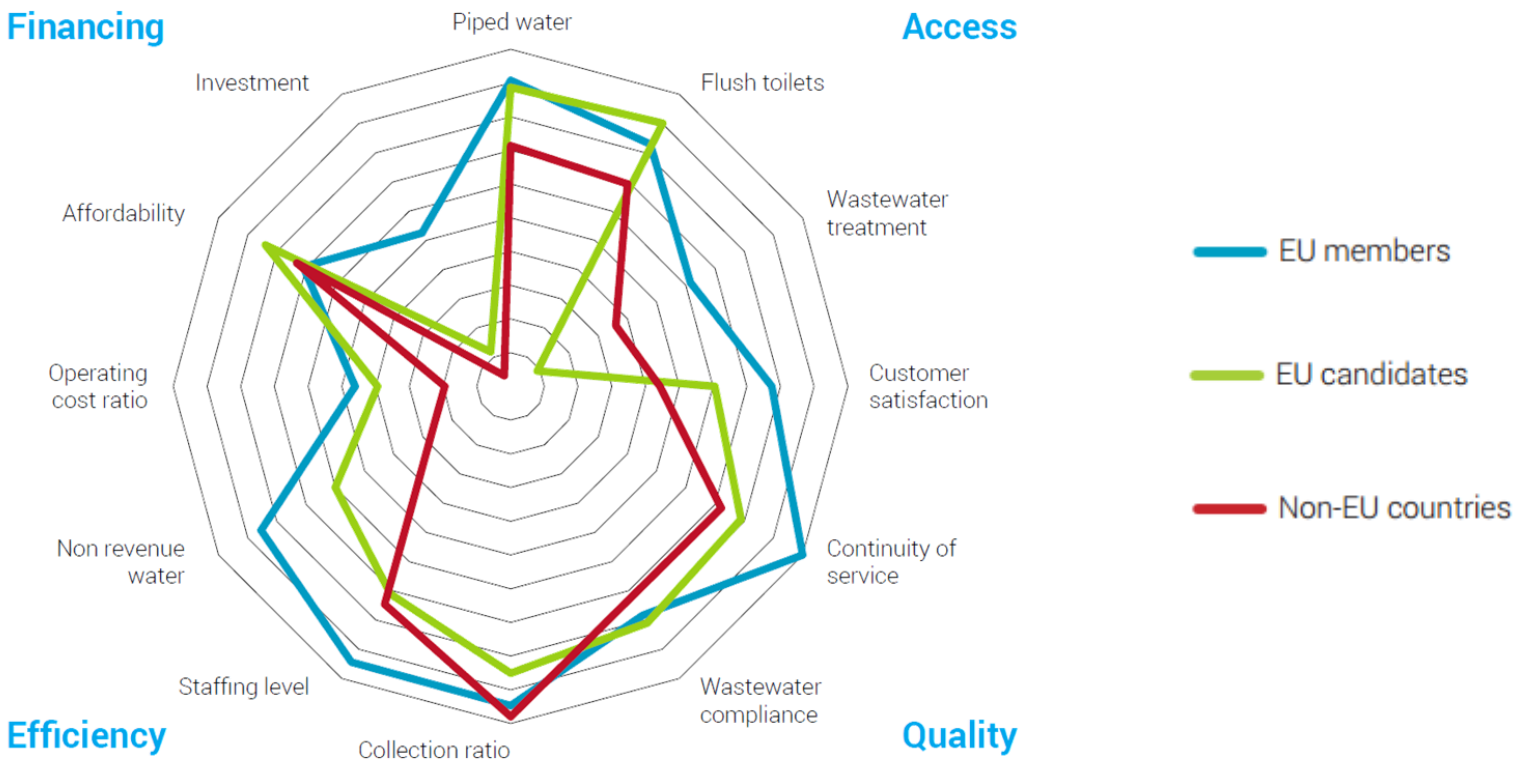


INSTITUTIONS AND POLICIES

- Overlaps and gaps in functions
  - At national level
  - Between local and national governments
  - At local level, in rural areas
- Regional trends tendency (regulation, regionalization)
- Limited culture of transparency and accountability

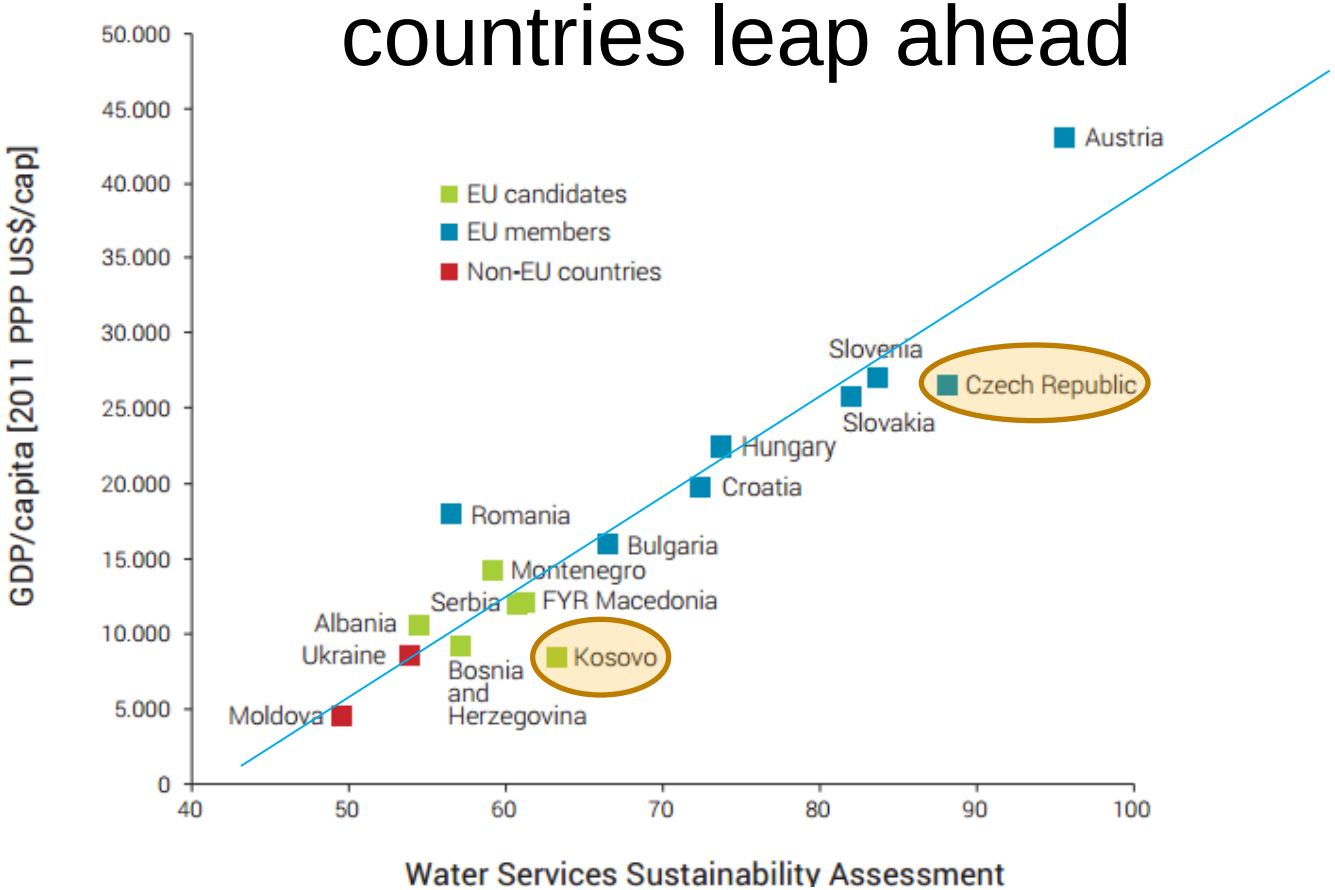
DIFFERENT STARTING POINTS

- Double challenge for recent members and candidate countries



ECONOMIC DEVELOPMENT

- Economic development matters, but some countries leap ahead



CONCLUSIONS

Countries of the Danube region…

- Are on a shared European trajectory, but at different levels and following different paths;
- See overall improvements, but significant gaps in particular in recent and candidate EU countries;
- Face a double challenge of meeting EU acquis and providing sustainable services to all

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THANK YOU

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Water

www.worldbank.org/water
www.danube-water-program.org
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