

## CROATIA STUDY TOUR TO PORTUGAL

### Water and Sanitation Services

The Portuguese experience in aggregation, efficiency, and water loss reduction

# Aggregations of water and sanitation utilities in Portugal: advantages, adversities, risks and results



Diogo Faria de Oliveira  
Francisco Mariz Machado  
Defining Future Options

26 APRIL, 2023

Types of Aggregations

The Three Steps of an aggregation

The case of Portugal: lessons, successes and constraints

Final remarks



## Types of Aggregations

The Three Steps of an aggregation

The case of Portugal: lessons, successes and constraints

Final remarks



# Types of Aggregations

## The biggest aggregation in modern history

- Voluntary
- Increasing scope
- Increasing area



## Imposed



- From administrative acts (ex. merging of two municipalities)
- Created by law

## Volunteer



- From central or local willingness
- Created by law or by delegation framework

## Partial Aggregation



- Only Activities or Assets are aggregated, but control keeps apart
- Aggregation of Activities (ex. Procurement, Clients' management, Maintenance, etc.)
- Aggregation of Assets (ex. sharing a Dam, WTP, WWTP, etc.)

## Aggregation of Services



- Water + Sanitation
  - Water + Sanitation + Waste M.
  - Water + Sanitation + Waste M. + Electricity
- or
- Bulk services
  - Bulk + Retail services

## Complete Aggregation



- Full merger of utilities

# The Three Steps of an aggregation

Types of Aggregations

The Three Steps of an aggregation

The case of Portugal: lessons, successes and constraints

Final remarks



1

## Decision-Making Procedures

Steps towards the aggregation decision

2

## Creation procedures

Steps to formally create the aggregation

3

## Establishment procedures

Transition period and steps to merge the services



## 1

### Decision-Making Procedures

- **Management Model**

100% Public? PPP?

Company? Association?

Existing vehicle? SPV?

- **Studies**

Investment, Organization, Financial Model, Tariffs, etc.

- **Rational for Decision Making**

Value for Money, alternatives, sensitivity scenarios, risk matrix

## 2

### Creation procedures

- **Approval**

Approval requirements (who approves what)

Shareholders' Agreements, Unions agreements, Financial agreements, etc.

Licenses, opinions, etc.

- **Creation**

Court of law, contracts, tax requirements, healthcare services

Communication to stakeholders

## 3

### Establishment procedures

- **Human Resources**

  - Uncertainty and insecurity management

  - Workers rights

- **Transition Period**

  - Preparation period (less than one year)

  - Responsibility stays with former utilities

- **Ensure service continuity**

  - Contracts that shall pass to the aggregated utility; new internal rules, regulations and procedures

# The case of Portugal

Types of Aggregations

The Three Steps of an aggregation

The case of Portugal: lessons, successes and constraints

Final remarks



In Portugal, aggregations started in 1995, with the introduced legal and institutional reforms

## Bulk Systems



234 Aggregated Municipalities

16 Utilities

## Retail systems



82 Aggregated Municipalities

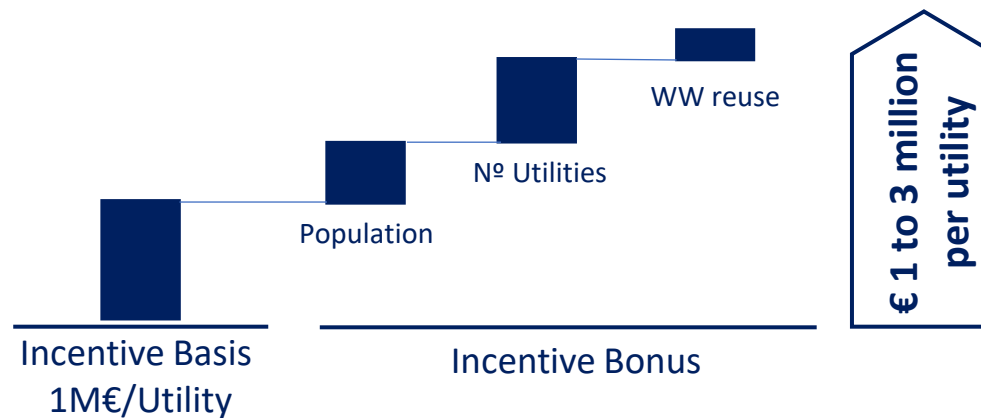
12 Utilities

**Parishes' utilities merged with respective municipalities**

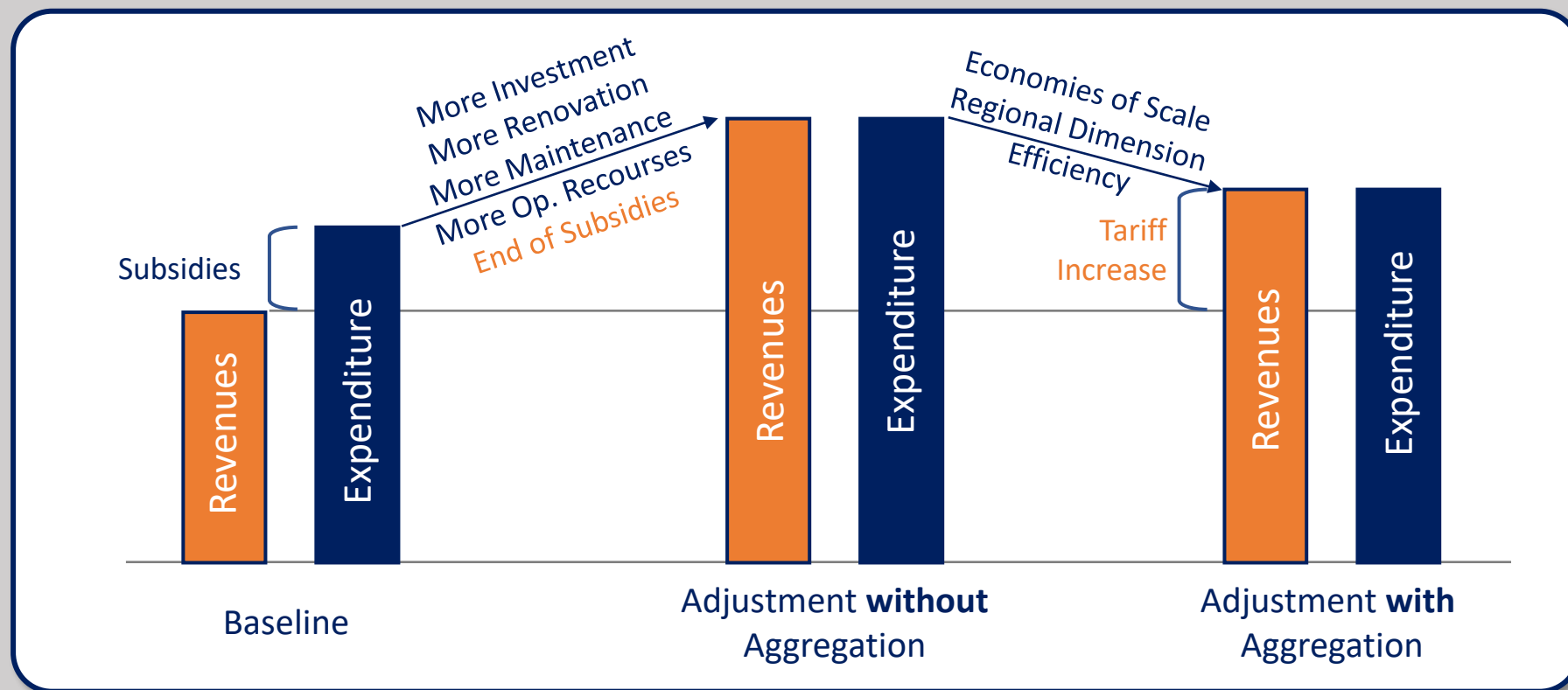
# The case of Portugal

- In 2016, GoP made available an incentive scheme to encourage aggregation
- Incentives increased with the size of aggregation

## Matrix of incentives for aggregation of municipalities

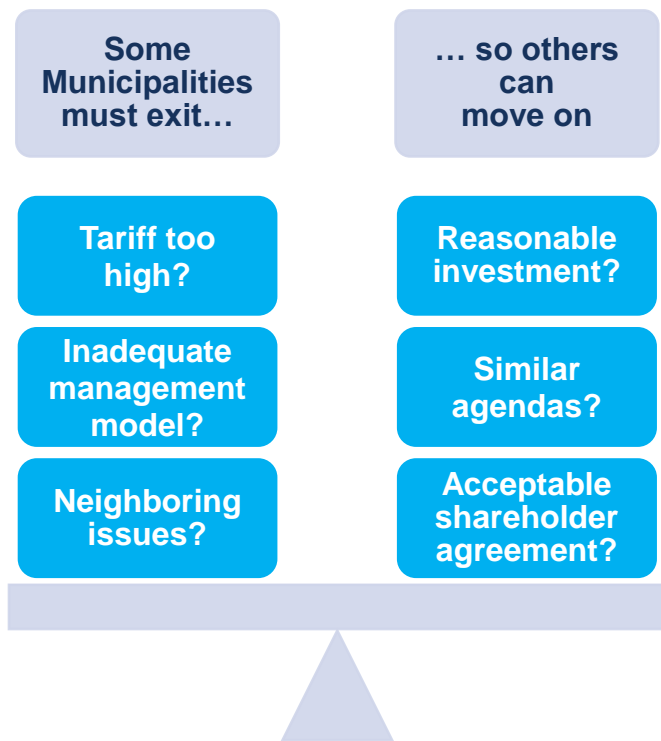


- Aggregation does not mean tariff reduction
- In most municipalities, tariff adjustments resulted in increases



## Concerns during Phase 1 Decision-Making

- Finding consensus and balance



- Phasing the Decision Process





## Common and transversal issues during Phase **3** Establishment

1. Faulty communication
2. Outdated and poor-quality databases
3. Financial models very much based on efficiency
4. Poorly planned meter readings, billing and collection start-up
5. Politicized "Damage Control"

Brief overview of the  
Portuguese water sector

Aggregation of utilities

Regulation

Final remarks



Ancient water tank, Águas do Porto;  
Photo: Expresso

- Aggregations (up to a certain size) contribute to the strengthening and consolidation of the sector.
- Creating aggregations is complex and requires strong political leadership
- Aggregations take time to produce results. Its success should only be evaluated 5 to 15 years after its inception

# Contacts



DEFINING  
FUTURE  
OPTIONS

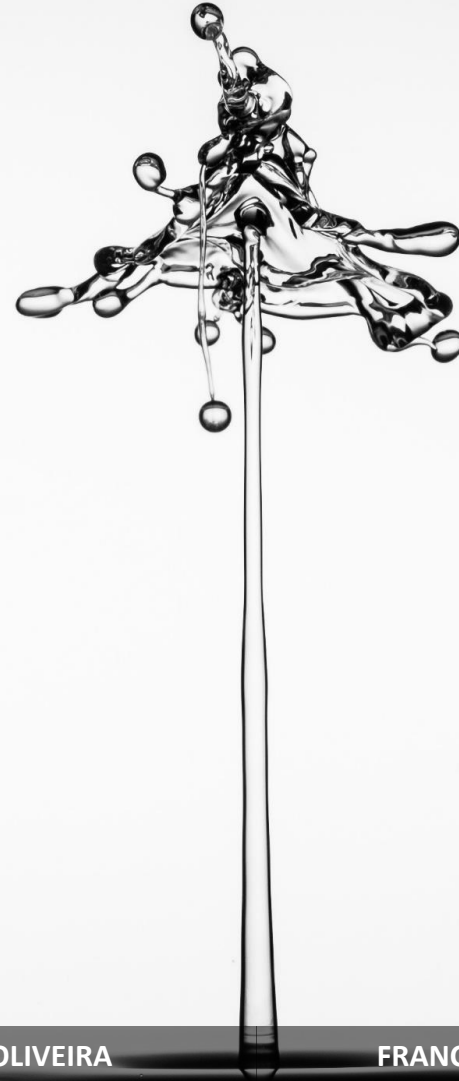
**DEFINING FUTURE OPTIONS, LDA.**

Office: Madan Parque, Rua dos Inventores  
2825-182 Caparica  
PORTUGAL

Website: [definingfutureoptions.com](http://definingfutureoptions.com)

Phone: (+351) 210 438 600 | 210 438 650

Email: [info@defining.eu](mailto:info@defining.eu)



**DIOGO FARIA DE OLIVEIRA**  
[diogo.oliveira@defining.eu](mailto:diogo.oliveira@defining.eu)  
+351 933 230 747

**FRANCISCO MARIZ MACHADO**  
[Francisco.machado@defining.eu](mailto:Francisco.machado@defining.eu)  
+351 919 521 454