

Research Project: David Pfeffer - Paris School of Economics



# Cost Efficiency and market structure in the EU Municipal Solid Waste Sector



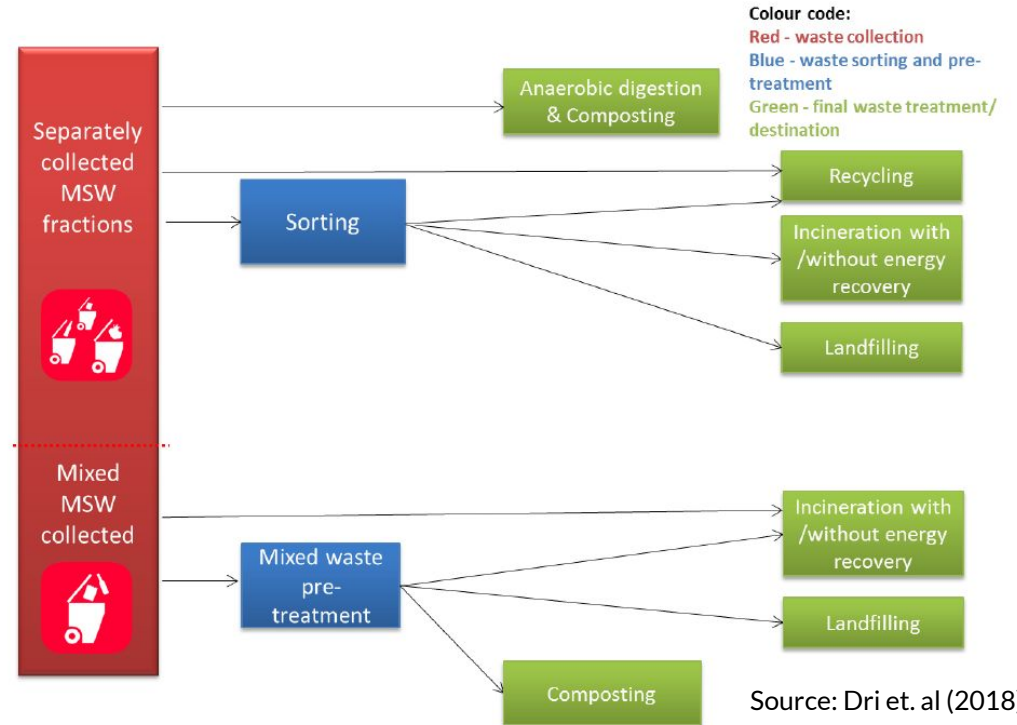
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# Motivation:

- **Different phases of MSW-management:**  
Collection - Preparation - Treatment
- **Within each phase:**  
different services/techniques  
(Treatment: Recycling vs. Incineration vs. Landfilling)  
(different collection techniques)
- **Different streams of waste:**  
Variation in the prevalence of techniques/services across streams

## A model of MSW-flow



Source: Dri et. al (2018)



## A diverse and fragmented market:

At EU-level more than 45,000 waste operators in the market (treatment and collection)

These operators vary:

- in size (mostly SMEs)
- in the services offered (type of collection, type of treatment)
- in the streams managed

→ in their output and costs



# Research Question:

## Tasks & Questions:

- 1) Estimate the costs of MSW-operators (operation and capital costs vs. collection and treatment costs)
- 2) Is there evidence for an optimal market structure?

## Focus and potential insights:

- 1) Bundling vs. unbundling **collection and treatment?**
- 2) Bundling of **several streams?**
- 3) Economies of scales in **services or streams?**
- 4) Where to improve data collection?



## Data and level of analysis:

### Required data:

- costs and outputs of MSW-operators at **different phases of waste management**
- costs and outputs of MSW-operators at different by **different streams of waste managed**

### Level of Analysis:

- country case study:  
use variation in operators within two-three selected EU member states
- municipality or firm level data



# Thank you for your attention!

Any questions, remarks or hints at potential data sources?