

# On the usage of statistics to review and improve the Regulatory Impact Assessment system in Portugal

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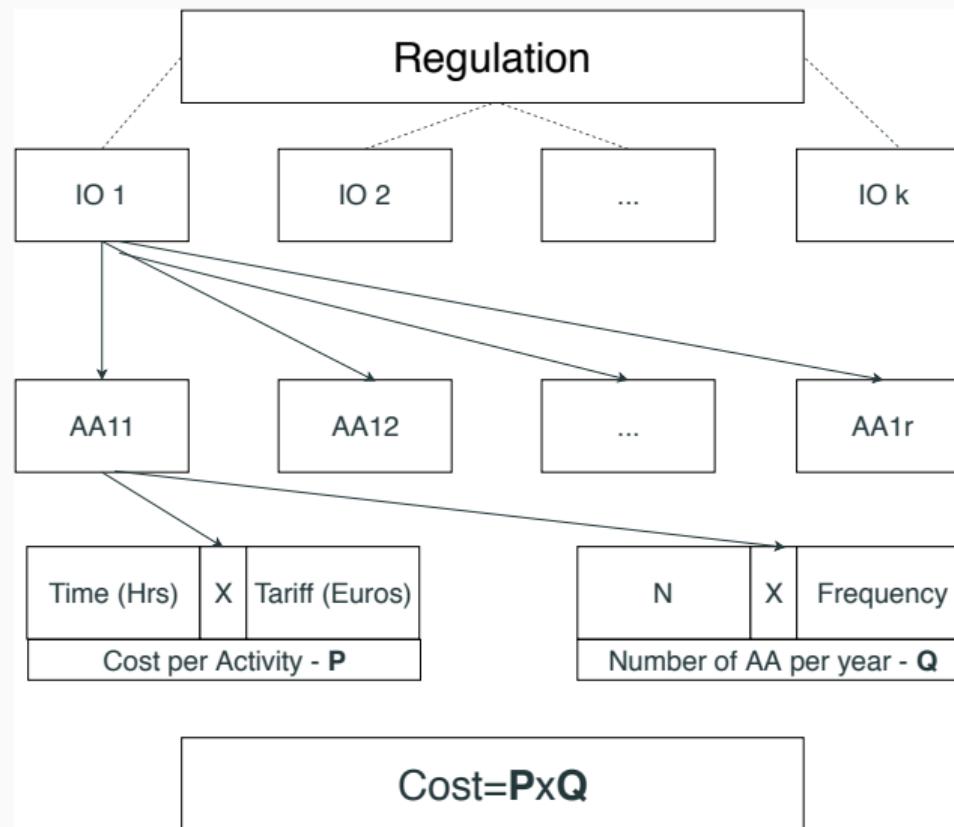
Cost Calculation (internal)

# Motivation

## Standard Cost Model (SCM)

- Information obligations
- Administrative activities
- Cost parameters: two components
  1. Time
  2. Tariff

# Overview SCM



## Objectives

1. To evaluate the **Tariff** component (hourly cost: wage+overhead; productivity; opportunity cost)
2. To estimate the **Time** component (administrative activities that must be undertaken in order to comply with regulation)

## Previous Procedure

### Tariff component:

- estimated using the average compensation of employees or the productivity
- constant over industry

### Time component

- estimated on an ad-hoc basis using information provided by the different ministries, case-by-case
- high discretion
- who reports values is not who performs the task

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# **Answering Questions using Data!**

# Goals: Answering Questions using Data



1. **What** should we be calculating?
2. **Why** should we be calculating that?
3. **How** can we use the calculator to calculate it?

# Goals: Answering Questions using Data

## What?

To systematize and standardize values for:

1. Tariff component
2. Time component

# Goals: Answering Questions using Data

## Why?

1. reduce arbitrariness and discretion
2. increase the consistency and reliability of the RIA
3. promote better regulation

# Goals: Answering Questions using Data

## How?

1. Using INE's micro data:
  - the Business Costs of Context Survey - IaCC
  - the Integrated Business Accounts System - SCIE
2. Conducting a market survey
3. Integrating the data

## Goals

- Developing a statistical study;
- Promoting comparative analysis and market research in Portugal to establish a set of standardised parameters for compliance costs/ costs of context
- Improving the implementation of the SME test, to look at the regulatory compliance cost impacts of regulation;
- Identifying standard data to support the estimation of costs incurred by companies to fulfil the information obligations.

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## Business Costs of Context Survey - IaCC

- *Costs of Context* are understood as the negative effects resulting from rules, procedures, actions or omissions that hinder businesses and that are not attributable to the investor, its business or organization.
- Focused on nine main domains, identified as potential areas of obstacle to businesses' activities (on a 1 to 5 scale):
  - starting a business,
  - licensing,
  - network industries,
  - financing,
  - judicial system,
  - tax system,
  - administrative burden,
  - barriers to internationalisation and
  - human resources.
- 4.248 companies from the non-financial sector

## Business Costs of Context Survey - IaCC

- A new module in 2017: *Costs from compliance with information obligations*
- Aims to identify the costs incurred in compliance with IO.
- 8 types of IO have been identified
  1. the provision and delivery of business and fiscal information;
  2. applications for licenses, certificates, authorisations or permissions;
  3. the registers and notifications;
  4. the application for subsidies or other supports;
  5. the availability of manuals of procedures and action plans;
  6. cooperation with audits, checks and inspections;
  7. the provision of information labels; and
  8. the provision of information to consumers and other entities.

## Business Costs of Context Survey - IaCC

- The average annual costs per company with these IO were obtained in two ways:
  1. When fulfilled by the use of outsourcing, the value considered was the one indicated by the company in the survey;
  2. When fulfilled internally by the company, the time spent with the fulfilment of the obligation was taken as reference, multiplied by a monetary value that translated the direct and indirect costs incurred by the company.
- For each economic activity and size-class, the monetary value was obtained by the quotient between the gross value added and the total number of hours worked in 2016
- This quantity was obtained according to the Integrated Business Accounts System.

## Integrated Business Accounts System - SCIE

- Integrated Business Accounts System (SCIE) results from a process of statistical data integration that covers enterprises and is based on administrative data, with an emphasis on Simplified Business Information (IES).
- This data is complemented with information collected from sole proprietors and independent workers from the Ministry of Finance and from Statistics Portugal's Business Register.
- Data has been produced taking into account the Regulation (EC) No 295/2008, regarding the Structural Business Statistics.
- The main objective of the SCIE is to characterize the economic and financial behaviour of companies
- Micro-dataset that covers 1.196.102 companies

## Examples

- People employed
- Wages
- GFCF
- Gross value added
- Gross operating surplus
- Turnover
- etc

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# Methodology

## Population:

- The target population of the market survey includes all companies located in Portugal.

## Sample and sampling design:

- Random stratified sampling;
- Sample is stratified by crossing the economic activity and the enterprise size;
- The enterprise size is aggregated in 3 groups:
  1. Micro enterprises;
  2. Small and medium enterprises;
  3. Large enterprises.

# Methodology

## Sample and sampling design:

- The economic activity is grouped into 8 sectors:
  1. Agriculture, farming of animals, hunting, forestry, mining and quarrying (CAE Rev.3 Section A);
  2. Mining, quarrying and manufacturing (CAE Rev.3 Section B and C);
  3. Energy, water and sewerage (CAE Rev.3 Section D and E);
  4. Construction and real estate activities (CAE Rev.3 Section F);
  5. Wholesale and retail trade; repair of motor vehicles and motorcycles (CAE Rev.3 Section G);
  6. Transportation and storage; information and communication activities (CAE Rev.3 Section H and J);
  7. Accommodation and food service activities (CAE Rev.3 Section I);
  8. Other service activities (CAE Rev.3 Section M, N, P, Q, R and S).

# Methodology

## Population and sample allocation by stratum:

Segment	Micro enterprises	Small and medium enterprises	Large enterprises	Enterprises size		Sample			TOTAL
				TOTAL	Micro enterprises	Small and medium enterprises	Large enterprises		
Economic activity (CAE Rev.3)	Agriculture, farming of animals, hunting, forestry, mining and quarrying (CAE Rev.3 Section A)	131.380	1.456	8	132.844	250	250	8	508
	Mining, quarrying and manufacturing (CAE Rev.3 Section B and C)	55.338	12.335	325	67.998	250	250	250	750
	Energy, water and sewerage (CAE Rev.3 Section D and E)	4.645	508	53	5.206	250	250	53	553
	Construction and real estate activities (CAE Rev.3 Section F)	108.875	5.715	63	114.653	250	250	63	563
	Wholesale and retail trade; repair of motor vehicles and motorcycles (CAE Rev.3 Section G)	210.167	10.006	186	220.359	250	250	186	686
	Transportation and storage; information and communication activities (CAE Rev.3 Section H and J)	35.089	3.028	135	38.252	250	250	135	635
	Accommodation and food service activities (CAE Rev.3 Section I)	92.914	4.599	49	97.562	250	250	49	549
	Other service activities (CAE Rev.3 Section M, N, P, Q, R and S)	529.585	7.467	280	537.332	250	250	250	750
TOTAL		1.167.993	45.114	1.099	1.214.206	2.000	2.000	994	4.994

# Methodology

## Questionnaire:

- A -The different kind of information obligations:
  1. Provision and delivery of business / tax information;
  2. License applications, certificates or permissions;
  3. Records and notifications;
  4. Applying for subsidies or other support;
  5. Provision of manuals of procedures and action plans;
  6. Cooperation with audits and inspections;
  7. Placing informational labels and providing information to consumers and other entities;
  8. Other obligations, if other obligations are identified.

# Methodology

## Questionnaire:

- **B -The administrative tasks associated to each information obligation:**
  1. Familiarization with the obligation;
  2. Collection of information;
  3. Information organization;
  4. Information processing;
  5. Submission of information;
  6. Waiting times;
  7. Travel;
  8. Others, if other administrative tasks are identified.

# Methodology

## Questionnaire:

- C - Resources - Companies can use their own resources or third parties by means of subcontracting:
  - With own company resources:
    - Average time spent on delivery;
    - Number of deliveries per year;
    - Salary of the employee allocated to the fulfilment of the obligation.
  - With subcontracting:
    - Annual cost (in Euros);
    - Number of deliveries per year.

# Methodology

## **Quanto aos Pedidos de Licenças, Certidões, autorizações ou permissões, e para a as seguintes tarefas:**

Esta obrigação de Informação abrange todos os procedimentos necessários à obtenção de licenças, certidões, autorizações ou permissões / isenções, obrigatórias para o exercício de uma determinada atividade. Inclui pedidos de licenças ambientais; pedidos de licenças camarárias; pedidos de autorizações/licenças para obras ou instalações; pedidos de autorização para prestação de serviço ou colocação de produto no mercado; certificação de produtos ou processos; etc.

Indique por favor se as seguintes tarefas administrativas associadas à Obrigação são realizadas internamente ou externamente?

	Interno	Externo	Ambos	Não aplicável
Familiarização com a obrigação de Informação	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Organização/Compilação da informação	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Preparação/Tratamento da informação	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tempo de espera	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Deslocações	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Submissão/envio/disponibilização/prestação de informação	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Outra Atividade administrativa:	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

# Methodology

**Quanto aos Pedidos de Licenças, Certidões, autorizações ou permissões, e para a as seguintes tarefas:**

Indique também quais os custos anuais associados às seguintes tarefas em termos de tempo despendido e salários de Colaboradores

Tempo médio despendido por pedido

	Horas	Minutos	Salário <sup>1</sup> médio mensal do Colaborador responsável pela tarefa
Familiarização com a obrigação de Informação	<input type="text"/>	<input type="text"/>	<input type="text"/>
Organização/Compilação da informação	<input type="text"/>	<input type="text"/>	<input type="text"/>
Preparação/Tratamento da informação	<input type="text"/>	<input type="text"/>	<input type="text"/>
Submissão/envio/disponibilização/preSTAÇÃO de informação	<input type="text"/>	<input type="text"/>	<input type="text"/>

**<sup>1</sup>Salário Médio Mensal** = Salário Bruto Mensal, incluindo o subsídio de almoço e outros subsídios ou abonos.



# Methodology



Qual o custo anualmente despendido com Terceiros com as várias tarefas associadas aos Pedidos de Licenças, Certidões, autorizações ou permissões?

€

[NR](#)



0%  100%



E quantos Pedidos foram realizados no último ano?

[NR](#)



0%  100%

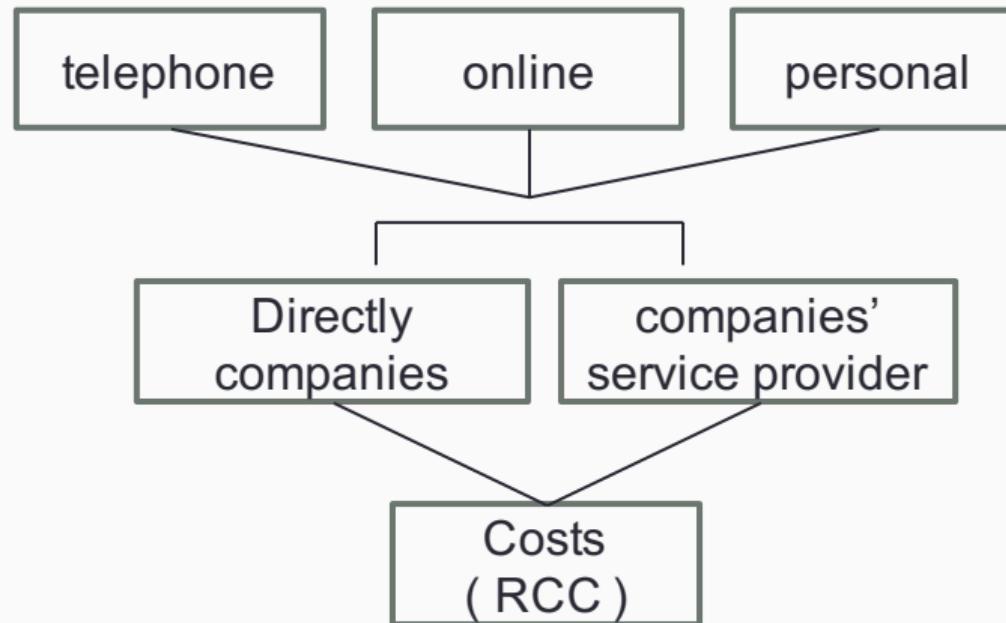
# Methodology

## Data Collection:

- To improve response rate the survey has been split into two groups, where each respondent is questioned about up to 4 groups of information obligation. This corresponds to a duration of approximately 25 minutes;
- The 4 groups are randomly selected;
- Companies may choose to participate by telephone, online or personal interviews;
- The data is being collected from two sources:
  - Directly interviewing companies or
  - Interviewing the companies' service provider that fulfils these obligations.

# Methodology

## Data Collection:



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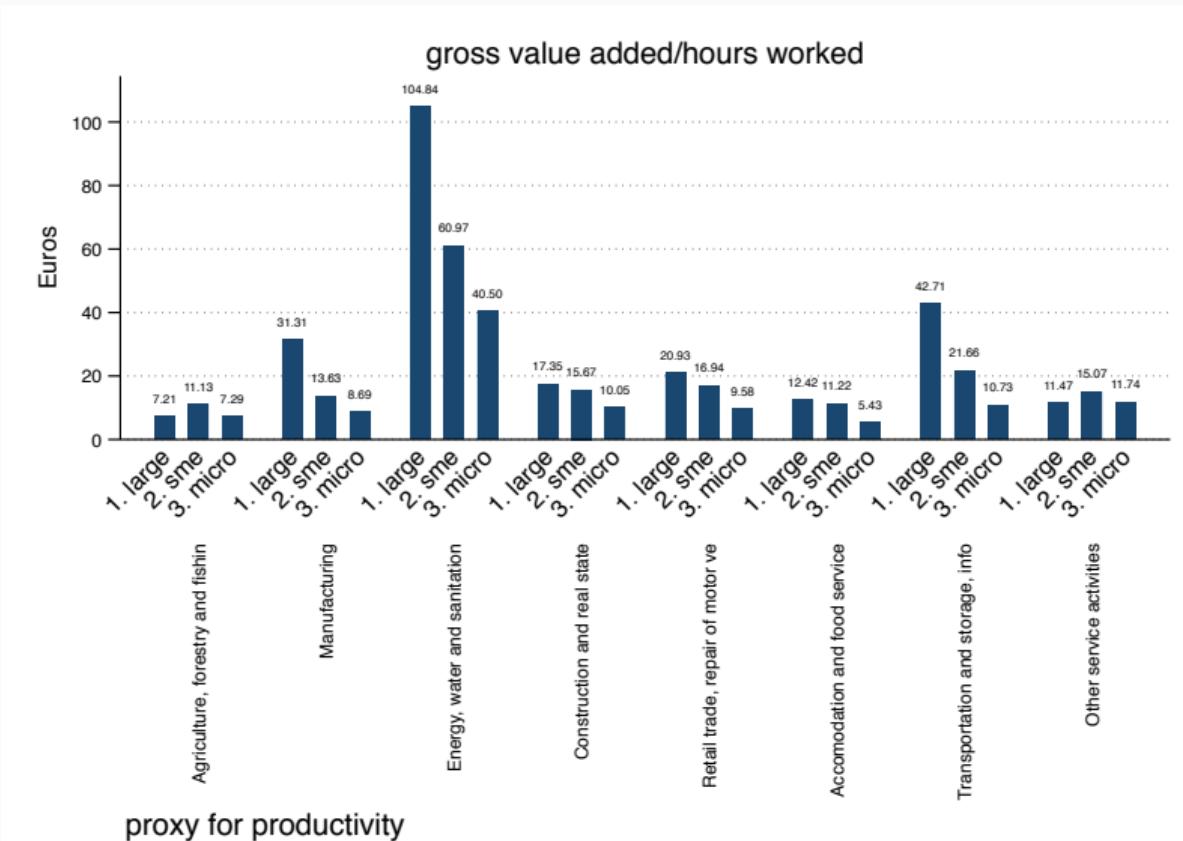
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# Results



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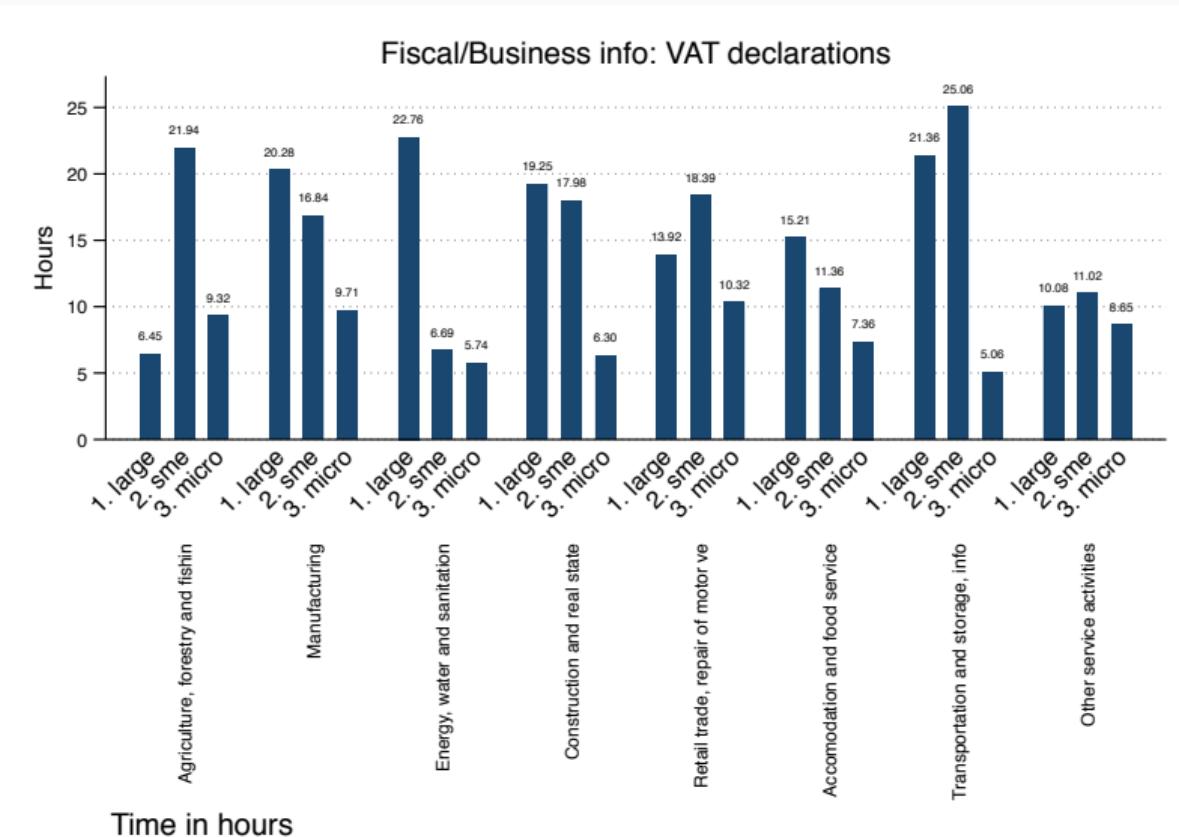
## **Results**

Tariff Component

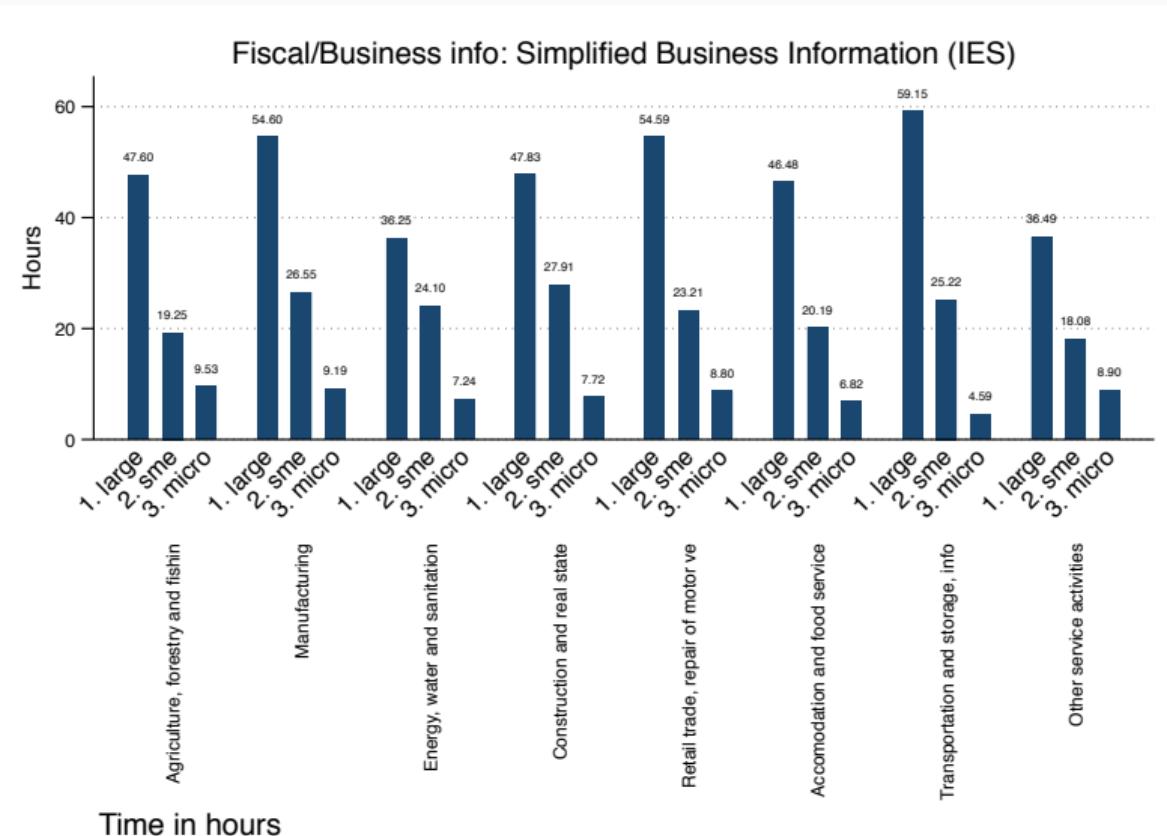
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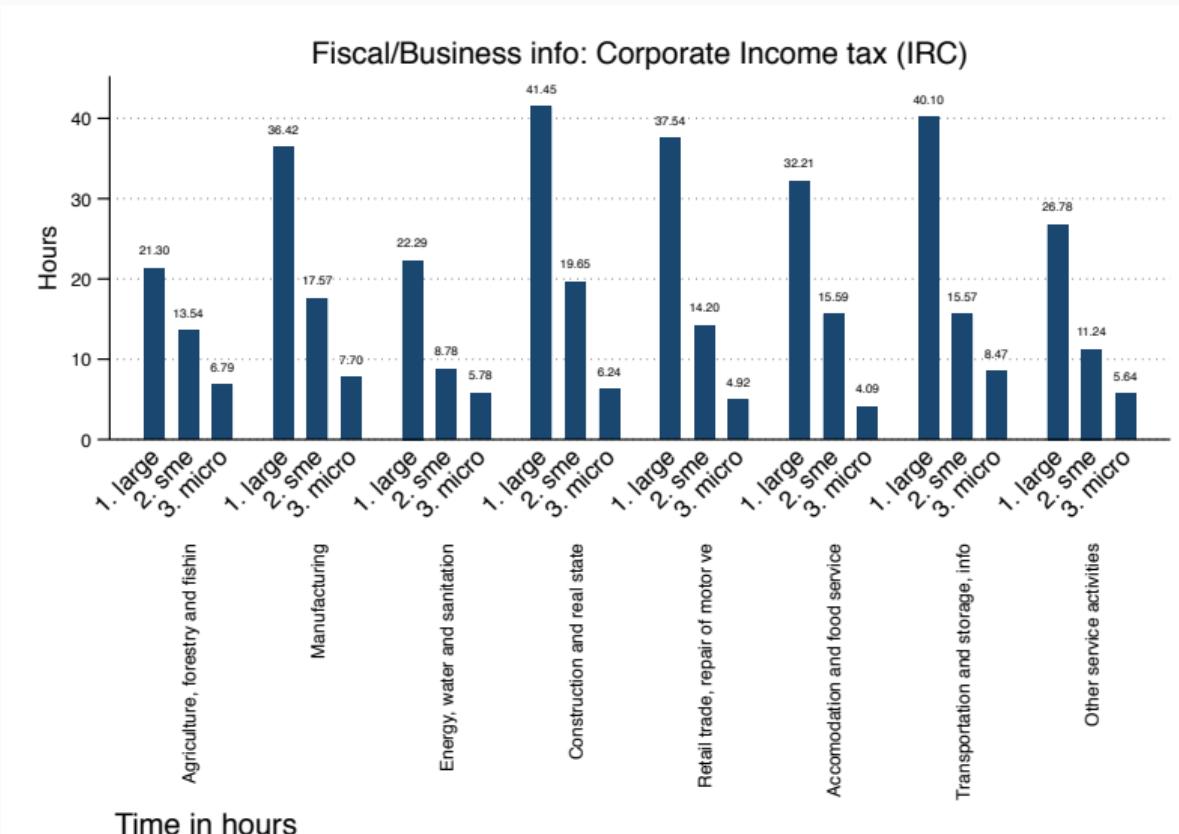
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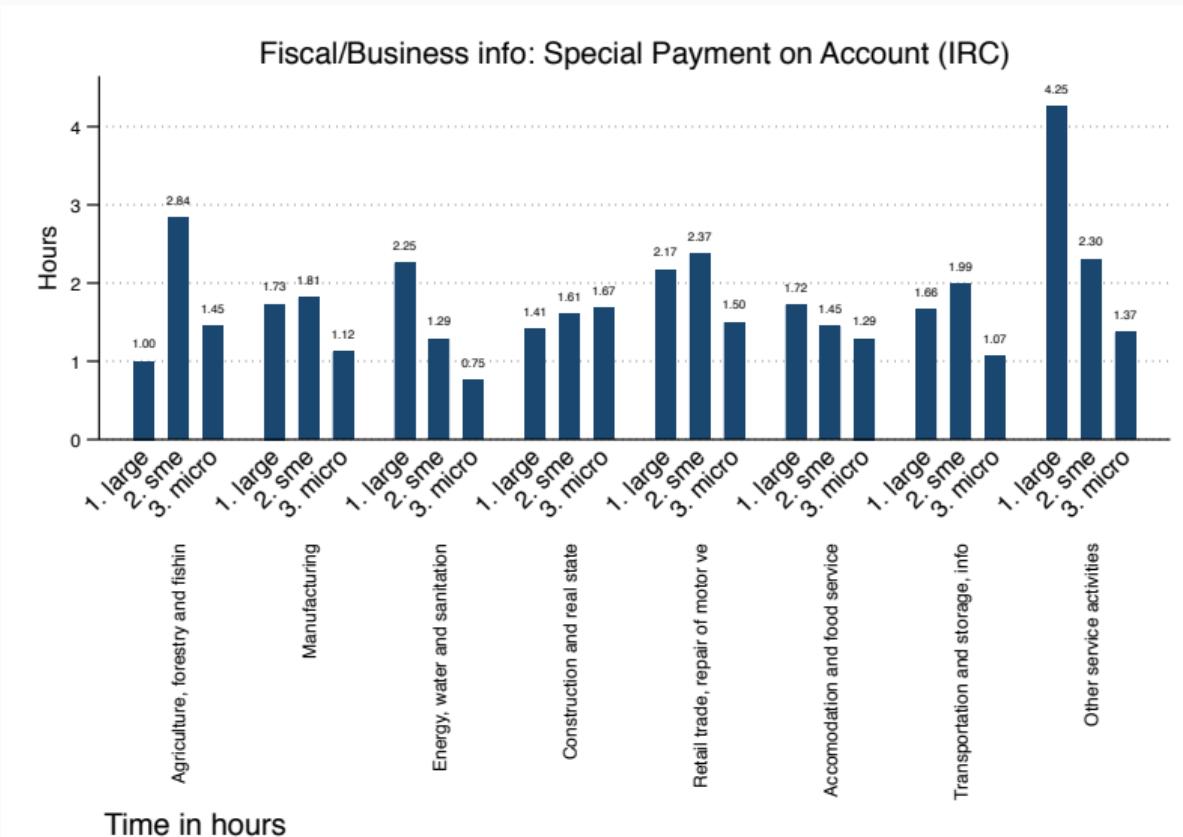
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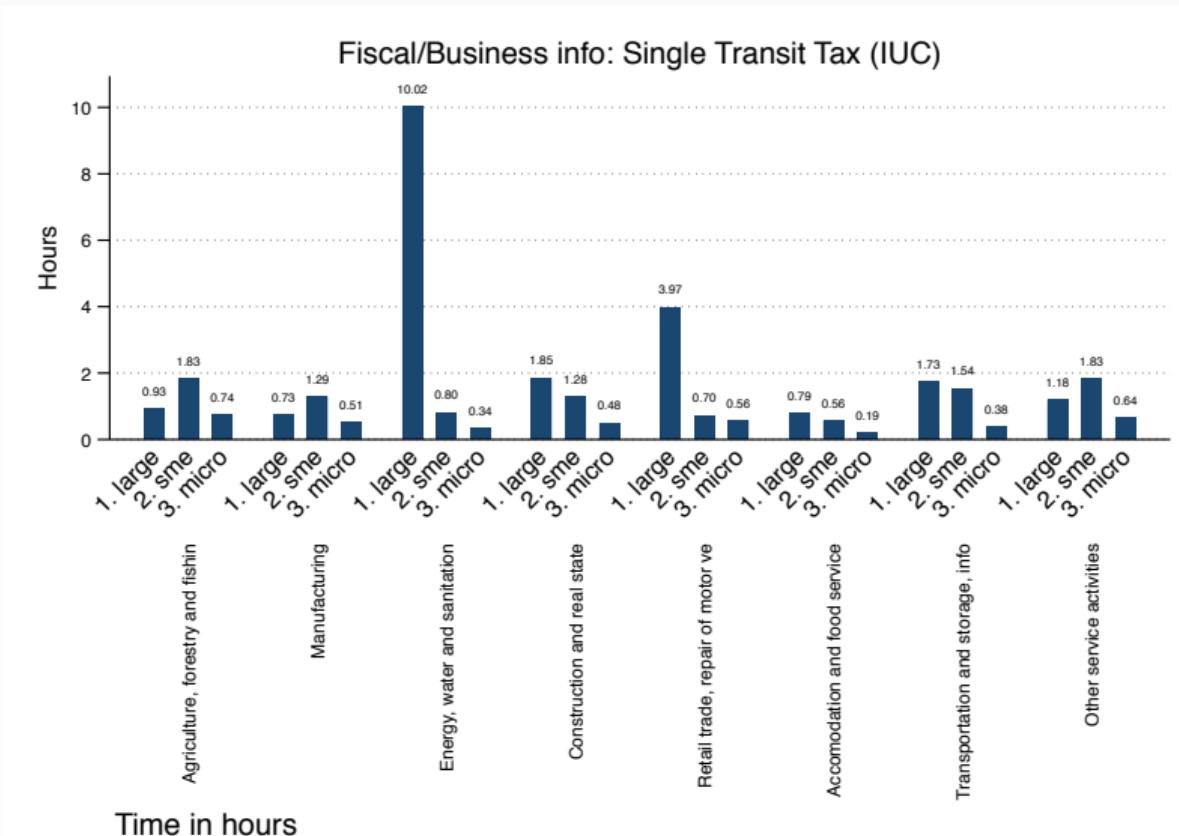
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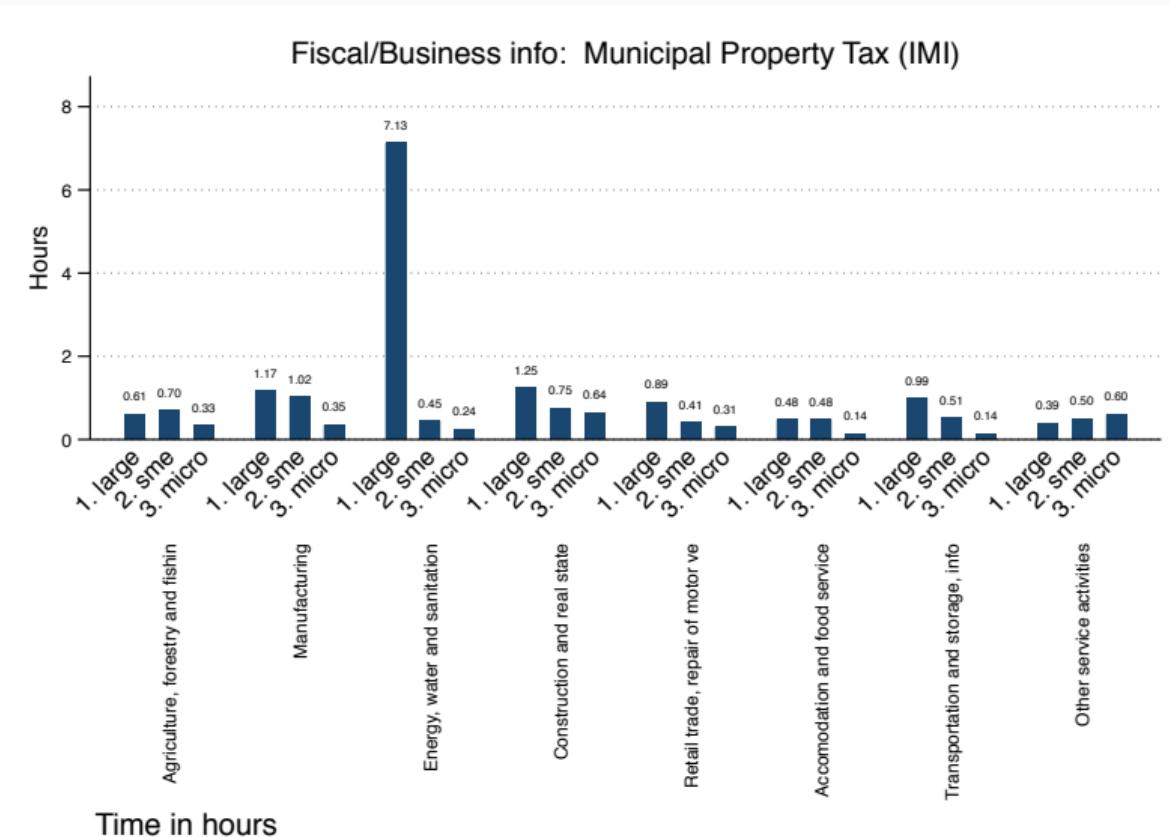
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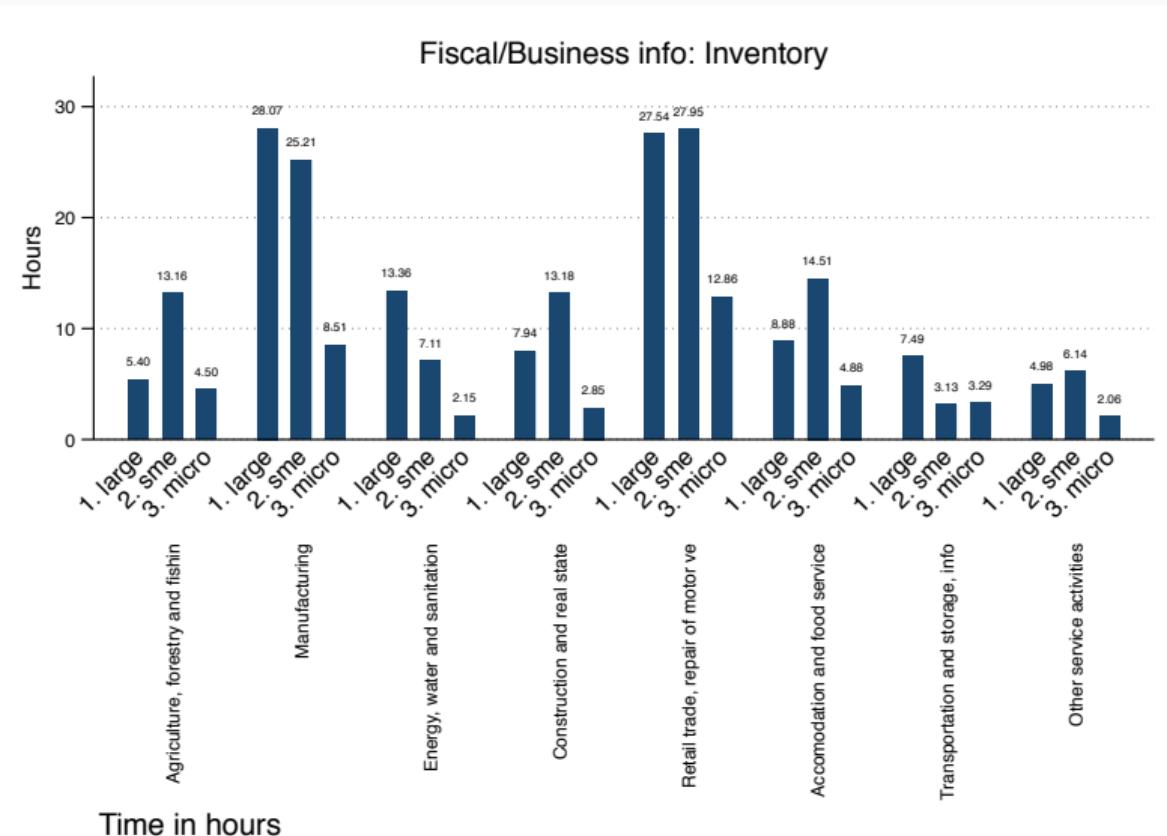
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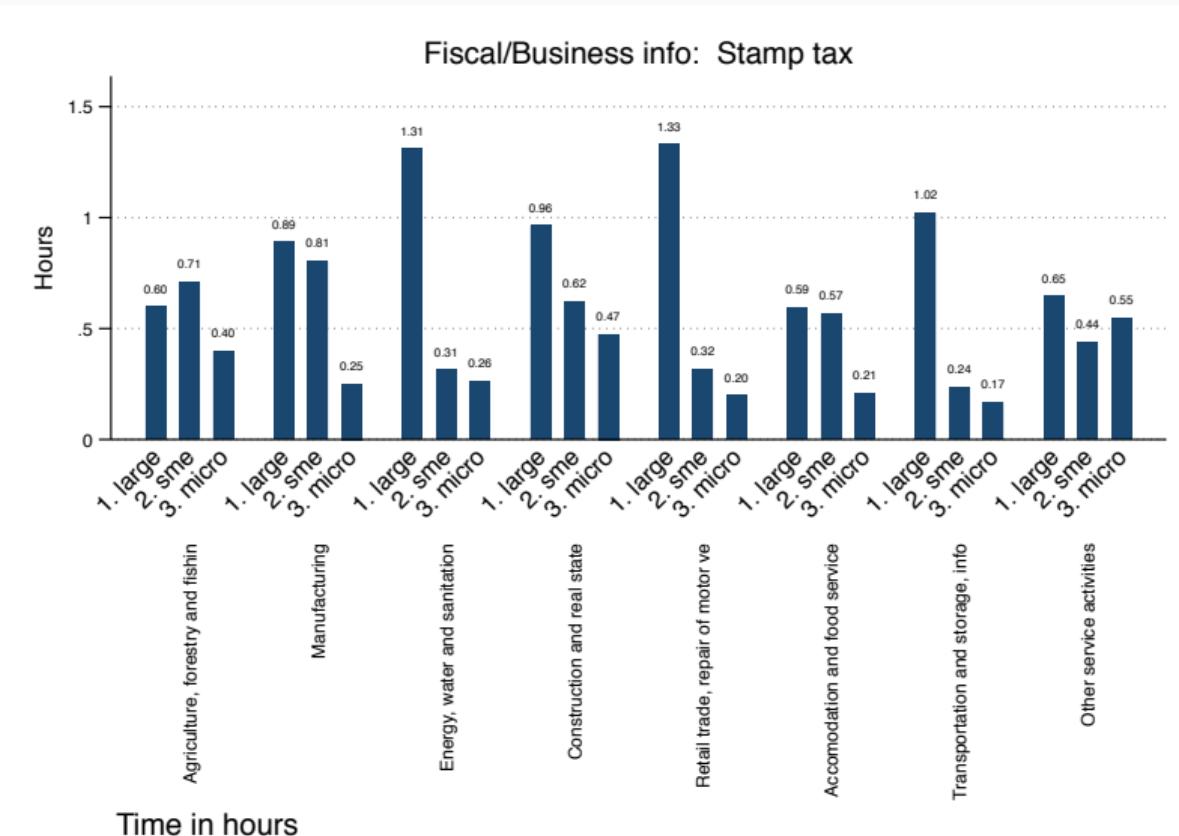
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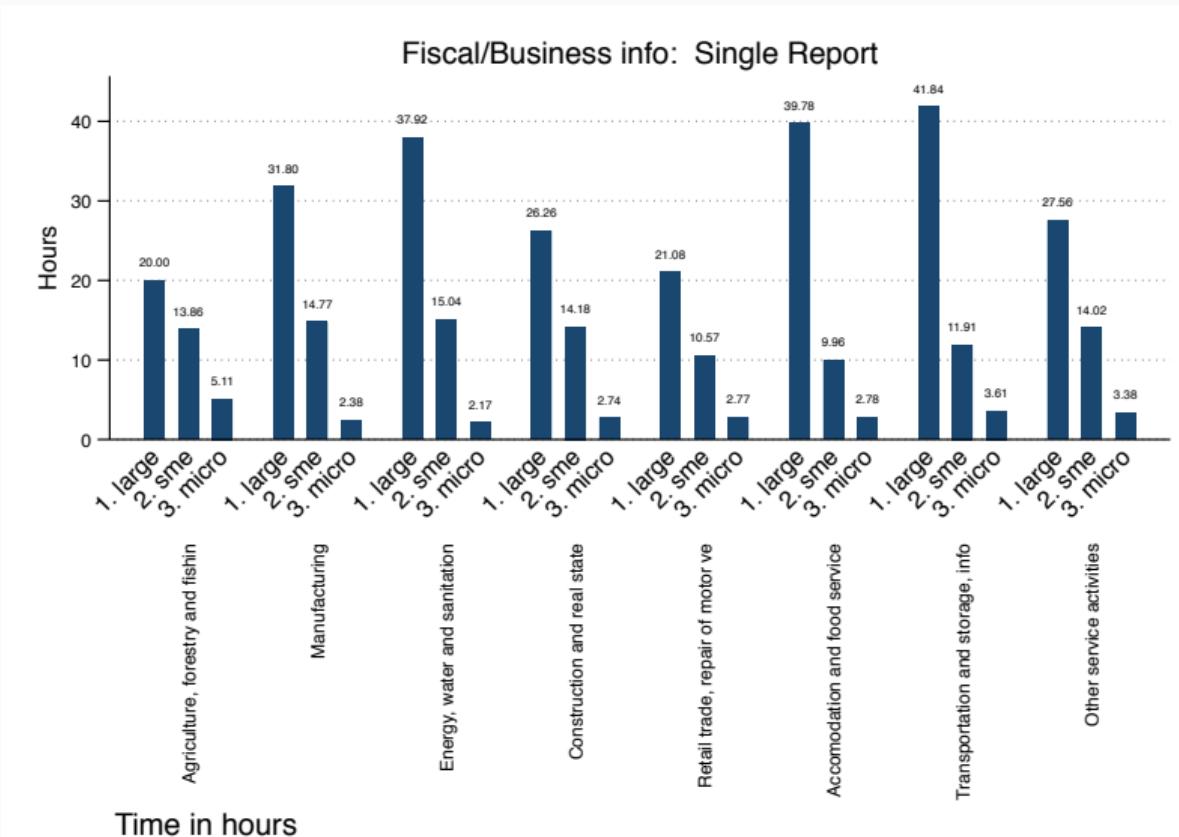
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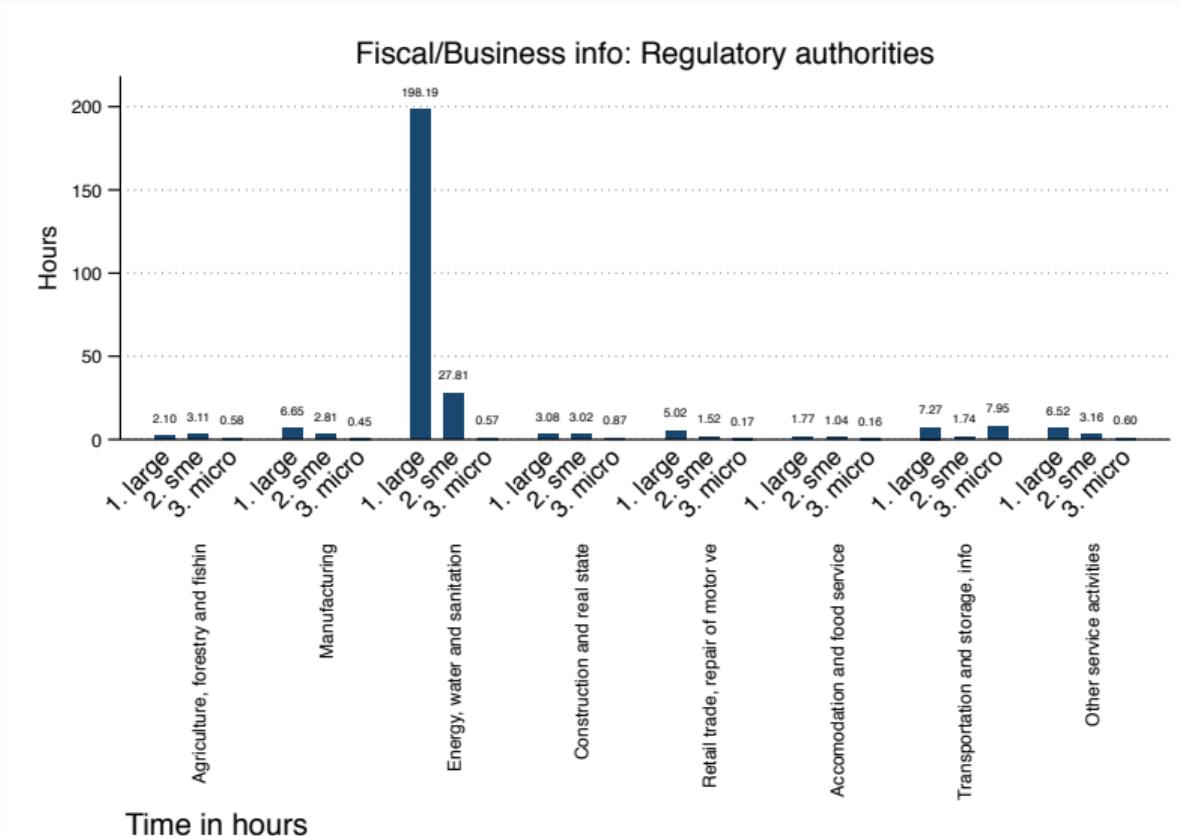
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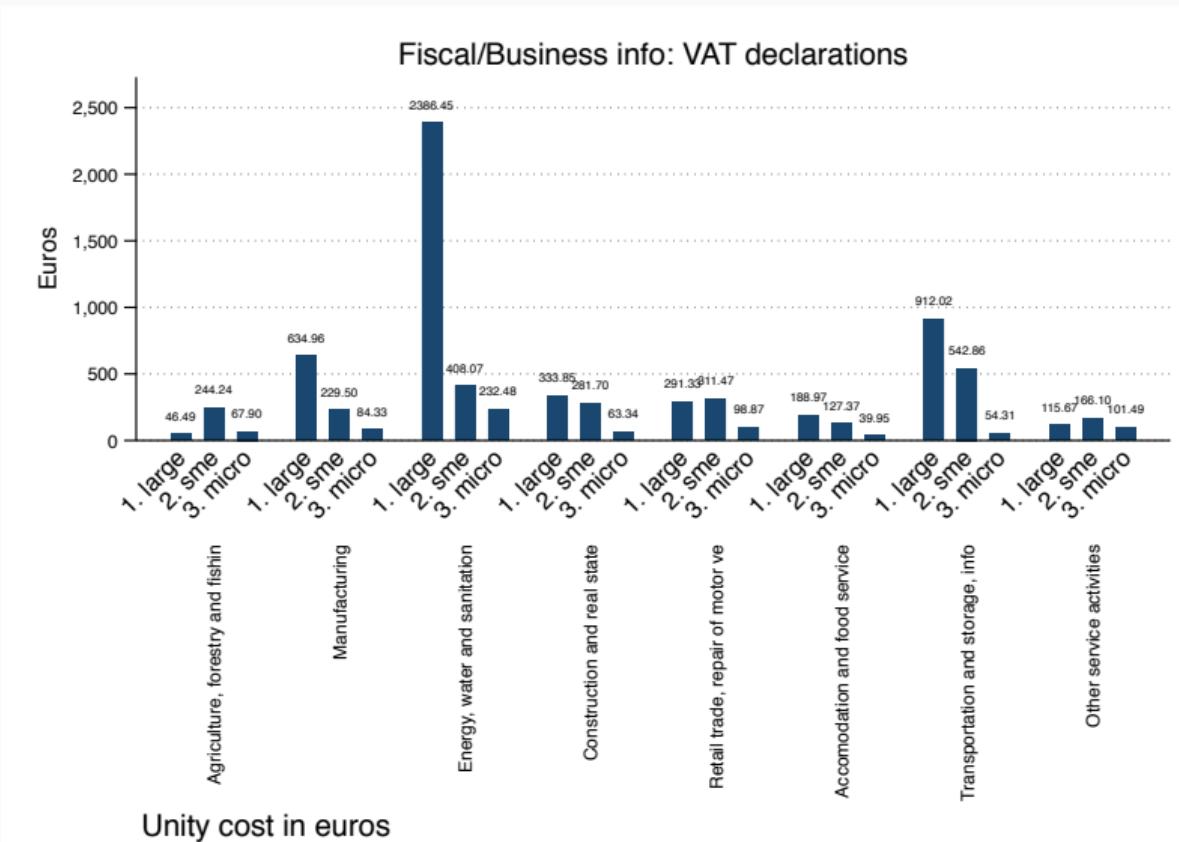
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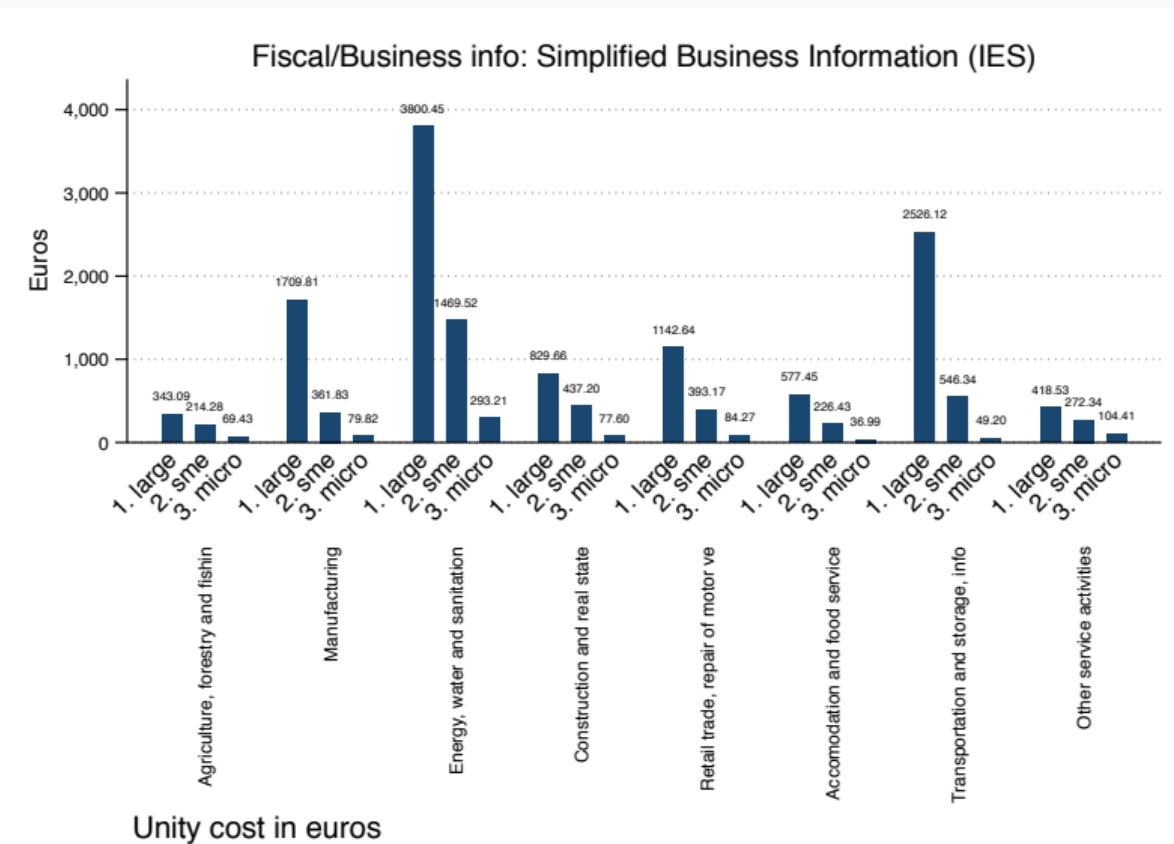
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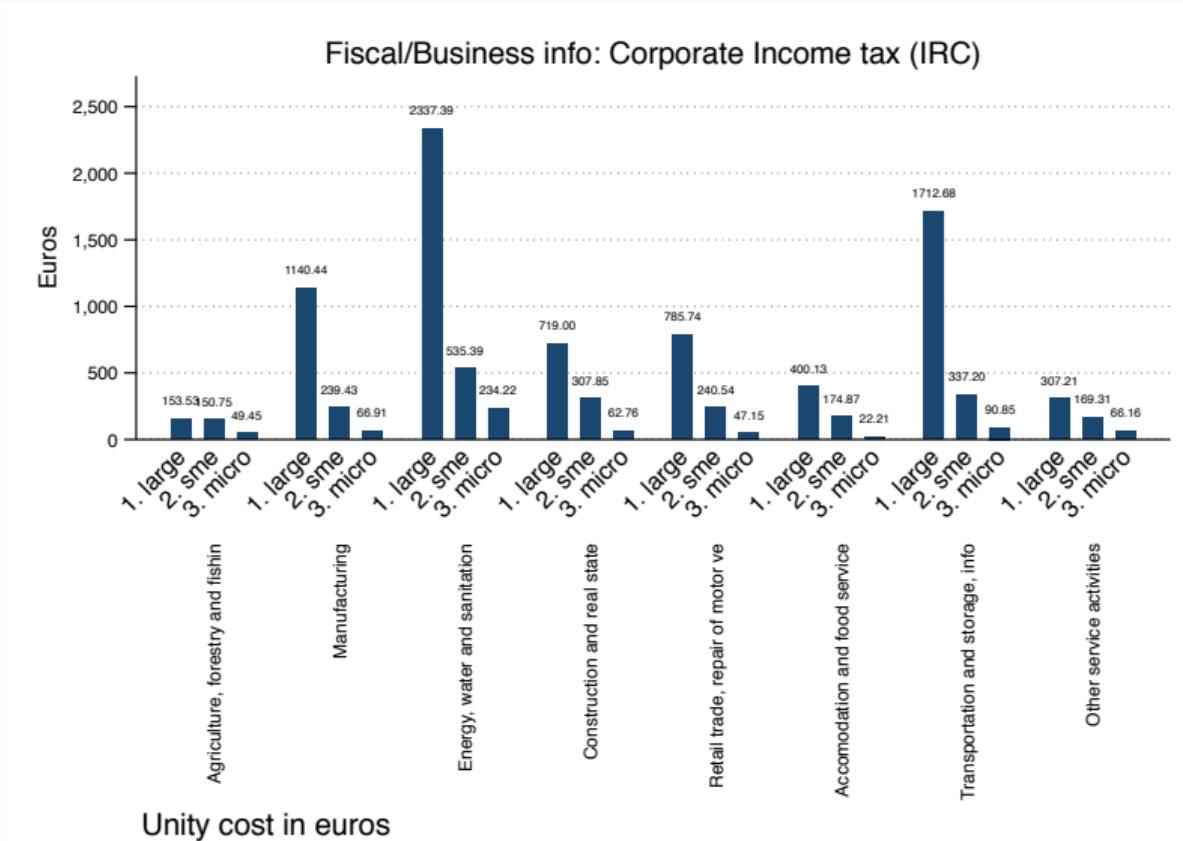
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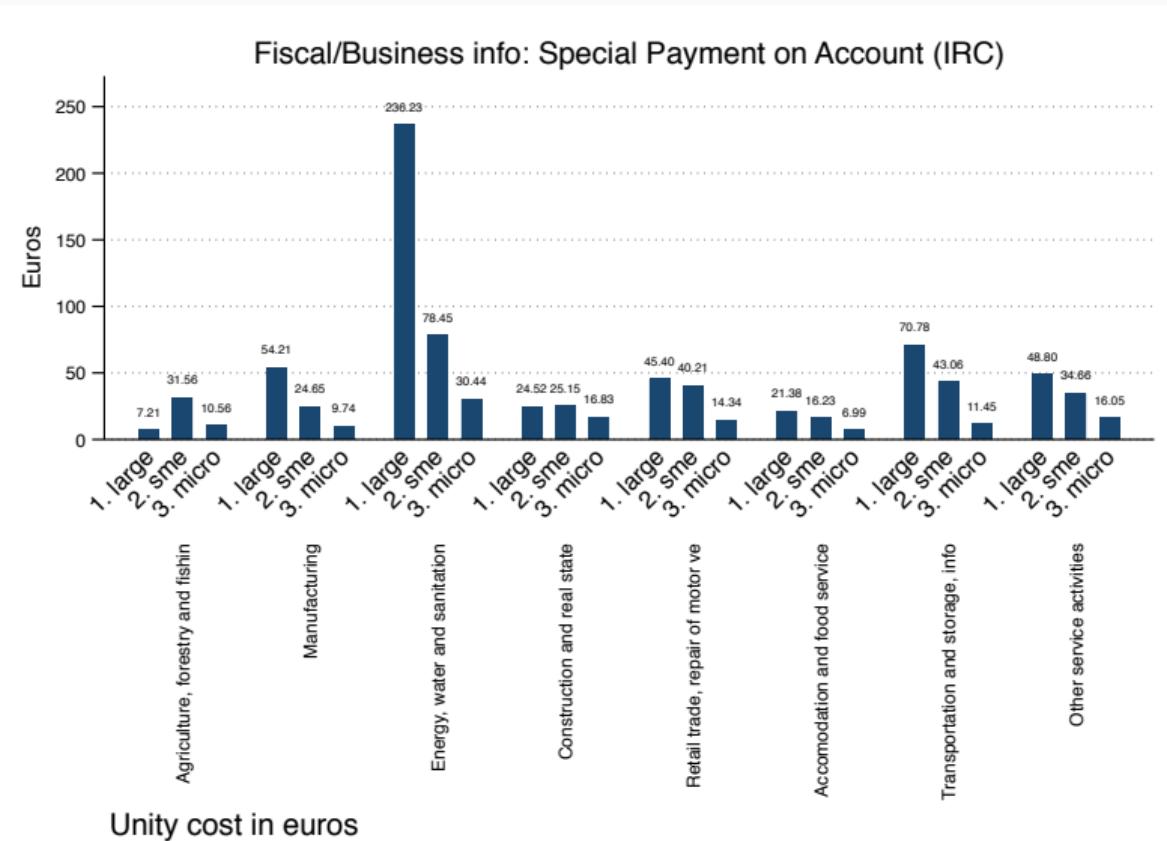
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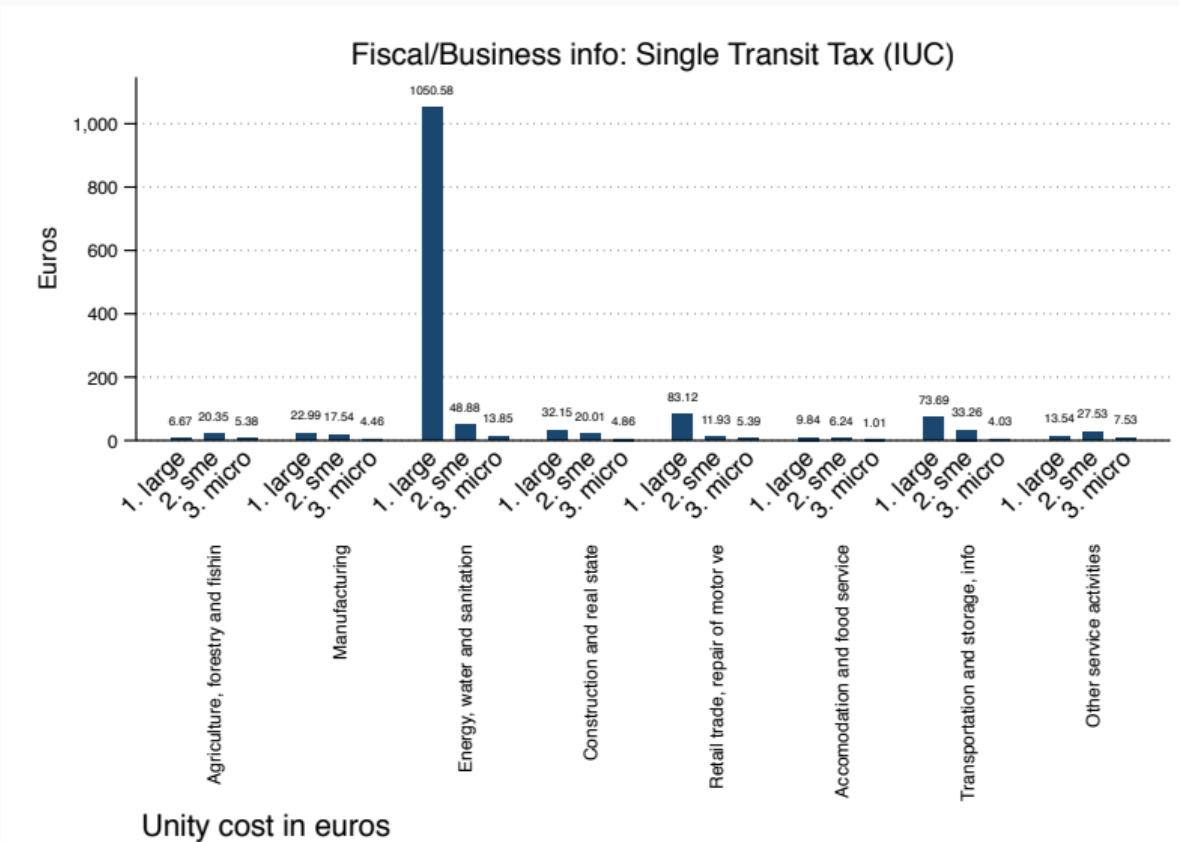
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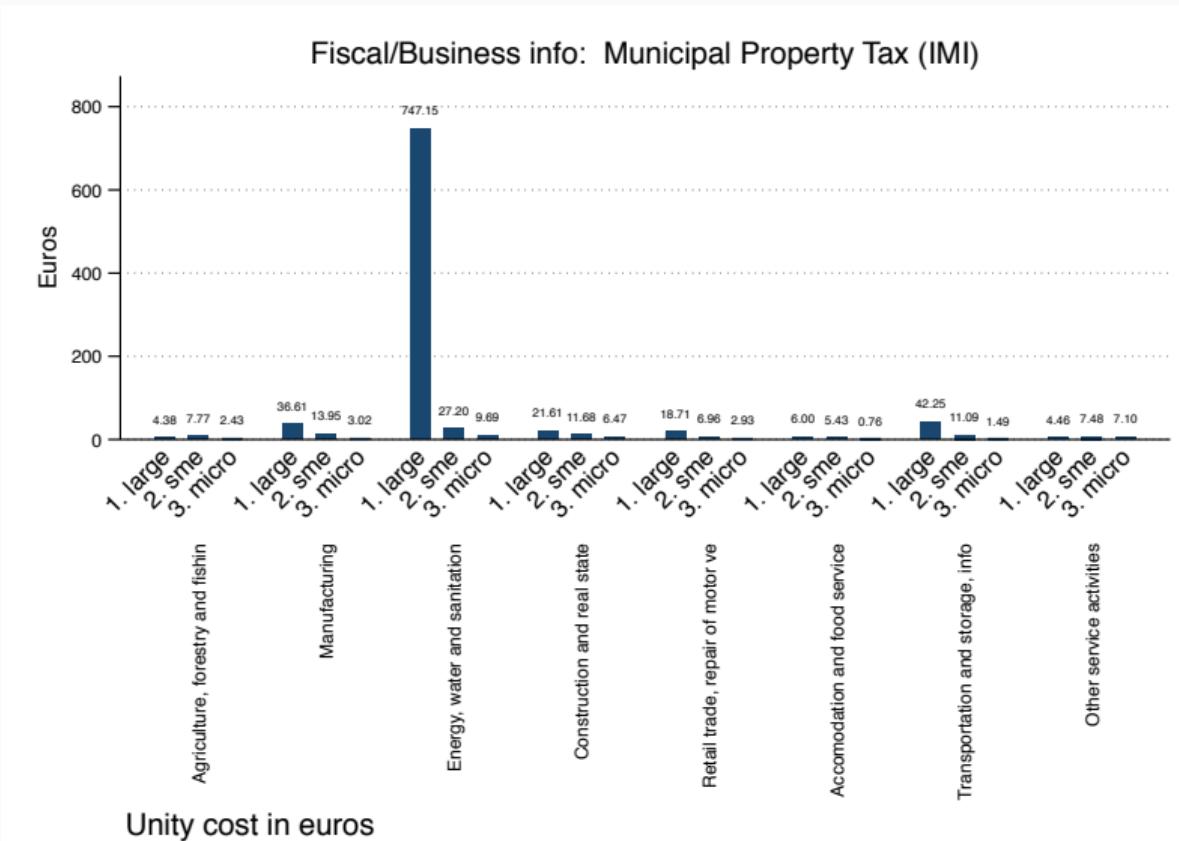
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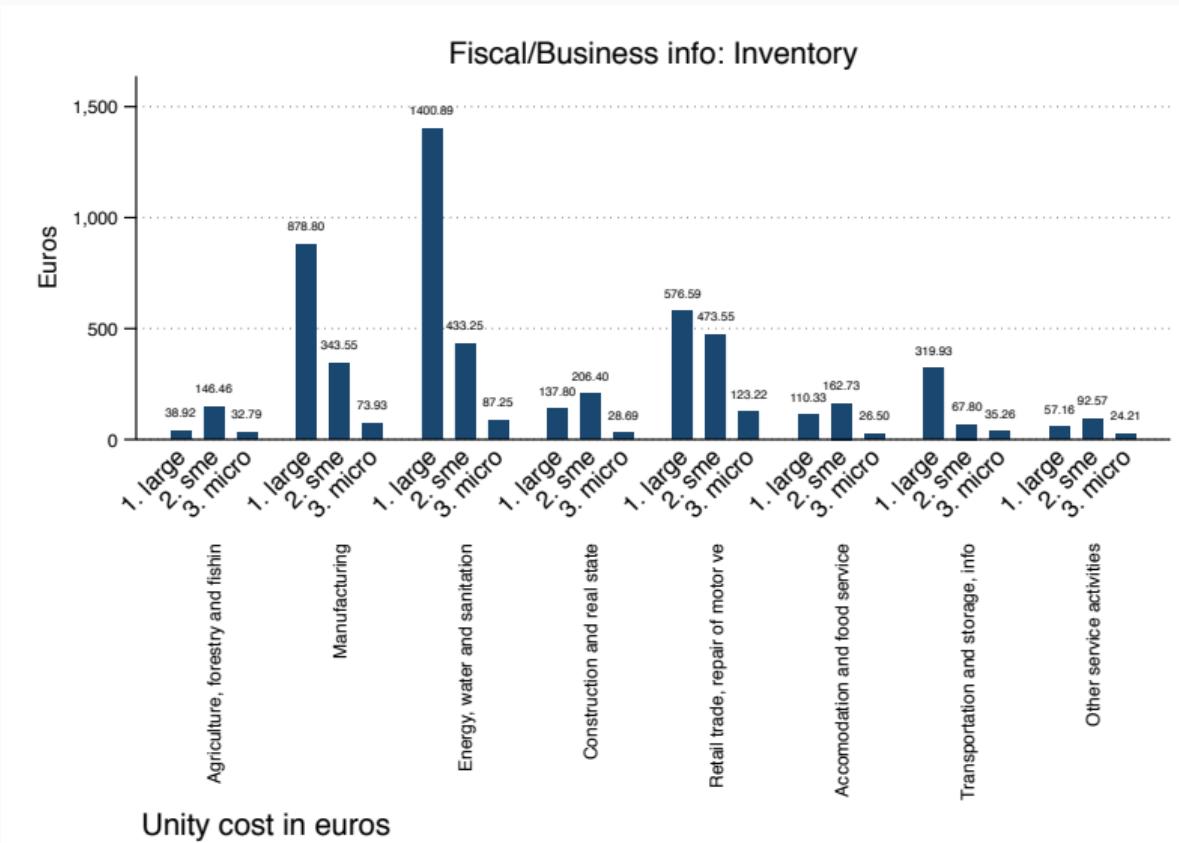
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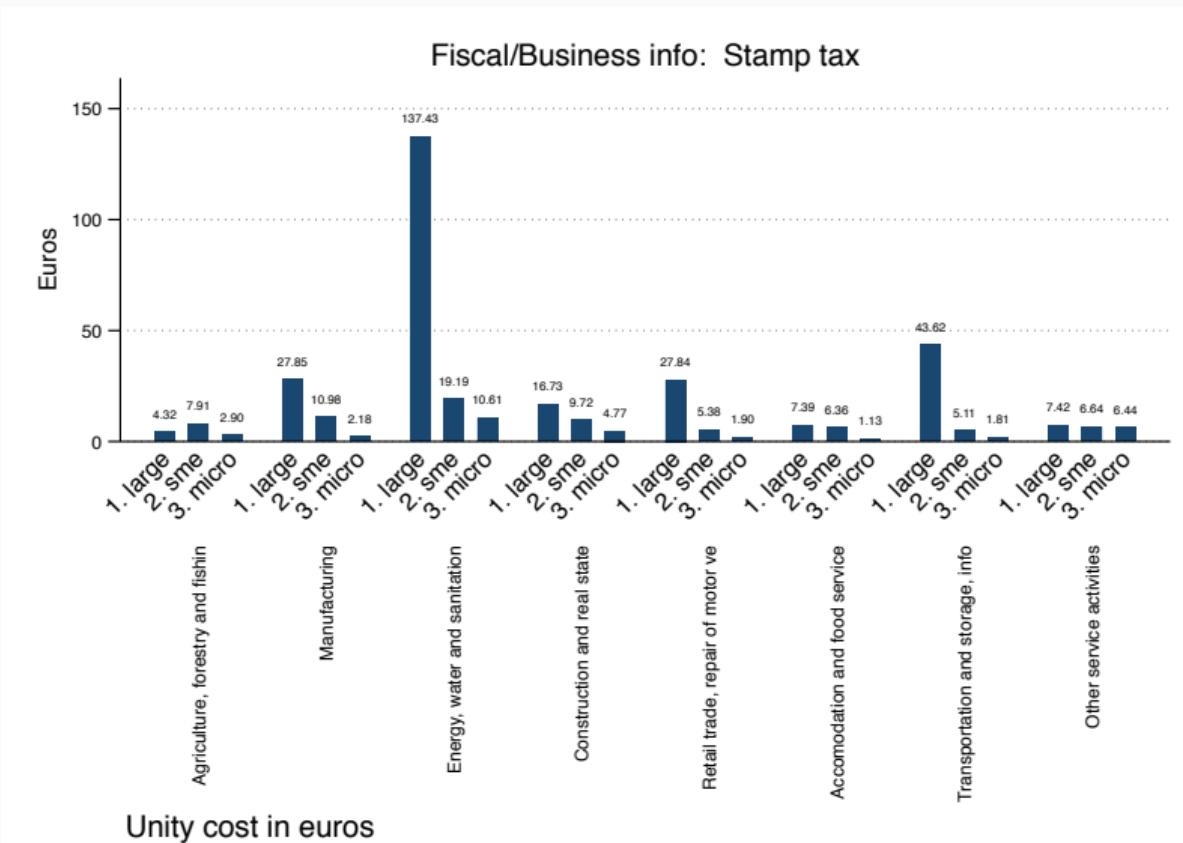
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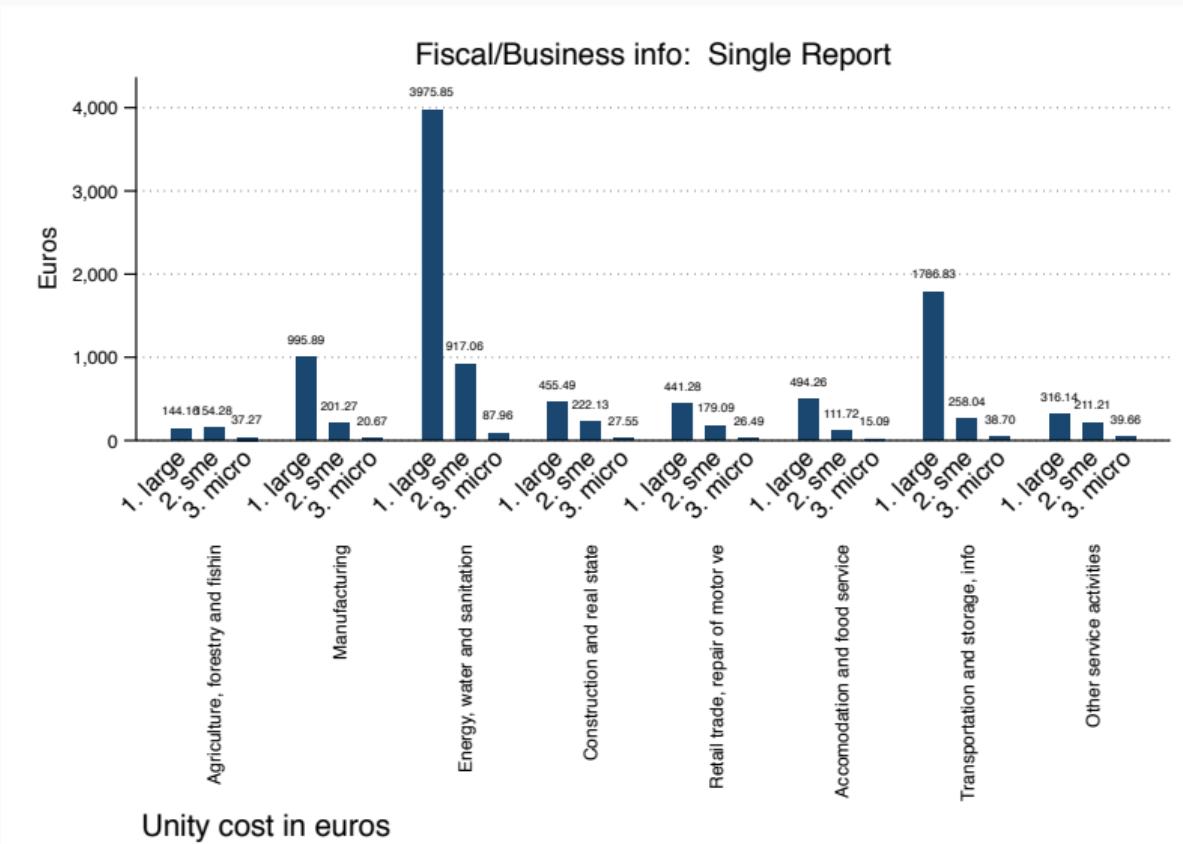
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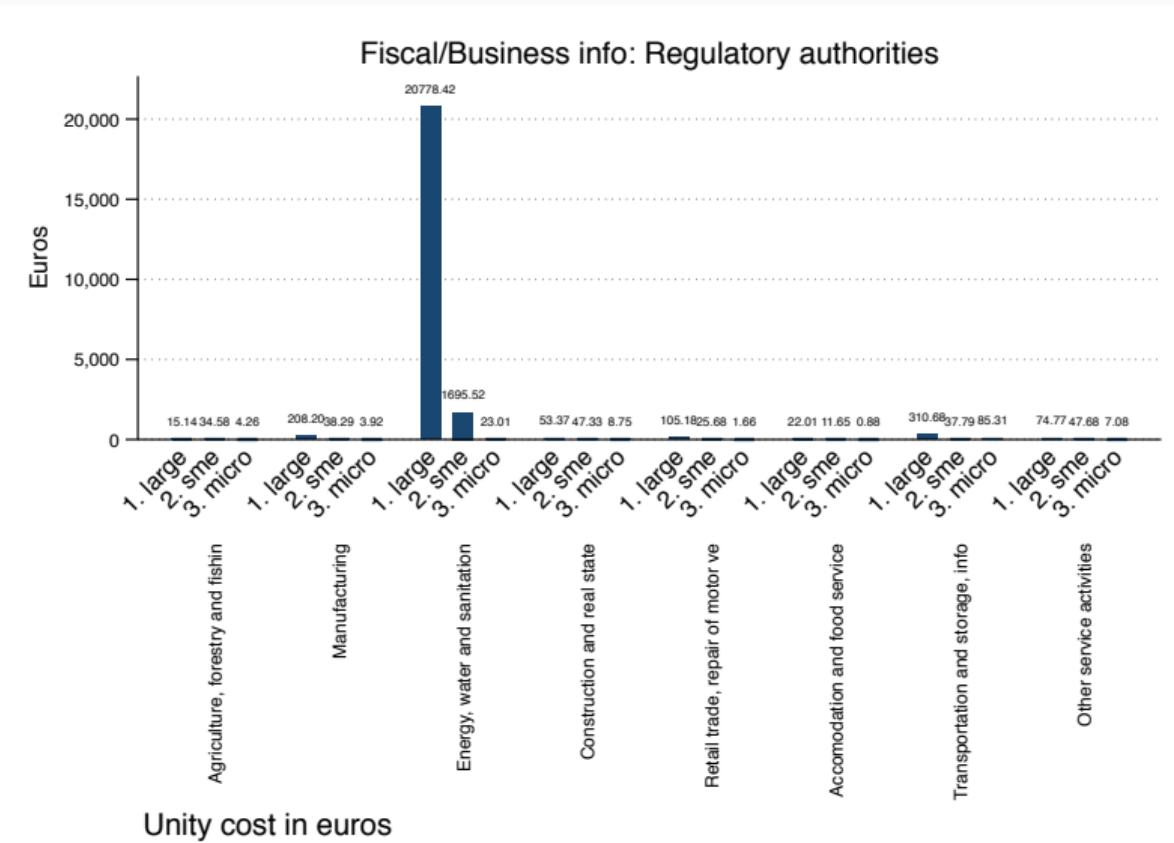
# Results



# Results



# Results



## Challenges

- "Only" 8 Information Obligations are standardized.
- How to identify similarities and dissimilarities with new IO?
- Is this the moment to start using Machine Learning and Artificial Intelligence to support RIA?

**Questions?**