

# Regulation and competition

Presentation 7 - Text 6

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# Introduction

- The objective is to present the literature of the impact of regulation on competition, focusing mainly on the negative effects

Competition, which is a process of rivalry between firms, is a **crucial factor driving economic growth** :

Pressures firms to innovate and become more efficient. The increase in productivity on the aggregate level ultimately contributes to increased economic growth.

Acts as a **defense against protectionism** and contributes to **keeping markets open to new entrants**, making countries more attractive as a recipient of **foreign direct investment**.

# Effects of regulation on competition

- Public intervention aims to restore perfect competition conditions.
- Regulations aims to allow an effective competition between firms
- There has to be a balance between regulation for a good functioning of the market and the minimum negative effects on competition

The effects of regulations on the market can have strong negative impacts

- Affect the economic growth :
- Eliminating the number of suppliers on the market
- Restriction to marketing activities
- Entry barriers
- Price regulation
- Burdensome labor market regulations

# Competition, regulation and economic growth

## ● Competition and growth

**Competition** is :

- A condition where different economic firms seek to obtain a share of a limited good by varying the elements of the marketing mix: price, product, promotion and place.
- A vital factor contributing to accelerated economic growth and increased consumer welfare

**Growth** is an **increase in the the production of economic goods and services**, compared from one period of time to another. It can be measured in nominal or real (adjusted for inflation) terms.

# The Schumpeterian branch of endogenous growth theory



Competition is necessary and encourages firms to develop new products.

Product market => reduces incentives for innovation and growth



Negative impact on research and development because some firms tend to copy its competitors

# The Aghion and Ai theory



Incentives don't depend on the rate of innovation but on the difference between successful and unsuccessful innovations

Questioning about the benefits and the constrains intense competitions => max growth achieved with intense competition



More product in the market reduces firm's pre innovation

Protectionism weaken growth rate which falls

## ● Regulation and growth : complex relationship

They are both a condition for the functioning of markets

Competition increase through domestic products in Europe and the United States with OECD best practices ( state control + barriers to entrepreneurship)

With low barriers from competitions/ low administrative burdens ( Ireland, UK):

- Static gains, better allocations of existing resources
- Dynamic gains, expected to arise from greater effort to innovate and produce. And also a rapid diffusions of cutting edge technologies



# Why intervene?

## **Market failures :**

- Externalities
- Public goods,
- Excessive market power
- Natural monopolies
- Asymmetric information

# Theories of regulation

## Public interest theory



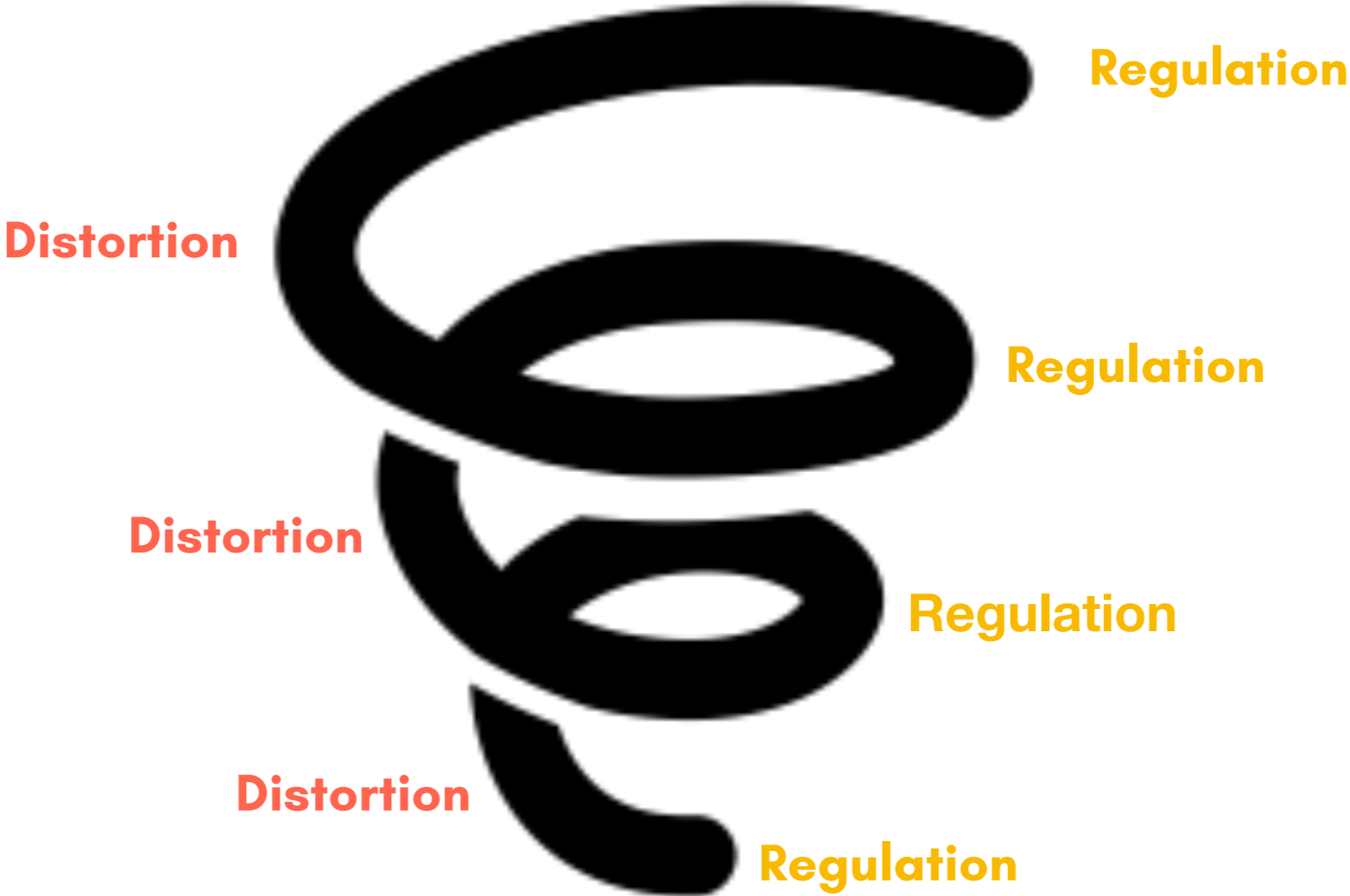
Market failure



Increased social welfare

Assumption: regulators have sufficient information and power

# Austrian theory



Ever increasing levels of regulations

# Critique of public interest theory

Governments should intervene in industries :



Where there is danger  
of monopoly



Those who generate  
externalities

**There has to be a positive correlation**



However this is not the case

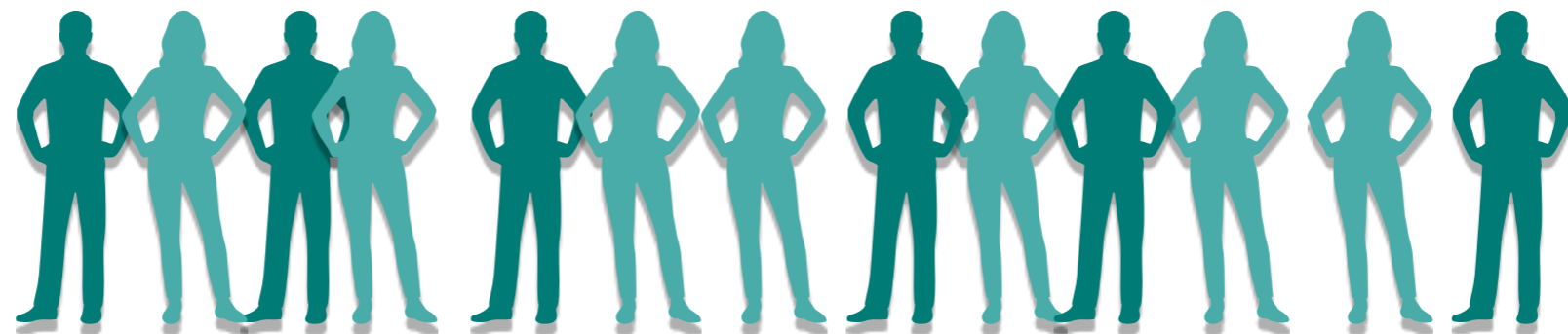
# Private interest theories

Regulators **do not have sufficient information** with respect to :

- ➔ Costs
- ➔ Demand
- ➔ Quality
- ➔ Other dimensions of firm behavior

# Public choice theory

Individuals are self-driven



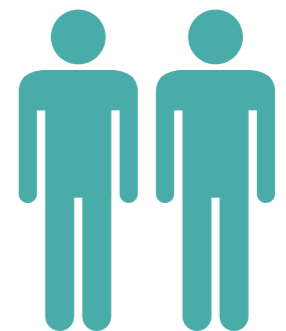
Influenced by lobbyists and special interest groups



Politicians want to be re-elected

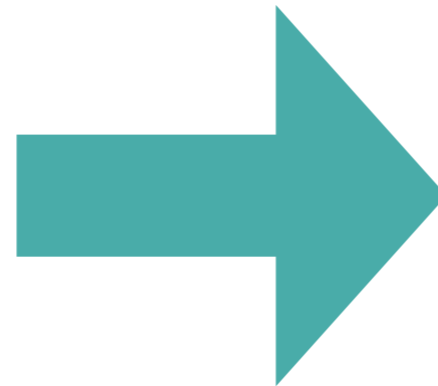


Public servants want to expand their structure and keep their job



# Capture theory

Government regulations often end up **-serving** the **regulated firms** rather than the public



Regulated firms, which possess an **information advantage** over the regulatory authorities, get regulators **to enforce regulations that protect profits**

# Chicago theory

Votes



Organize less expensively



Outsiders



Regulators

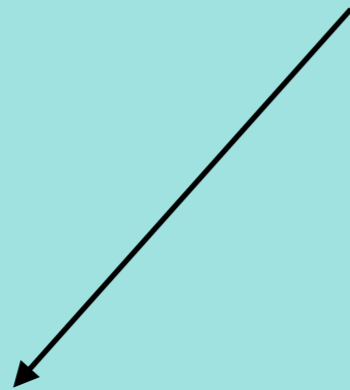
Regulations





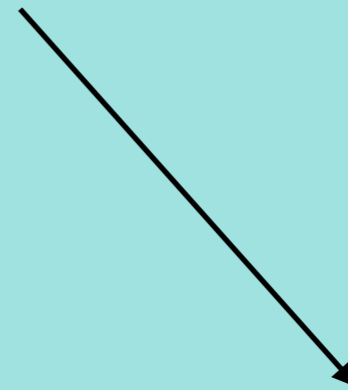
# Critique

Regulations often serve consumer rather than the interest of the industries



Heavy regulations :

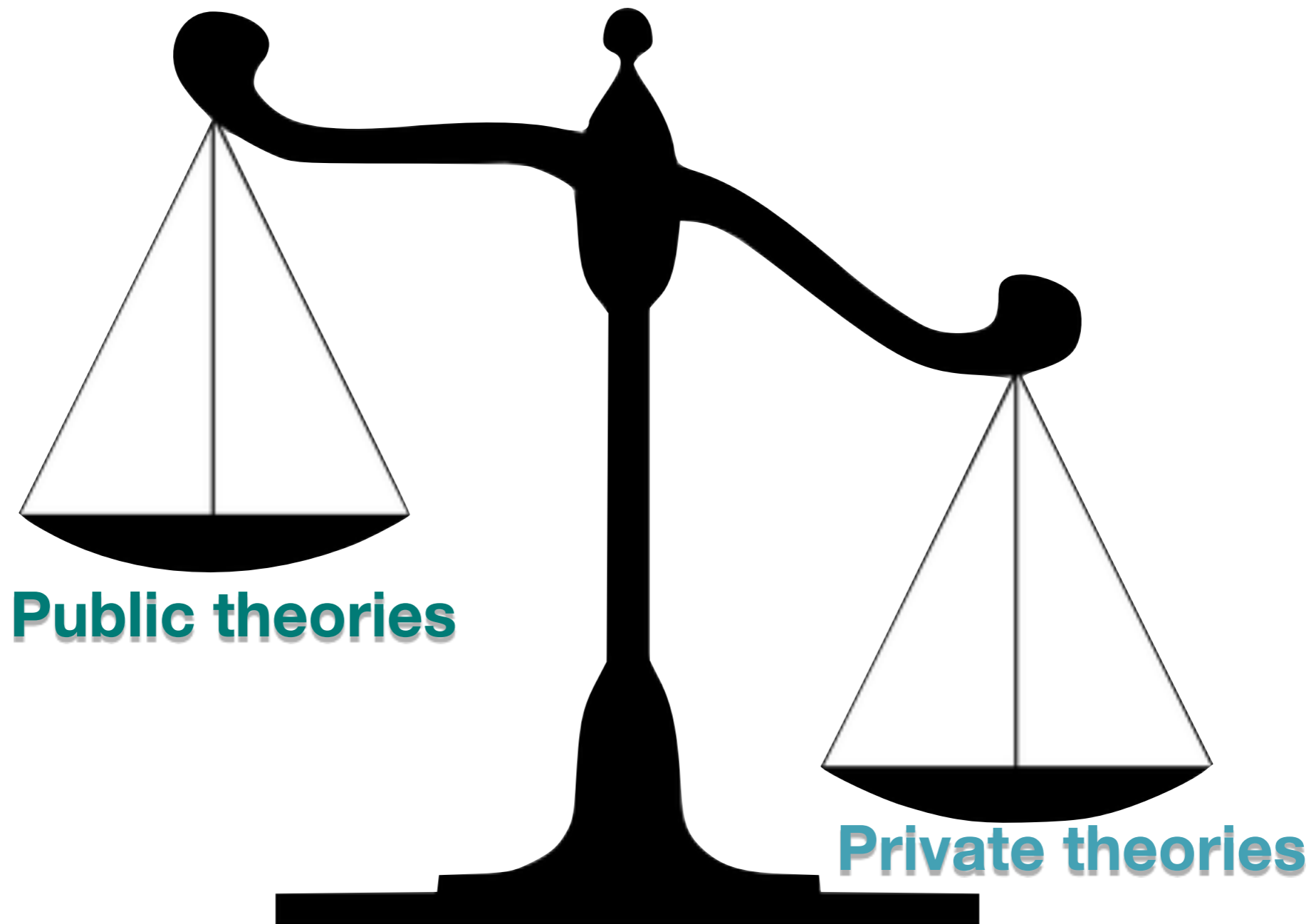
- Higher corruption
- Larger unofficial economies



Light regulations :

Democratic and limited governments

More evidence for private rather than public interest theories



# Summary of theories of Regulation

<b>Theory</b>	<b>Rationale</b>
<b>Public interest theories</b>	Intervention to correct market failures and to increase social welfare.
<i>Austrian theory</i>	Regulation is well intended, but the distortion in the market the intervention creates causes problems which require further interventions. Regulatory spiral.
<b>Private interest theories</b>	Regulators do not have sufficient information regarding costs, demand, quality and other dimensions of firm behaviour. Can therefore only imperfectly, if at all, promote the public interest when regulating firms.
<i>Public choice theory</i>	All individuals are driven by self-interest. Politicians make decisions in favour of businesses in order to maximise their own chances of becoming re-elected.
<i>Capture theory</i>	Regulations often end up serving the regulated firms rather than the public. Regulated firms, which possess an information advantage over the regulatory authorities, get regulators to enforce regulations that protect profits. Regulators get "captured" by the firms they are supposed to be regulating.
<i>Chicago theory</i>	Regulation is acquired by the industry and is designed and operated primarily for its own benefit. Interest groups that can organise themselves less expensively than others will exercise political influence. Politicians honour the demand for regulations by the interest groups who supply votes and other resources in return.

# The regulatory burden

## Costs of regulation

```
graph TD; A[Costs of regulation] --> B[Direct costs]; A --> C[Indirect costs]; B --- B_list["• financial costs<br>• investment costs<br>• enforcement costs<br>• administrative costs<br>• hassle costs"]; C --- C_text["Experienced by the agents that are not under the scope of regulation or when the regulation has unintended effects."];
```

### Direct costs

- financial costs
- investment costs
- enforcement costs
- administrative costs
- hassle costs

### Indirect costs

Experienced by the agents that are not under the scope of regulation or when the regulation has unintended effects.

→ Governments try to reduce the direct costs of compliance by focusing on reducing the administrative burden for businesses to free up resources that can be more productively employed elsewhere

# Impacts of regulation on competition

- **Direct** and **indirect** effects on competition

Indirect effects of regulation can be significant because competition is closely linked with **innovation, productivity, employment, job opportunities** and **economic growth**.

- **Positive** or **negative** impact on economy

- Impact at a **national** and **international** level

## Impact competition if 1 or more of the following effects is true :

### 1. Limits the number or range of firms :

#### OECD 2016

- **Implicitly** : creating barriers to entry and exit (considerable administrative and bureaucratic procedures )
- **Explicitly** : denationalizing an industry, granting a business exclusive rights to a market, or restricting the number of suppliers in a geographical area.

#### Brandt, 2004

« New businesses entering the market and replacing less productive ones is an important factor of business dynamism and economic growth ».

#### Rincon-Aznar et al, 2010

« Entry liberalization and the process of entry and exit has had a positive influence on productivity growth in a number of OECD countries ».

# Studies about the negative effects of regulation

## Van Stel et al, 2007

Minimum capital requirement component is found to be an obstacle for entrepreneurship and administrative barriers to entry play only a modest role

## Brandt 2004

- Administrative burden on start-ups has negative impact on entry rates
- Importance of exit barriers
- High entry and exit barriers : Firms which find out that they have little chance of survival tend to refrain from entering the market

## Braunerhjelm and Eklund 2013

The tax rate and the administrative burden that the tax system imposes on firms significantly reduces new firm formation, -10% reduction in the tax administrative burden results in +3% in entry rates.

## World Bank, 2016 report

The ease of paying taxes, regardless of the corporate tax rate is a significant determinant of firm entry

## 2. Limits the ability of firms to compete

Firms compete with each other through **different channels** :

- **Price**
- **Products quality or characteristics**
- **Different sales channels**

Regulations that limit firms ability to compete are :

- **Price controls**
- **Product or production method specifications**
- **Limits to the freedom to advertise** : restrictions on comparative advertising, the interdiction to advertise some products or restrictions to use certain types of media or certain times of the day

→ Restrictions on advertising may also restrict the entry of new firms by reducing their ability to create brand awareness.

**(OECD, 1998)**



### 3. Reduces the incentive of firms to compete

- Restricting a business from expanding its market share or growing its profit
- Introduction of self-or co-regulatory regimes, or allowing cooperation and information exchange between firms :

#### **Advantages**

- Enhanced regulatory credibility through :
  - The involvement of industry and other interested parties in the regulatory process
  - Improved regulatory quality from drawing on the expertise of the industry in designing the rules
- bring enforcement cost savings by making the regulated parties part of the monitoring of enforcement of the rules.

#### **Disadvantages**

- Participants may be tempted to share thoughts on firm strategies related to pricing, quantity and other aspects and can lead to price coordination between firms or to prevent new entry.

#### 4. Limits the choices and information available to consumers

Consumers having access to information about goods and services is essential for effective competition to take place

- **UK Competition and Markets Review** of the energy sector in 2015 found a weak customer engagement in the retail energy market, signaling a problem with lack of competition in the market.
- Potential consequence of the prevailing difficulty for consumers to compare the complex and competing offers by various energy suppliers.

# Labour market regulation

Labour market regulation can negatively impact on competition by limiting firms ability to adapt their work force to changing economic conditions.

## Van Stel et al (2007)

- Greater impact on business start-up rates than the administrative burden associated with starting a business.
- The effect on entrepreneurship can partly be explained by the fact that less rigid regulations diminishes the safety of a paid job, and the more likely employees may be to start their own business.

## Gust and Marquez (2002)

- Rigidities in labour market such as employment protection legislation have proven to increase the cost of labour and often discourage companies from exporting through low level of competitiveness that resulted from a reduction of the firms' profits.

## Bjuagren, 2013 ; OECD, 2013)

- Employment protection legislation can have important effects on worker behavior as it might increase the incentive of employees to acquire more firm specific skills.
- Prevent significant costs associated with job displacement.

# Measures of regulation

- OECD Product Market Regulation (PMR) index
- World Bank – Doing Business Annual Reports
- Comparing/Complementing the two indices

# OECD Product Market Regulation Index

- **Definition** : The aggregate PMR indicator is the simple average across the three high-level indicators *state control*, *barriers to entrepreneurship* and *barriers to trade and investment*, under which there are 18 low-level indicators.
- The PMR data is collected through a questionnaire sent to governments in OECD and non OECD countries, and is updated every five years.

OECD countries have considerably liberalized their product markets over the past 15 years by :

- **Lowering barriers to entrepreneurship** (streamlining administrative procedures for start-ups, generally simplifying rules and procedures and improving access to information about regulation).
- Implementing **measures to reduce the level of state control** (abolishing price controls or improving the design of price control schemes).

Competition-unfriendly regulations are higher in the areas of state control and barriers to entrepreneurship than in the area of barriers to trade and investment.

- Within the **state control component**, high scores are primarily driven by public ownership of firms in business sectors and the poor governance of these firms.
- High scores on the **barriers to entrepreneurship** component are typically driven by a strong protection of incumbents in network sectors and high administrative burdens on specific firms such as retail shops and road freight companies.

# PMR Portugal

## Regulation of total economy (product markets)



### State control



Public ownership



Involvement in business operations



### Barriers to entrepreneurship



Complexity of procedures



Admin. burdens on start-ups



Protection of incumbents



### Barriers to trade and investment



Explicit barriers to T&I



Other barriers to T&I



# PMR United Kingdom

## Regulation of total economy (product markets)



### State control



Public ownership



Involvement in business operations



### Barriers to entrepreneurship



Complexity of procedures



Admin. burdens on start-ups



Protection of incumbents



### Barriers to trade and investment



Explicit barriers to T&I



Other barriers to T&I



# PMR New Zealand

## Regulation of total economy (product markets)



### State control



Public ownership



Involvement in business operations



### Barriers to entrepreneurship



Complexity of procedures



Admin. burdens on start-ups



Protection of incumbents



### Barriers to trade and investment



Explicit barriers to T&I



Other barriers to T&I





# World Bank – Doing Business

**Definition** : Annual report with quantitative data on the main regulatory constraints affecting domestic small and medium-sized businesses throughout their life cycles.

- The latest version of the index contains improvements to some of the indicators by expanding the focus on efficiency of a transaction or a service to also include :
  - Aspects of the quality of that service : **reliability, transparency and geographic coverage** of land administration systems.
  - Aspects of dispute resolution for land issues
- 30 best performing countries are not those with the least regulation, but rather those with **good rules** that **allow efficient and transparent functioning of businesses** and markets while **protecting the public interest**

# Comparing the two indices

## PMR

Turns qualitative data into a quantitative measure of the degree to which policies promote or inhibit competition in areas of the product market where competition is thought to be viable

## The Doing Business index

Quantitative measure, which indicates the regulatory costs associated with doing business

**Jacobzone et al, 2010** « the two indices have been shown to be correlated (...) when a country has a high quality regulatory management system it is also likely to be performing well in terms of the general business friendliness and competition environments »

# Doing Business Portugal

<b>PORTUGAL</b>		<b>OECD high income</b>		<b>GNI per capita (US\$)</b>	
<b>Ease of doing business rank (1–190)</b>	<b>34</b>	<b>Ease of doing business score (0–100)</b>	<b>76.55</b>	<b>Population</b>	<b>19,820</b>
<b>Starting a business (rank)</b>	57	<b>Getting credit (rank)</b>	112	<b>Trading across borders (rank)</b>	1
Score for starting a business (0–100)	90.89	Score for getting credit (0–100)	45.00	Score for trading across borders (0–100)	100.00
Procedures (number)	6	Strength of legal rights index (0–12)	2	Time to export	
Time (days)	6.5	Depth of credit information index (0–8)	7	Documentary compliance (hours)	1
Cost (% of income per capita)	2.0	Credit bureau coverage (% of adults)	7.9	Border compliance (hours)	0
Minimum capital (% of income per capita)	0.0	Credit registry coverage (% of adults)	100.0	Cost to export	
				Documentary compliance (US\$)	0
<b>Dealing with construction permits (rank)</b>	60	<b>Protecting minority investors (rank)</b>	64	Border compliance (US\$)	0
Score for dealing with construction permits (0–100)	73.17	Score for protecting minority investors (0–100)	60.00	Time to import	
Procedures (number)	14	Extent of disclosure index (0–10)	6	Documentary compliance (hours)	1
Time (days)	160	Extent of director liability index (0–10)	5	Border compliance (hours)	0
Cost (% of warehouse value)	1.2	Ease of shareholder suits index (0–10)	7	Cost to import	
Building quality control index (0–15)	11.0	Extent of shareholder rights index (0–10)	4	Documentary compliance (US\$)	0
		Extent of ownership and control index (0–10)	6	Border compliance (US\$)	0
		Extent of corporate transparency index (0–10)	8		
<b>Getting electricity (rank)</b>	32	<b>Paying taxes (rank)</b>	39	<b>Enforcing contracts (rank)</b>	35
Score for getting electricity (0–100)	86.45	Score for paying taxes (0–100)	83.75	Score for enforcing contracts (0–100)	67.91
Procedures (number)	5	Payments (number per year)	8	Time (days)	755
Time (days)	65	Time (hours per year)	243	Cost (% of claim value)	17.2
Cost (% of income per capita)	34.5	Total tax and contribution rate (% of profit)	39.8	Quality of judicial processes index (0–18)	13.5
Reliability of supply and transparency of tariffs index (0–8)	8	Postfiling index (0–100)	92.71		
<b>Registering property (rank)</b>	36			<b>Resolving insolvency (rank)</b>	16
Score for registering property (0–100)	78.36			Score for resolving insolvency (0–100)	80.01
Procedures (number)	1			Time (years)	3.0
Time (days)	10			Cost (% of estate)	9.0
Cost (% of property value)	7.3			Recovery rate (cents on the dollar)	64.5
Quality of land administration index (0–30)	20.0			Strength of insolvency framework index (0–16)	14.5

# Doing Business United Kingdom

## UNITED KINGDOM

Ease of doing business rank (1–190) **9**

**Starting a business** (rank) 19  
 Score for starting a business (0–100) 94.58  
 Procedures (number) 4  
 Time (days) 4.5  
 Cost (% of income per capita) 0.0  
 Minimum capital (% of income per capita) 0.0

**Dealing with construction permits** (rank) 17  
 Score for dealing with construction permits (0–100) 80.29  
 Procedures (number) 9  
 Time (days) 86  
 Cost (% of warehouse value) 1.1  
 Building quality control index (0–15) 9.0

✓ **Getting electricity** (rank) 7  
 Score for getting electricity (0–100) 96.45  
 Procedures (number) 3  
 Time (days) 50  
 Cost (% of income per capita) 23.9  
 Reliability of supply and transparency of tariffs index (0–8) 8

**Registering property** (rank) 42  
 Score for registering property (0–100) 75.34  
 Procedures (number) 6  
 Time (days) 21.5  
 Cost (% of property value) 4.8  
 Quality of land administration index (0–30) 25.5

## OECD high income

Ease of doing business score (0–100) **82.65**

**Getting credit** (rank) 32  
 Score for getting credit (0–100) 75.00  
 Strength of legal rights index (0–12) 7  
 Depth of credit information index (0–8) 8  
 Credit bureau coverage (% of adults) 100.0  
 Credit registry coverage (% of adults) 0.0

**Protecting minority investors** (rank) 15  
 Score for protecting minority investors (0–100) 75.00  
 Extent of disclosure index (0–10) 10  
 Extent of director liability index (0–10) 7  
 Ease of shareholder suits index (0–10) 8  
 Extent of shareholder rights index (0–10) 7  
 Extent of ownership and control index (0–10) 5  
 Extent of corporate transparency index (0–10) 8

**Paying taxes** (rank) 23  
 Score for paying taxes (0–100) 87.14  
 Payments (number per year) 8  
 Time (hours per year) 105  
 Total tax and contribution rate (% of profit) 30.0  
 Postfiling index (0–100) 71.00

## GNI per capita (US\$)

**40,530**

Population **66,022,273**

**Trading across borders** (rank) 30  
 Score for trading across borders (0–100) 93.76  
*Time to export*  
 Documentary compliance (hours) 4  
 Border compliance (hours) 24  
*Cost to export*  
 Documentary compliance (US\$) 25  
 Border compliance (US\$) 280  
*Time to import*  
 Documentary compliance (hours) 2  
 Border compliance (hours) 3  
*Cost to import*  
 Documentary compliance (US\$) 0  
 Border compliance (US\$) 0

**Enforcing contracts** (rank) 32  
 Score for enforcing contracts (0–100) 68.69  
 Time (days) 437  
 Cost (% of claim value) 45.7  
 Quality of judicial processes index (0–18) 15.0

**Resolving insolvency** (rank) 14  
 Score for resolving insolvency (0–100) 80.27  
 Time (years) 1.0  
 Cost (% of estate) 6.0  
 Recovery rate (cents on the dollar) 85.3  
 Strength of insolvency framework index (0–16) 11.0

# Doing Business New Zealand

<b>NEW ZEALAND</b>		<b>OECD high income</b>		<b>GNI per capita (US\$)</b>	
<b>Ease of doing business rank (1–190)</b>	<b>1</b>	<b>Ease of doing business score (0–100)</b>	<b>86.59</b>	<b>Population</b>	<b>4,793,900</b>
<b>Starting a business (rank)</b>	<b>1</b>	<b>Getting credit (rank)</b>	<b>1</b>	<b>Trading across borders (rank)</b>	<b>60</b>
Score for starting a business (0–100)	99.98	Score for getting credit (0–100)	100.00	Score for trading across borders (0–100)	84.63
Procedures (number)	1	Strength of legal rights index (0–12)	12	<i>Time to export</i>	
Time (days)	0.5	Depth of credit information index (0–8)	8	Documentary compliance (hours)	3
Cost (% of income per capita)	0.2	Credit bureau coverage (% of adults)	100.0	Border compliance (hours)	37
Minimum capital (% of income per capita)	0.0	Credit registry coverage (% of adults)	0.0	<i>Cost to export</i>	
				Documentary compliance (US\$)	67
<b>Dealing with construction permits (rank)</b>	<b>6</b>	<b>Protecting minority investors (rank)</b>	<b>2</b>	Border compliance (US\$)	337
Score for dealing with construction permits (0–100)	86.40	Score for protecting minority investors (0–100)	81.67	<i>Time to import</i>	
Procedures (number)	11	Extent of disclosure index (0–10)	10	Documentary compliance (hours)	1
Time (days)	93	Extent of director liability index (0–10)	9	Border compliance (hours)	25
Cost (% of warehouse value)	2.2	Ease of shareholder suits index (0–10)	9	<i>Cost to import</i>	
Building quality control index (0–15)	15.0	Extent of shareholder rights index (0–10)	7	Documentary compliance (US\$)	80
		Extent of ownership and control index (0–10)	7	Border compliance (US\$)	367
		Extent of corporate transparency index (0–10)	7		
<b>Getting electricity (rank)</b>	<b>45</b>	<b>Paying taxes (rank)</b>	<b>10</b>	<b>Enforcing contracts (rank)</b>	<b>21</b>
Score for getting electricity (0–100)	83.98	Score for paying taxes (0–100)	91.08	Score for enforcing contracts (0–100)	71.48
Procedures (number)	5	Payments (number per year)	7	Time (days)	216
Time (days)	58	Time (hours per year)	140	Cost (% of claim value)	27.2
Cost (% of income per capita)	68.0	Total tax and contribution rate (% of profit)	34.6	Quality of judicial processes index (0–18)	9.5
Reliability of supply and transparency of tariffs index (0–8)	7	Postfiling index (0–100)	96.90		
				<b>Resolving insolvency (rank)</b>	<b>31</b>
<b>Registering property (rank)</b>	<b>1</b>			Score for resolving insolvency (0–100)	71.81
Score for registering property (0–100)	94.89			Time (years)	1.3
Procedures (number)	2			Cost (% of estate)	3.5
Time (days)	1			Recovery rate (cents on the dollar)	84.1
Cost (% of property value)	0.1			Strength of insolvency framework index (0–16)	8.5
Quality of land administration index (0–30)	26.5				

# Conclusion

## Private interest theories

Regulation is the result of powerful interest groups in society that benefit from some rules

## Public interest theories

Regulatory intervention creates distortion in the market

→ The existent studies support the **private interest theory**

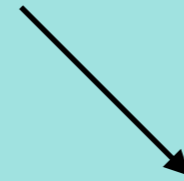
**Competition** can be **negatively affected by regulation** creating:

- Entry barriers
- Limiting the number of suppliers in the market
- Limiting the ability of firms to compete
- Restricting the information available to consumers

## Labour market regulation



**Too strict** : will **discourage businesses to expand** and firms to enter in the market



**Too flexible** : will **affect employee behavior** in a negative way

- Governments have been reducing the regulatory burden, but the focus should be on the indirect effects instead of the direct.
- Balance between providing a good environment for competition and between firms without causing overregulation.