



# **Regulation and Competition**



**Vivek Ghosal**  
**Georgia Institute of Technology**

# General remarks

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- I will focus on broad range of issues and countries (not any given country or US and EU)

# Rules and regulations

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- Governments intervene to regulate behavior of businesses
- Market failures arising from
  - Externalities
  - Common public resources and public goods
  - Market power
  - Information problems
- Many legitimate socioeconomic objectives
  - Safety regulations: workplace, food, pharmaceuticals, automobile
  - Environmental - reducing pollution
  - Information disclosure
    - Financial contracts
    - Insurance contracts

# Why current emphasis on reform?

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- Winds of change driven by globalization
  - Domestic markets under increasing pressure from foreign producers
  - Domestic producers have interest in harmonizing rules and regulations intra-nation and international
- Change in technology and market conditions
- Increasing realization that markets may work reasonably well in many industries that have traditionally been regulated
- Improved quality of regulations may lead to national economies becoming more innovative and domestic firms in a better position to compete globally

# My motivation

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- Research interests in Industrial Organization and Antitrust
- Policy and enforcement experience at Antitrust Division, US Department of Justice
  - Advocacy experience interacting with US Department of Energy, Federal Energy Regulatory Commission, and Department of State
- Work with OECD
  - Happy marriage of regulatory reform and competition
  - Role of consumers in driving competition
  - Role of competition policy in fostering investment
- Worked on Sloan Foundation grant for pulp and paper industry
  - Significant environmental regulatory issues



# Big picture

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- **Fundamental focus of reform: promote innovation**
  - Product innovation – new products, variety, quality
  - Process innovation
- Growth - could argue this is a derivative of innovation
- Prices - could argue this is a derivative of the longer-run benefits
  - Shorter-run focus on prices may lead to hasty judgments and imposition of inappropriate rules
- **E.g., postal markets: USO, regulation; FedEx, UPS, DHL, etc**
  - Product variety, quality, process innovations
- To foster innovation
  - Careful scrutiny of existing and new rules and regulations

# Initiatives and experiments with reform

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- Institutions like OECD and World Bank
- Jurisdictions like EU
- Countries like Australia, Korea, some member EU States, New Zealand, Singapore, UK, US among many others
- In some cases, the focus is not necessarily sharp
  - E.g., excessive focus on prices



# A guiding principle for evaluating rules and regulations

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- **Subject the market to a competition test**
  - Different from traditional cost-benefit analysis
  - As we see later, simple metrics like # sellers can be misleading
  - Need a more concerted effort to understand harm to innovation
  - If a rule or regulations harms innovation – restructure it
- Competition law enforcement provides a useful framework
- Link between competition and innovation and growth
- Potential issues
  - Advocacy
  - Resistance by sector regulators: who may have weak insights into functioning of competition laws and enforcement; turf wars
  - **Capacity building – training regulators and staff**
  - **Significant variation across countries in mindset**



# How much should we regulate?

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- Minimum necessary regulation as a guiding principle
  - Many countries and jurisdictions have adopted this principle
- Optimal standards
  - Environmental
  - Health – pharmaceuticals
  - Workplace safety
  - Variation across countries
- Enhanced standards come at a cost
  - These costs need to be traded with the delivered benefits
- May be useful to first have an independent assessment of minimum necessary standard before the various players start lobbying

# A big issue

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- Re-evaluate the socio-economic objectives??
- Particularly stark choices in some areas
  - Environmental standards
  - Safety and quality control: pharmaceuticals; food; etc

# OECD initiative

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- Competition Assessment Toolkit, March 2007
  - <http://www.oecd.org/dataoecd/15/59/39679833.pdf>
  - My contribution “Competition Assessments: Guidance,” p.59-167
  - Toolkit has writings on implementation, institutions, etc
- Audience: OECD (and non-OECD) government officials who are part of the decision-making process and implementation
- Guidance document uses framework provided by competition policy and law enforcement to guide regulatory reform
- Other frameworks and initiatives
  - World Bank, UK, EU, Australia, New Zealand, others

# Some concepts for competition assessments

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- Integral concepts from competition policy and law enforcement
  - Market power
  - **Innovation and efficiencies**
  - Barriers to entry
  - Entry of new firms
  - Exit of firms
  - Raising rivals' costs
- Concepts and details are spelled out in the OECD Guidance document



# Examples of rules and regulations that may impede innovation and growth

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- Regulations on entry
- **Granting or extending exclusive rights**
- Regulations on the inter-regional flow of goods, services and capital
- Regulations on advertising and marketing
- Regulations that influence prices
- Cooperation and information exchange
- Regulations that may exempt activities from competition laws
- **Rules on content and setting standards**
- **Grandfather clauses**
- A different category: **Promoting self-regulation**
- Any rule or regulation that limits actual or potential competition is likely to hinder innovation and growth

# Rules and regulations

## Granting and extending exclusive rights

- Reduced innovation, production inefficiency, adoption of newer technologies, and long-run growth of affected markets
- Prozac (anti-depressant): patented 1977, launched 1987.
  - Eli Lilly fought a 5-year court battle to **extend their patent** and lost. If patent expired, price of 20mg capsule would drop from about \$2.50 to \$0.50
- Jamaica: State telecommunications company was privatized
  - Granting of exclusive rights for a period of 25 years.
  - Maximize selling price versus ensuring efficient market outcomes
- Municipality of Copenhagen (reviewed by ECJ, 2000)
  - Granted exclusive rights to limit the number of plants which could process non-hazardous building waste produced within the municipality.
  - Despite being equipped to perform this function, the regulations prevented a Copenhagen recycling plant from processing building waste



# Rules and regulations

## Granting and extending exclusive rights

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- **Considerations**
- Is it really necessary to grant exclusive rights?
  - Alternatives? E.g., in case of patent extensions
- If yes, think of the minimum period
- Sunset clause – beyond which the market is opened up and no further granting of exclusive rights



# Rules and regulations

## Rules on content and setting standards

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- Consumers
  - Preference for variety
  - Differ in their ability to pay
- Markets respond by producing goods and services that are differentiated in characteristics and quality
- Governments set standards on product content or characteristics, including minimum quality standards
  - Food, media, building codes, safety, etc
- Setting standards and quality is often necessary

# Rules and regulations

## Rules on content and setting standards

- But standards should not be set unreasonably high
  - They clash with consumer preferences which tend to be diverse
  - Disadvantage lower income consumers who may prefer a lower price and lower quality outcome
- **May impose significant costs on firms, as well as differential costs across firms**
  - New investment and R&D expenditures incurred by businesses for meeting standards and developing new products
- These costs may have a large sunk cost component
  - Potential to create competition problems
  - Some companies may have to exit the market
  - Longer run problems



# Rules and regulations

## Rules on content and setting standards

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- Different example
- Professional organizations impose minimum quality and certification standards:
  - Certification rules, degree recognition, mobility restrictions, etc
  - Legal, architectural, accounting, medical, etc.
- Main argument: ensure quality of service
- Problem: they create barriers to flow of professionals and reduce competition and higher prices

# Rules and regulations

## Rules on content and setting standards

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- **Considerations**
- What is the minimum necessary standard that must be set?
- If higher standard has to be set, evaluate
  - Costs imposed on consumers
  - Effects on market structure and competition



# Rules and regulations

## Grandfather clauses

- New pollution standards: electric, pulp and paper
- Existing production plants are given a time-frame to conform
  - New production facility has to meet new standards.
- Not making older facilities conform immediately is legitimate justification
- **Grandfathering imposes asymmetric standards/costs on older v. newer plants (investments)**
  - Greater costs on new entrants and new capital investments by incumbents
  - Depending on how the rule is structured, it can:
    - Deter new entry
    - Dampen new investment by incumbent businesses
    - Allow continuation of inefficient production by older more inefficient plants



# Rules and regulations

## Grandfather clauses

- Stavins (2005) examined several industries, 1963-92
  - Grandfathering depressed birth of new plants, keeping old plants in use
- Becker and Henderson (2000)
  - Grandfathering of plants in organic industrial chemicals industry contributed to environmental degradation by raising survival rates, reducing plant turnover rates, and keeping otherwise unprofitable operations in business.
  - Slowed air quality improvements by prolonging lives of older, dirtier plants
- **Many studies point to grandfathering creating barriers-to-entry, depressing new investments and promoting inefficiency**



# Rules and regulations

## Grandfather clauses

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- **Considerations**
- What would happen if there was no grandfathering?
  - Helps establish a minimum necessary period of grandfathering
- Nature of production technology
  - Static or rapidly changing: most relevant one's are slow to change
- Vintage of capital
- Small versus large firms
  - Former much less likely to afford costs
- Sunset clause – by when all plants have to comply



# Rules and regulations

## Grandfather clauses

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- Other example
- Airport landing slots and gate facilities
  - Control of landing slots and gate facilities of significant concern to EC, US FAA, others
- **Considerations**
- What would happen if there was no grandfathering?
- Costs for airlines to juggle gates and landing slots frequently
- Airlines invest in airports
- Auction rather than grandfather slots

# Rules and regulations

## Self-regulation

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- Less costly than traditional regulation
- Potentially efficient way to meet targets due to industry involvement
- Specific areas of self-regulation include
  - Pollution control; product characteristics, quality and safety; design compatibility; technical standards
- Concerns include
  - **Likelihood of collusion**
  - Coordination to erect entry barriers
  - Agreements on standards or the nature and range of goods and services to the detriment of consumers
  - Rather than engage in innovation and costly R&D, choose to coordinate actions and reduce product and process innovation





# Rules and regulations

## Self-regulation

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- Likelihood of collusive conduct: large or small number of competitors. An example:
  - 1988 U.S. antitrust case *Allied Tube & Conduit Corp. v. Indian Head, Inc.* Allied Tube had set standards for steel based electrical wire conduits in buildings and these standards had been incorporated into safety codes of local governments. A new entrant offered a plastic based conduit that was high quality and cost efficient. The incumbent steel conduit manufacturers collectively agreed to vote against the new entrant in the association's annual meeting. The association coordinated action prevailed, resulting in significant harm to competition



# Rules and regulations

## Self-regulation

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- **Considerations**
- Need close oversight of industry
  - Detecting and prosecuting cartels is a difficult problem
- Standards adopted should be voluntary not mandatory
  - Collusion more likely in latter
- In some instances, self-regulation may not necessarily achieve the socially desired targets
  - Needs to be combined with stringent oversight



# OECD competition assessment

## Initial review checklist

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- Does the rule or regulation:
  - **1. Limit the number or range of suppliers?**
    - Grants exclusive rights for a company to supply goods or services
    - Establishes a license, permit or authorization process as a requirement of operation
    - Limits the ability of some types of suppliers to provide a good or service
    - Significantly raises cost of entry or exit by a supplier
    - Creates a geographical barrier to the ability of companies to supply goods or services, invest capital or supply labor



# OECD competition assessment

## Initial review checklist

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- **2. Limit the ability of suppliers to compete?**
  - Controls or substantially influences the prices for goods or services
  - Limits freedom of suppliers to advertise or market their goods or services
  - Sets standards for product quality that provide an advantage to some suppliers over others or that are above the level that many well-informed customers would choose
  - Significantly raises costs of production for some suppliers relative to others (especially by treating incumbents differently from new entrants)



# OECD competition assessment

## Initial review checklist

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- **3. Reduce the incentive of suppliers to compete vigorously?**
  - Creates a self-regulatory or co-regulatory regime
  - Requires or encourages information on supplier outputs, prices, sales or costs to be published
  - Exempts the activity of a particular industry or group of suppliers from the operation of general competition law
  - Reduces mobility of customers between suppliers of goods or services by increasing the explicit or implicit costs of changing suppliers
- A **YES answer to any of the items** noted in the three questions warrants a full review of the rule or regulation under consideration as it potentially signals a significant competition concern



# OECD competition assessment

## Full review

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- This full evaluation would examine all the issues related to whether the rule or regulation might
  - Reduce product or process innovation
  - Impose barriers to entry of new businesses
  - Force certain types of businesses (e.g., smaller firms) to exit
  - Increase the prices of goods and services
  - Significantly increase concentration in the relevant market
- Are any upstream or downstream markets affected?
  - If YES
  - Evaluate effects on all related markets
  - Initial review
  - Full review



# The innovation aspect

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- In general a difficult issue to assess and quantify
- Many dimensions
- Process innovation
  - Incremental innovation
  - Major innovations
- Product innovation
  - Product variety
  - Product quality
- Organizational innovation
  - Von's grocery case: dissenting judge
  - Important in many markets and organizations

# When can imposition of some rules make markets perform better?

## Standard examples

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- Behavior of dominant airlines
  - Control of landing rights and gate slots
- Behavior of formerly regulated firms in electricity, telecommunications, natural gas
  - Switching Costs
- Many governments have had to re-introduce some rules to enable the markets function better
- Consideration
  - What is the minimum intervention required?

# When can imposition of some rules make markets perform better?

## Exotic arguments

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- Porter (1991) advocated strict environmental regulations:
  - Will encourage companies to re-engineer their technology to not only pollutes less but also lowers costs and improve quality
- Many scholars disagree with this
- Some evidence in favor: automobile, pulp and paper industries
- Consideration
  - What is the minimal necessary standard?
  - Transparency of rules
  - Consistency of enforcement
- Different jurisdictions have different socio-economic views



# Some essential ingredients

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## ■ **Minimum necessary intervention**

- No intervention as a benchmark to assess what needs to be done
- Close look at socio-economic justifications
- Focus on both “necessary” and “minimum” when structuring rule
- Resist tendency to deviate due to interest-group considerations
- Initiate independent study before interest groups start lobbying

➤ **Easier said than done**

**Electric co  
response**

## ■ **Competition test for all rules and regulations**

- Carefully crafted test to evaluate outcomes
- If evidence of harm to innovation and growth, restructure rules



# Some essential ingredients

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- **Intertemporal consistency of enforcement of rules**
  - When ideological gap between left and right political parties is large
  - Regime changes can bring significant change in enforcement
  - Enforcement uncertainty creates problems in achieving goals and behavior of market participants
  
- **Harmonization of standards in key areas**
  - Big problem
  - Environment, safety
  - Cross-country differences can lead to efficiency loss for businesses
  - When harmonizing, think about a minimum benchmark first

# Other considerations

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- **Role played by consumers in driving competition**
- **Thinking about how the conduct of competition policy can foster investment**
- These areas are in current focus
  - OECD, World Bank, other institutions and some governments

# Role of consumers in driving competition

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- **In some instances, large number of sellers may not necessarily lead to highly competitive outcomes**
- Information – **of the right kind, in the right amount and at the right time** – plays a major role in helping consumers make choices
- This helps drive competition
- One can find currency exchange stores with a “No Commissions” sign posted, only to realize later that the exchange rate is worse than another provider with positive commissions.
- Inadequate and opaque information adversely affects a consumer’s ability to choose and the incentive to choose

# Role of consumers in driving competition

## Contracts

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- More providers does not necessarily lead to highly competitive outcomes
- Consumers may focus on loan rate, while paying less attention to other items critical to assessing the potential total cost of the loan
- Policy prescription: make it mandatory for all financial institutions and loan providers to provide “summary loan contract fact sheet” containing:
  - Loan rate
  - Commission
  - All fees and surcharges
  - Penalty for single late payment
  - Penalty for multiple late payments
  - Penalty for default
  - Any other costs that might be imposed on the borrower.
- Transparency of information will better allow consumers to compare different financial offerings and drive competition

# Role of consumers in driving competition

## Barriers to entry

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- Even when the markets are seemingly open to entry and new competition, actual competition does not materialize to the extent one expects.
  - Barriers created by the dominant firms in the markets
  - Existence of some rules and restrictions that effectively skew the outcomes in favor of the dominant incumbents
- Startup airlines historically have had problems entering markets and competing with the dominant incumbent airlines due to various barriers related to access to airports, landing slots and gate facilities
  - Widespread problem prompting many nations and jurisdictions to introduce new rules to curtail behavior of incumbents



# Role of consumers in driving competition

## What to look for

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- Consumer decision-making could be adversely affected if the behavior of firms or market characteristics affects the:
  - Consumers ability to access goods and services
  - Consumers ability to choose
  - Consumers incentives to choose
  - Flow of appropriate information to consumers

# Competition policy and law enforcement, and investment

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- Significant growth of cross-border investment flows
- Lack of transparency and enforcement uncertainty in competition law enforcement can reduce investment below optimal levels
- Asymmetry between types of firms
  - small versus large
  - deep pockets
  - information costs
- Role played by
  - Institutions
  - Enforcement
  - Transparency