ANTITRUST ECONOMICS 2013

David S. Evans
University of Chicago, Global Economics Group

Elisa Mariscal
CIDE, ITAM, CPI

TOPIC 1: ECONOMICS OF COMPETITION POLICY

CPI COMPETITION POLICY INTERNATIONAL

Topic 1 | Part 2

14 February 2013

Overview

Part 1

- The importance of economics to the practice of antitrust
- How is the course going to help you learn antitrust economics
- Competition and why we care about it

Part 2

- The basic economics of competition policy
- The design of competition rule

3

Basic Economics of Competition Policy

The key concepts for understanding the economics of antitrust

Demand, Supply and Static Competition

- Demand schedule reflects how much consumers are willing to pay and therefore how much they value particular amounts of production.
- Supply schedule reflects how much producers would have to be paid to offset their costs for particular amounts of production.
- Competition among producers drives output to the point where additional cost of production just equals additional value to consumers.
- That maximizes consumer welfare! (And maximizes social welfare too!)

Consumer versus social welfare

Consumer welfare is the difference between the value each individual places on a good or service they purchase (measured by the maximum they are willing to pay) and the price they pay for it.

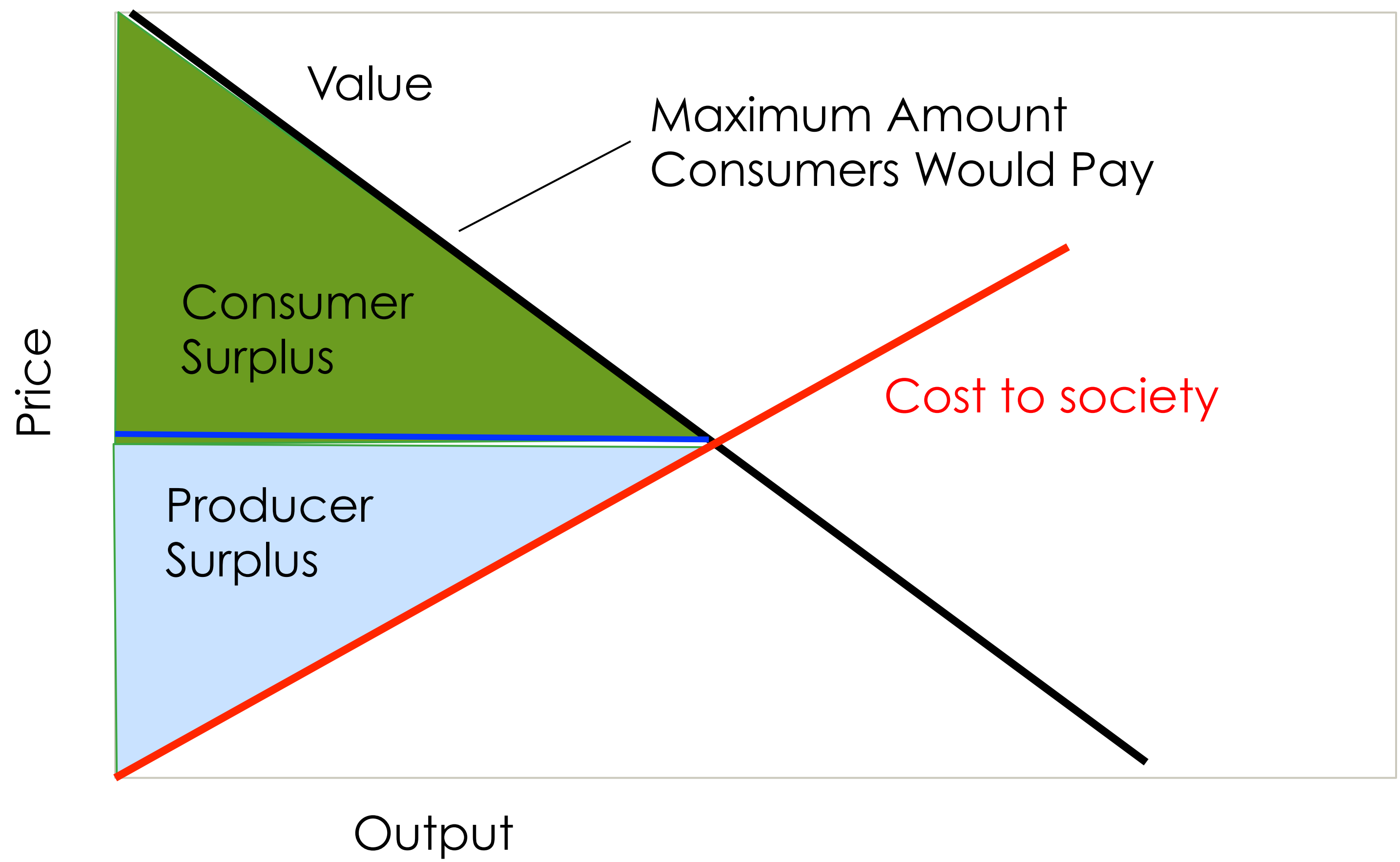
Social welfare is the difference between the value each individual places on a good or service they purchase (measured by their maximum willingness to pay) minus the cost to society of the scarce resources that went into providing that good or service.

Roughly speaking the difference between social welfare and consumer welfare goes to firms as profits which then get distributed to their shareholders.

Consumer welfare for an iPad

Person	Value	Price	Consumer Surplus
Jose	$1200	$600	$600
Derek	1000	600	400
Sarah	700	600	100
Vanessa	520	600	0
Doug	300	600	0
TOTAL			$1100

Consumer and produce surplus

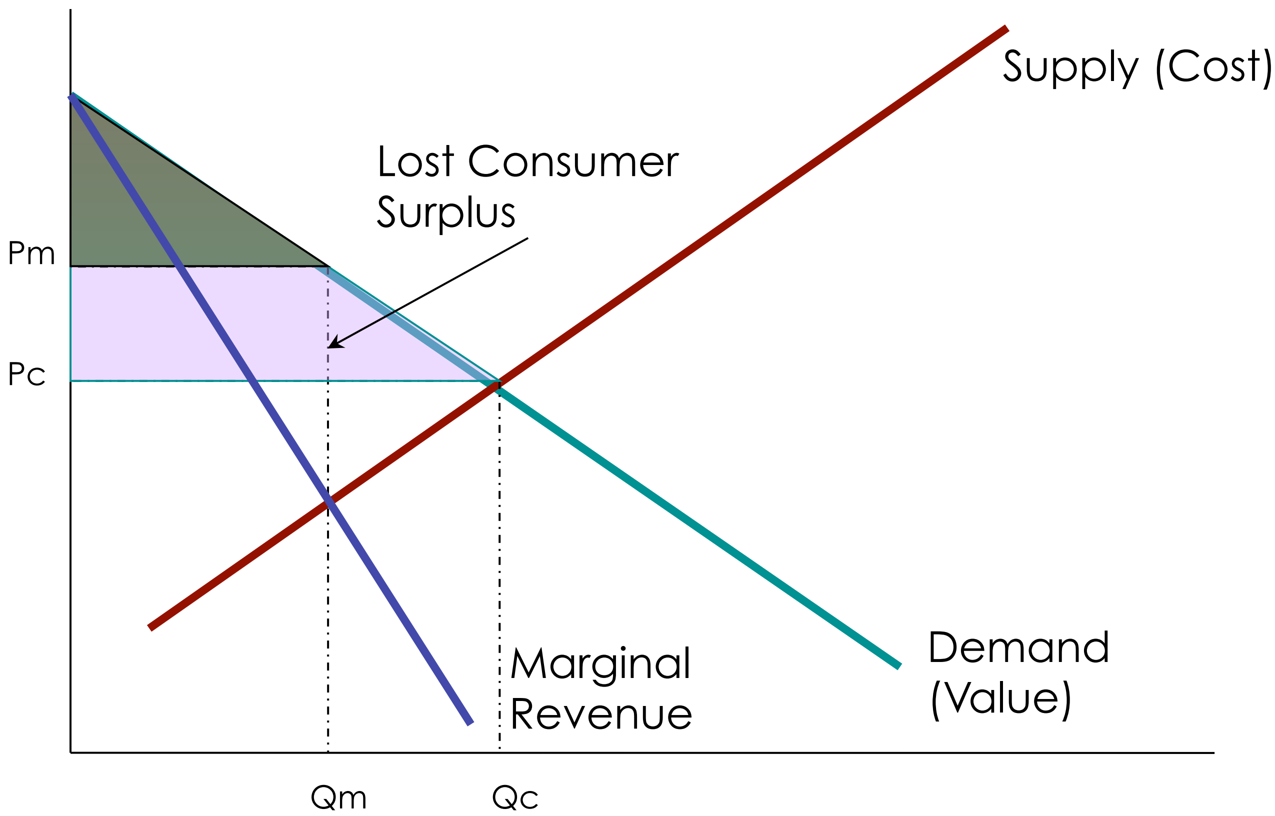


Social welfare=Consumer plus Producer Surplus (green plus blue triangles)

Monopoly reduces consumer welfare

- Monopoly can set the price to maximize its profits.
- Monopoly determines the "marginal revenue" from increasing output.
- Monopoly produces to the point where additional (marginal) revenue from increasing output equals the additional (marginal) cost.
- That results in a lower level of output than under competition.
- Monopoly provides less consumer welfare than competition because consumers pay higher prices and get less valuable output.

Static monopoly reduces consumer welfare



The purple-shaded area reflects lost consumer surplus from paying higher prices (rectangle) and not getting some valuable output (triangle)

"Monopolies" have significant market power

- Monopoly is a short-hand expression for firms having "significant market power".
- Market power means the ability to raise price above the competitive level by a substantial amount.
- Most firms have some market power in the short run in the sense that they have some control over price and the previous diagram describes their pricing.
- In many jurisdictions that follow EU competition law the law focuses on firms that are "dominant" but in practice that often means having significant market power.

Monopoly power can provide dynamic benefits

Monopoly isn't all bad, or always bad, when looked at dynamically

Most new businesses fail and lose money.

- 60% of new businesses fail in first five years
- 43% of venture capital investments in firms vanish and another 23% returns less than initial investment.

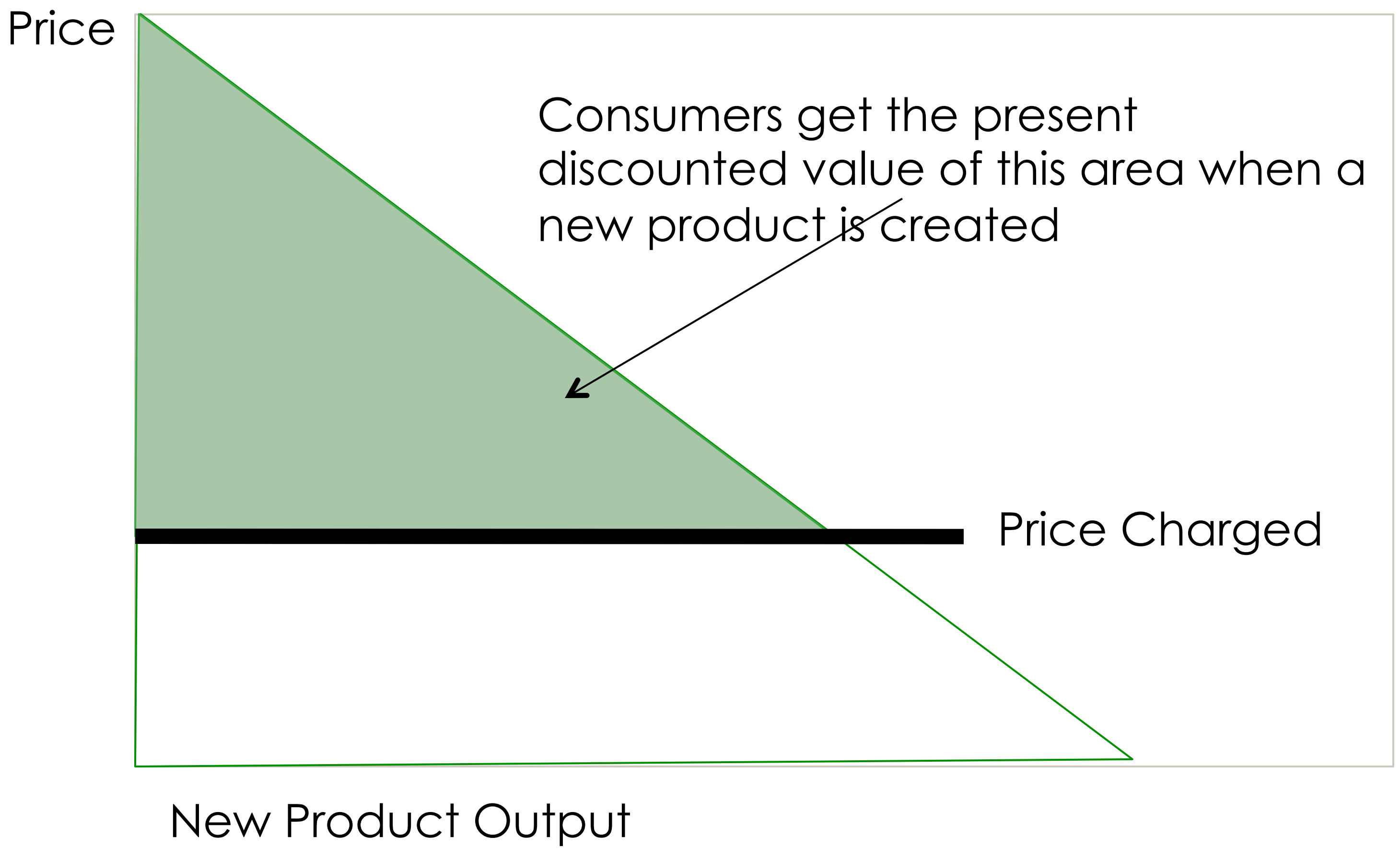
Monopoly profits can be the "prize" for winning competitions in which most people lose.

- Only small fraction of drugs that make it to pre-clinical trials make it to the market.

The hope for monopoly profits stimulates risk-taking behavior involving investment and innovation

- Leads to new products that can provide significant consumer value

Economics of New Products



Consumer surplus from the Minivan almost $3B

Mini

Minivan

The total welfare gain from the introduction of the minivan over 1984-1988 was about $2.9 billion, of which $2.8 billion came from consumer surplus.

Some questions to discuss over lunch

Should we prevent firms from becoming dominant so that we always have at least two vigorous firms competing in the market place? (EU Ordoliberal school would seem to favor this.)

Article 101 TFEU prohibits excessive pricing. Shouldn't the EC enforce these laws vigorously (they don't now) to prevent dominant firms from charging high prices that reduce social welfare?

What's the basis for throwing people in jail for price fixing but not for abusing their dominant position? Why does a midlevel Marine Hose executive get a jail sentence for price fixing but Microsoft key executives (e.g. Bill Gates) don't even get fined personally.

The Design of Competition Rules

How should society design the rules of the competition game to maximize welfare

Antitrust balances short and long-term benefits

Antitrust in practice balances the benefits and costs of static and dynamic competition.

Competition policy is "Judicious regulation to bring out the best in 'laissez-faire'." (Vickers)

- Sets the rules for firms to compete and intervenes when they break these rules. It has a "light" touch.

Antitrust policy in practice usually does not prohibit firms from becoming monopolies or enjoying (many) of the fruits of monopoly power

- Places reliance on markets and provides rules that govern competition. Some jurisdictions such as the EU have "exploitative abuses" that could prevent dominant firms from charging "excessive prices" but this s seldom enforced.

Antitrust considers static v. dynamic tradeoff

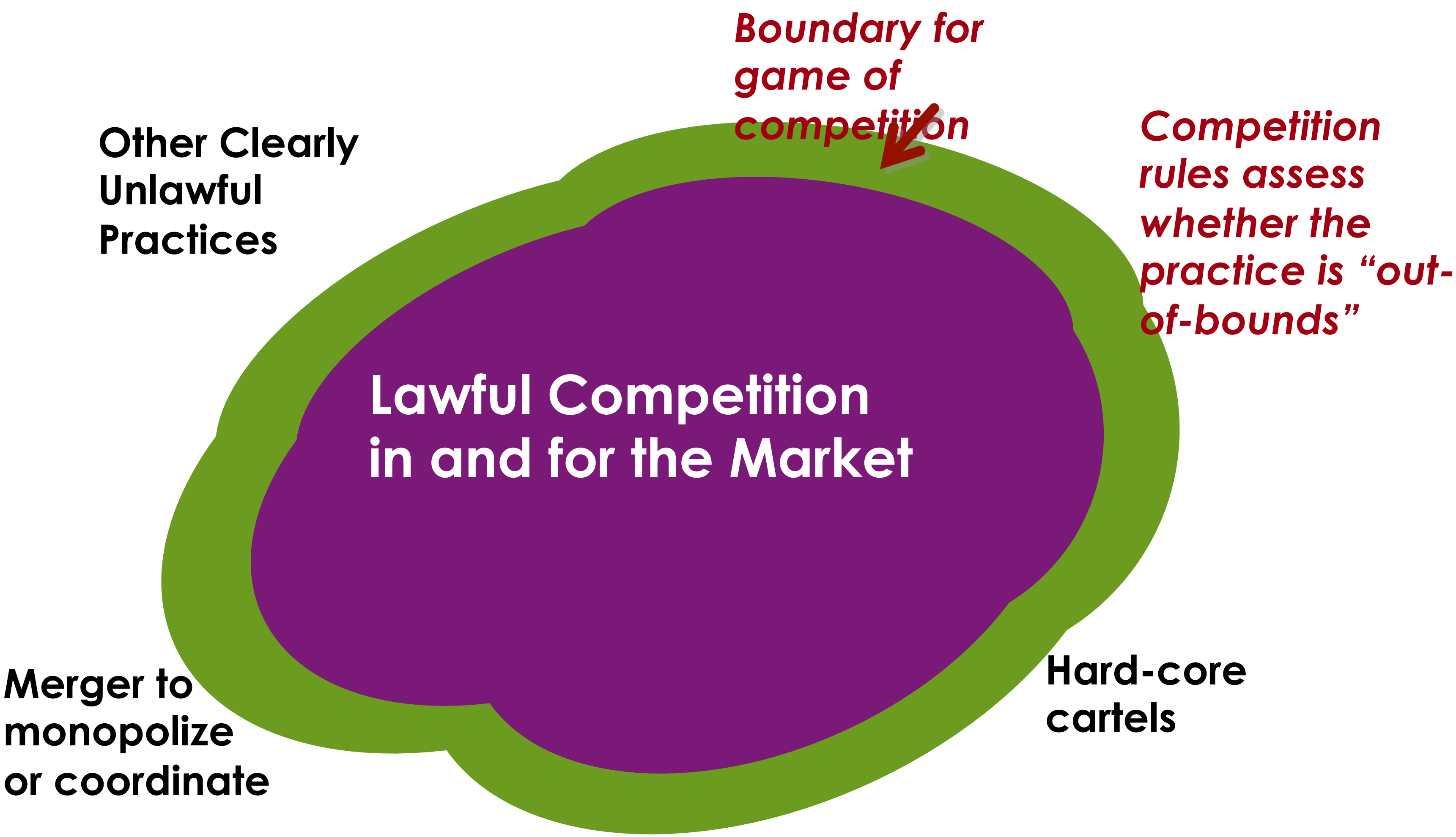
Monopolies (or "dominant firms") are lawful but may have some special obligations in how they compete.

Striving for success, including trying to get a monopoly, is lawful so long as it is based on the merits.

Competition policy generally lets markets work freely but subject to some limitations.

- No collusive agreements
- Firms can't engage in certain "anticompetitive practices" that are likely to harm consumers ultimately
- Firms can get big organically but we limit their ability to become monopolies through mergers

Antitrust rules for the game of competition



Competition rules based on two tradeoffs

Static vs. dynamic efficiency

Tradeoff between increasing static welfare in markets versus increasing dynamic welfare from competition for the markets.

False negative vs. false positive decisions

Tradeoff between costs of condemning practices that promote consumer welfare versus allowing practices that harm consumer welfare.

Other costs of decisions include:

- Cost of uncertainty faced by businesses in adopting business practices (businesses may prefer clear rules even if those rules err on the side of discouraging pro-competitive practices)
- Costs of administration faced by judicial system including legal costs for parties and opportunity costs of the judicial system

False positive vs. false negative decisions

Given that we don't have a perfect "test" we need to consider the cost of mistakes which can go two ways (using colorful criminal terminology):

- Convicting the innocent ("false positive" aka "Type I error")
- Absolving the guilty ("false negative" aka "Type II error")

A rule that is "too" easy to violate will discourage pro-competitive practices thereby imposing losses in consumer welfare throughout the economy.

A rule that is "too" hard to violate will not discourage anti-competitive practices enough thereby imposing losses in consumer welfare throughout the economy.

A guide to error-cost terminology

Type I Error	Type II Error
False Positive	False Negative
Court convicts the innocent	Court lets the guilty off
Test says you're pregnant when you aren't	Test says you aren't pregnant when you are

Key counterintuitive result of error cost analysis

Tests with modest error rates can have large error costs.

Suppose out of 100, 90% are innocent and10% are guilty

Cost of convicting innocent is $20 and cost of exonerating guilty is also $20

Test has 20% error rate

Cost of convicting innocent is $360 (18 x $20)

If cost of letting guilty go free is less than $45 then it is better to have no prosecutions.

	Convictions	Acquittals	**Total**
Innocent (90%)	**18**	72	90
Guilty (10%)	8	**2**	**10**
Total	26	**74**	**90**

Analogy in medical tests: test for inoperable cancer with high error rate; better not to conduct test since psychic cost to healthy outweighs cost of letting sick get their affairs in order.

Applications of error cost

Antitrust has become more rigorous about predatory pricing because of high cost of prohibiting low prices.

Error cost framework regularly used to think through degree of burden of proof and who bears it.

Recent work looking into mergers and examining whether approvals have had false negatives where price ended up rising significantly.

The Role of Deterrence

Important role of antitrust rules is to discourage firms from crossing the line by punishing those who do

Various ways to discourage violations

Firms considering particular practices will weigh likelihood of detection and cost of being convicted

Society can spend resources on detection

- Public
- Private Actions

Society can impose penalties on guilty to signal cost to potential violators

- Jail
- Fines by competition authorities
- Professional sanctions
- Damages imposed through private actions

The Role of Deterrence

Bloomberg | Our Company | Professional | Anywhere

HOME | QUICK | NEWS | OPINION | MARKET DATA | PERSONAL FINANCE | TECH | POLITICS | SUST

IMF Says India Should Hold Rates Until Inflation Curbed

Ayala CEO: Philippines' Growth Will Remain Stable

LG Said to Face EU Fines With Philips, Panasonic for Cartel

By Aoife White - Nov 7, 2012 12:15 PM CT

0 COMMENTS | QUEUE

LG Electronics Inc. (066570), Panasonic Corp. (6752) and Royal Philips Electronics NV (PHIA) may be fined by European Union antitrust regulators within weeks over price-fixing agreements for cathode-ray tubes used in televisions, four people said.

Technicolor SA (TCH) is also among companies earmarked for possible European Commission fines as soon as Nov. 28, one of the people said. Other manufacturers including Toshiba Corp. have been asked ... fines by a panel of EU and nati... spoke on condition of anonymit...

HOME PAGE | MY TIMES | TODAY'S PAPER | VIDEO | MOST POPULAR | TIMES TOPICS

The New York Times — World Business

WORLD | U.S. | N.Y. / REGION | BUSINESS | TECHNOLOGY | SCIENCE | HEALTH | SPORTS | OPINION

MEDIA & ADVERTISING | WORLD BUSINESS | SMALL BUSINESS | YOUR MONEY | DEALBOOK | MARKETS

Get the world delivered to your door. Includes FREE IHT Digital

Europe Fines Microsoft $1.3 Billion

By STEPHEN CASTLE and DAVID JOLLY
Published: February 28, 2008

TWITTER | LINKEDIN | E-MAIL | PRINT | REPRINTS | SHARE

BRUSSELS —European antitrust regulators on Wednesday fined Microsoft $1.3 billion for failing to comply with a 2004 judgment that the company had abused its market dominance. The new fine by the European Commission was the largest it has ever imposed on an individual company, and brings the total in fines imposed on Microsoft to ab...

BBC | CATEGORIES | TV | RADIO | COMMUNICATE | WHERE I LIVE | INDEX | SEARCH | Go

BBC NEWS

You are in: World: Americas

Front Page | World | Africa | Americas | Asia-Pacific | Europe | Middle East | South Asia | From Our Own Correspondent | Letter From America | UK | UK Politics | Business | Sci/Tech | Health | Education | Entertainment | Talking Point | In Depth

Tuesday, 23 April, 2002, 14:32 GMT 15:32 UK

Sotheby's chief gets year in jail

The scam defrauded art sellers out of millions

The former chairman of Sotheby's auction house, Alfred Taubman, has been sentenced to a year and a day in prison for rigging the fees charged to clients.

Taubman, 78, was also fined $7.5m.

He was convicted in December.

WATCH/LISTEN ON THIS STORY

The BBC's Stephen Evans in New York: "The atmosphere in the courtroom was electric"

Lawyer Alex Burnside: "The European Commission seems to have puts its investigation on hold."

See also:

- 06 Dec 01 | Americas — Former Sotheby's chairman guilty
- 05 Dec 01 | Americas — History of a conspiracy
- 28 Nov 01 | Europe — Sothebys makes French debut
- 12 Oct 01 | Business — Sotheby's reviews flagging website
- 16 Jul 01 | Business — Sotheby's downgraded to junk status
- 28 Feb 00 | Business — eBay denies Sotheby's bid

The Economist | Log in | Register | Subscribe | Digital & mobile

World politics | Business & finance | Economics | Science & technology | Culture | Blogs | Deb...

Schumpeter — Business and management

Previous | Next | Latest Schumpeter | Latest from all our blogs

UBS and LIBOR

Horribly rotten, comically stupid

Dec 19th 2012, 14:30 by J.R.

Like 418 | Tweet 31

Rules vs. deterrence

Tradeoff between stricter rules and deterrence resources

Stricter rules:

- make detection and conviction easier
- may err on the side of "false convictions"

Stricter deterrence:

- Increases cost of being detected and convicted
- Thereby discourages behavior that might be found unlawful

Competition rules across jurisdictions

- We would not generally expect every jurisdiction to have the same competition rules since the factual circumstances that affect the fundamental tradeoffs differ.
- Institutional differences: Many state-owned monopolies were privatized but retained market position in EC.
- Enforcement differences: Competition policy largely enforced through EC and member state authorities; limited private enforcement, limited class actions and seldom multiple damages (so far).
- Cultural differences: Cartels condoned by many EC member states until late 1940s; other cultural differences that might make cooperation among competitors more acceptable.
- Value differences: EC does not necessarily make same static/dynamic tradeoff and seems to place more emphasis on "fairness" of competition.

Some more questions to discuss over lunch

Should we consider that competition authorities courts make mistakes? Do you think they do much?

Wouldn't it be cheaper to have extremely high fines and spend less than deterrence?

Is it better to have greater certainty in the rules of the game or more flexibility to reach an accurate decision in a particular case? This is related to object-based vs. effects-based analyses of Article 102 TFEU and per se v. rule of reason approach in US.