

# **Issues in Market Definition and Assessment of Market Power**

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# An old subject, currently in a state of flux

- What was thought of, until a few years ago, as **the most often applied, well established and mature economic methodology in competition law** enforcement, has recently entered a state of substantial flux.
- Consider the following recent statement by one of the foremost academics in the area:  
“.....**the most central questions concerning market definition, market power and related matters are rarely asked, much less answered.** Closer inspection reveals that myriad subsidiary issues are likewise hidden despite their importance.” Louis Kaplow: “Market Definition, Market Power”, *International Journal of Industrial Organization*, 43, 2015.
- This makes the subject difficult to review!

# Objective of presentation

- Review the role of (a) market power and (b) antitrust market definition in competition policy.
- Review the main elements of the current approaches, that continue to dominate enforcement practice worldwide.
- Review the criticisms and weaknesses of the current approaches and of the proposed alternatives that are recently influencing and are likely to influence even more enforcement in future.

# Market Power in Antitrust: **Introduction** (1)

- ❑ As you all know concept of **Market Power (MP)** is **fundamental to antitrust economics and law.**
- ❑ Its **existence** is often considered as a **prerequisite** to considering whether a conduct gives rise to **antitrust liability.**
- ❑ **The law's use of a MP requirement** is best illustrated by the **laws of monopolization (in US) or abuse of dominance (in EU)** where it is **the first of two elements required to establish law violation** – the second being showing that the conduct is “abusive” (EU) or “exclusionary” and thus creating, augmenting or maintaining MP (US) .
- ❑ It is also important with regard to many horizontal (joint ventures) and vertical agreements.

# Market Power in Antitrust: Introduction (2)

- ❑ It is understood that the **MP requirement** is highest in monopolization cases, lower in horizontal merger cases and essentially absent in price-fixing cases.
- ❑ Also, there is **variation across contexts** on whether focus of question posed concerns **extant** MP or the amount by which actions under scrutiny **raise** it.
- ❑ In **monopolization cases** focus is usually on whether significant MP already exists while in **horizontal merger cases** focus is on whether proposed acquisition would significantly increase MP.
- ❑ However, “this distinction is overstated and potentially misleading and the **correct inquiry should focus largely on contributions to MP**”, or on the **direct assessment of competitive harm even in monopolization cases** (more on this later).
- ❑ See: Kaplow and Shapiro (“Antitrust”, 2007), EAGCP (2005) report to DGCOMP (coordinated by P Rey and Kaplow (Harvard Law Review, 2010) – latter contains full reference details to most articles / books mentioned below by the names of their authors.

# Two Fundamental Questions

- The MP requirement in Competition Law raises **two fundamental questions**.
- 1. Assuming that, in order to **establish liability** we need to show negative impact of the examined conduct on welfare, **how is the MP requirement related to this objective? Does it have a useful, implementable, screening or filtering role?**
- 2. Assuming that it DOES, how do we go about in practice, in order to satisfy the MP requirement? That is, **how do we obtain estimates of MP in practice?**
  - Strangely (?), over the last 35 years, economists have been pre-occupied almost exclusively with the second question.
  - We start with this question – i.e., the issue of measuring MP, and return to the first question later on.

## Measurement of MP: **what** to measure

- A preliminary reminder: MP is **usually defined by the Lerner index**, though the **basic simple textbook formula** (the proportional excess of price above marginal cost) is **not always appropriate** – as when the firm sells complementary products and when dynamic and intangible considerations such as customer loyalty, reputation, network effects and learning curves are relevant (Farrell and Shapiro, F&S, The Anti-trust Source, Febr. 2008; p. 11 - 12).
- Also: some economists have argued that **long run excess profits** may be a better indicator – Schmalensee, 1979; Ordovery & Willig, 1981.

# Measurement of MP: **how** to measure

- Three **main approaches** to the measurement of **MP**:

A. **Indirect Measurement**: infer MP from estimates of **market shares** in “**relevant markets**”. The dominant approach since the early 1980’s and still the most popular approach.

B. **Direct Measurement** (of whatever index of MP is chosen).

C. Infer degree of MP by **examining conduct itself**.

- Examine A and B in more detail.



# Indirect Measurement of MP

- In **indirect measurement** “the standard method....Involves **defining a relevant market** ... next computing **market shares**, and then deciding if it is large enough to **support an inference** of the required degree of MP” (Landes and Posner, Harv. L.R, 1981).
- This, **market definition / market shares / MP paradigm**, has characterized the assessment of MP throughout the world since the early 1980s.
- Indeed: “The outcome of more (antitrust) cases has turned on market definition than on any other substantive issue” (J. Baker, Antitrust Law Journal, 2007).

- **The Market Definition / MP Paradigm:  
The Hypothetical Monopolist Test**

# The Relevant Market Definition Paradigm: Definition

- **An Antitrust (or Relevant) Market** consists of “a collection of products and geographic locations, delineated as part of an enquiry *aimed at making inferences about market power and anticompetitive effects....*”

# Phases in the market delineation / assessment of MP procedure

- Can think of procedure as consisting of a **number of phases**:
  1. Identification of the **collection of products and locations** that belong to the relevant market.
  2. Identification of **the firms** that participate in the market.
  3. Computation of statistics about the size distribution of firms, in the form of **market shares**.
  4. (Perhaps) undertaking **additional tests** to amplify problems of cellophane fallacy in monopolisation cases.
  5. **“Re-interpreting” market shares** taking into account of additional information concerning e.g. reserves, capacity etc. (see below).
  6. **Making inferences about MP from MSs**, taking into account also additional considerations – other than market shares.

# Identification of the collection of products and locations – **the HM test**

- **Emphasis mainly on phase 1:** question is through which conceptual framework / methodology can we identify this collection of products and geographic locations?
- **Standard framework**, that has been applied for over 30 years, **focuses on the economic forces of demand substitution** to identify this collection.
- Specifically, the **Hypothetical Monopolist (HM) Test**, as first put forward in the US Merger Guidelines of 1982, has ever since been used in order to assess the **forces of demand substitution**.
- **According to this test:**

# The Hypothetical Monopolist Test – the SSNIP

- .....a relevant market is defined as a collection of products or services and a geographic region, that would **form a valuable monopoly** (current guidelines). SO:
- If it would be unprofitable for a HM of a group of products within a region – the **candidate (provisional) market** - to undertake **a Small but Significant and Non-transitory Increase in Price (SSNIP)**, of some or all products, at some or all locations (holding constant the terms of sales of all other products), because buyers would substitute to other products or locations, **then the candidate (provisional) market is too small** and must be expanded - by including products or locations to which the most buyer substitution would occur (**cross elasticities** can in principle identify these). The HM question must then be asked again.

# Supply Substitution (1)

- CAs and courts have also taken account of forces of **supply substitution** to define relevant markets.
- Thus, even if a HM would not find profitable a SSNIP accounting for demand substitution, the market can be expanded with additional products or locations after also accounting for the incentives of outside sellers to begin producing and selling within the candidate market.
- Accepting that supply substitution is an important economic force in the determination ultimately of market power, **the question is at what stage in the analytical process it is best to take it into account.**

## Supply Substitution (2)

- In EU, the **Commission Note on the Definition of the Relevant Market (1997)** recognizes that **supply substitution** can be taken into account in the first phase of the **delineation procedure**, but only if a set of cumulative conditions are satisfied.
- These are sometimes referred to as conditions for **Market Aggregation** – aggregate products that are not demand substitutes – and the **relevant test is the “almost universal supply side substitutability” (AUSSS)**.
- **Criteria for implementing test:** assets used/ability to switch production, technological feasibility, speed, economic viability, universality.
- This is **likely to apply** where the market contains a number of different grades, varieties or sizes of essentially the same underlying product.



# Supply Substitution (3)

- In US, **SS is NOT taken into account in phase one** – when products are identified.
- Baker (2007) advances a series of arguments to support the position that SS should NOT be taken into account in phase one, but **should be taken into account in phases 2 and 3 - when marker shares are assessed.**
- Specifically, **when calculating shares, suppliers outside the relevant market may be taken into account for reasons of supply substitutability**, assigned market shares reflecting the capacity they would profitably divert to the relevant market.
- In EU, in contrast, **if Market Aggregation is not warranted then supply substitutability is not taken into account in evaluating market shares**, though of course it IS taken into account at a still later phase in the analysis, namely when **assessing the strength of potential competition (in phase 6).**
- Relative merits of US and EU positions.
- Return then to **Demand Substitution.**

## Evidence in Assessing Demand Substitution

- **Evidence** can be grouped into **five categories** (also Baker, 2007):
  1. Responses of buyers to changes in relative prices in the past. This evidence can be quantitative and systematic, as with econometric evidence of **demand elasticities** or econometric analysis of **natural experiments** involving a change in market structure. Evidence can also be qualitative or anecdotal (e.g. based on the experience and reports of firms' marketing executives).
  2. Buyer surveys (see e.g. Baker and Rubinfeld, Am. L & Ec. Rev, 1999).
  3. Information about the characteristics of products and geographic locations (including the **switching costs** across buyers).
  4. Information concerning seller conduct.
  5. Views of industry experts.

## How Much Demand Substitution is Enough? (1)

- The crucial question that has still been left unanswered is: **how much demand substitution is enough?**
- To answer this question in principle one has to **compare the extent of demand substitution in the event of a price increase with the magnitude of the price – cost margin**, which will determine whether the price increase would be profitable were firms to act collectively as a single seller (a HM).
- That is, the profitability of a SSNIP by a HM turns on a trade-off: the increase in price increases the price-cost margin to those buyers who continue to purchase, but the HM loses the entire margin of those buyers that switch to substitute products or locations.

## How Much Demand Substitution is Enough? (2)

- A **quantitative methodology** that attempts to make this comparison has been proposed and has often been utilized in the last 15 years or so – the **“critical elasticity”** or **“critical loss” analysis (CLA)** – in order to define relevant markets.
- CLA calculates the HM’s **Critical Loss**, meaning the magnitude of lost sales that would (just) make it unprofitable for the HM to impose a SSNIP, and compares it against the so-called **Actual Loss** of sales that would result from the SSNIP.
- If the Actual Loss would be less than the Critical Loss, the SSNIP would be profitable and the candidate market can be considered to be a relevant market. If the reverse is true the candidate market cannot be considered a relevant market.

## Critical Loss Analysis (1)

- Assuming that the current price-cost margin is  $m = (p - c)/p$ , where  $c$  is the marginal cost, and  $s$  is the SSNIP (between 5% and 10%) it is easily established that the **Critical Loss** in sales measured as a fraction of current sales is given by:

$$= \rho_{cr} / (m + s)$$

So if  $s = 0,05$  and  $m = 45\%$ ,  $\rho_{cr} = 10\%$ .

- Note that the calculation here asks: “Would a HM find a SSNIP more or less profitable than the status quo?”. That is, it considers a **break-even version of the HM’s pricing incentives**.
- The US Merger Guidelines asks the related but distinct question: “Is the HM’s **profit-maximising price** at least a SSNIP above the status-quo level?” (Farrell and Shapiro (2008) discuss the relationship between these two versions).
- Note that from above the **critical elasticity is defined by:**

$$e_{cr} = \rho_{cr} / S$$

## Critical Loss Analysis (2)

- In principle one must then **compare the critical loss to an estimate of the Actual Loss.**
- For estimating actual loss one can either **seek direct evidence about demand responsiveness.** This can include econometric or marketing studies and/or an intuitive evaluation of qualitative facts about what it would take for a customer to substitute away from a group of products.
- Or, for **merger cases,** Katz and Shapiro (Antitrust, 2003) and O'Brien and Wickelgren (Antitrust L.J., 2003) – see Farrell and Shapiro (2008), propose **getting estimates of the Actual Loss using information about firms' pre-merger pricing decisions.**
- Let the pre-merger margin be  $m$  and assume that  $A$  is the **Aggregate Diversion Ratio**, i.e. the fraction of the sales lost by a product when its price rises by a SSNIP, that go to **other products in the candidate market**, or equivalently,  $(1 - A)$  is the fraction of a product's demand elasticity that consists of substitution to goods outside the candidate market. That is:

$$p_a = (1 - A)e_a s$$

where

$$e_a = (1 / m)$$

## Critical Loss Analysis (3)

- Thus:  $p_a = (1 - A)(s/m)$
- Comparing the actual to the critical loss, we get that, a symmetric group of products, each produced by a firm that maximises its profit taking as given all other prices, forms an antitrust market under the CL (break-even) analysis, if:

$$A \geq s/(s+m)$$

so actual loss in sales < critical loss in sales.

- Farrell and Shapiro (2008) consider a large number of extensions of the above to cover a range of cases in which more realistic assumptions are made.

# Other **Implementation Issues** of the HM Test: A Summary

1. Specifying the Initial Product or Region
2. Range of SSNIP with Other Terms of Sale Held Constant
3. Size of Markets, Multiple Markets, Special Cases:
  - After (or Secondary) Markets
  - Price Discrimination Markets
  - Tying/Bundling
  - Two (or multi) – Sided Markets
4. Chains of Substitutes
5. Shipment Flows (Elzinga-Hogarty approach) in geographic market definition. Inferior to HM methodology in which in defining geographic market particular attention is paid to **barriers to trade**.
  - [For further discussion of above see: Baker (Antitrust L.J., 2007, Section III.C) and O’Donohue and Padilla (2007, Section 2.5)].
  - **Most serious issue:**
5. **Cellophane Fallacy** – Retrospective Harm Cases (devote more attention to this below).



# The Cellophane Fallacy (1)

- A special problem arises in **Dominance / Monopolization cases** Problem referred to in the literature as the Cellophane Fallacy.
- The problem becomes apparent if in SSNIP test we ask: **raise prices relative to what?**
  - Merger cases: wish to assess demand substitutability at current prices since only concern is whether merger will allow an increase in prices from present level.
  - Art.102 (Dominance) or US Monopolisation cases: must first assess **whether there IS dominance** – i.e. **whether prices can rise above a competitive “but-for” level**. So we must assess substitutability at these competitive “but-for” price levels.
  - But if dominance does exist – perhaps as a result of the alleged conduct been undertaken – the only prices that can be observed are the elevated prices as the result of dominance!
  - So, in other words:

## The Cellophane Fallacy (2)

- A “fallacy” in MD can result if the price of the product for which we undertake the SSNIP test is already high.
- In this case, the elasticity of demand for the product could be very large because at the high product price consumers regard some other products sufficiently good substitutes – something that would not be true if the price were lower (closer to the competitive level).
- Then, the SSNIP test can show a significant reduction in sales after a price increase from the current level but the reduction in sales could be very small if the price was at the “but-for” or close to the competitive level.
- As a result of the Cellophane Fallacy the SSNIP test in Dominance cases can result in market definitions that are “too wide”, hence in estimates of market shares that are too low and hence in false predictions concerning the magnitude of market power.

# Comments About and Possible Solutions to the Cellophane Fallacy (1)

- Some argue that the Cellophane Fallacy does not imply that the SSNIP test is completely useless in Dominance cases. They argue that it can still be useful, taking into account the following factors:
  1. The definition is still consistent with the principles of demand and supply substitutability and can still result in a narrower definition than when we rely purely on purely qualitative arguments. Also, products that are thought of, on the basis of the test, as not belonging to the relevant market certainly do not belong to the market for the purposes of market definition in Dominance cases.
  2. The assessment of the significance of factors such as physical characteristics and large price differences is made in the right way.
  3. Other empirical data and information can be used to complement the SSNIP test. E.g. there may be information that the firm in question reacts to changes in the prices or to the introduction of new brands by competitors. This indicates that the products of competitors are likely to be quite good substitutes to the product(s) of the firm in question.

## Comments About and Possible Solutions to the Cellophane Fallacy (2)

4. Empirical data from Natural Experiments concerning the relation between price and concentration can help us avoid the problems of the Cellophane Fallacy.
5. The test can be supplemented by looking also for a reduction in price. If the current price is above the competitive level, its reduction is expected to lead to a small increase in sales – otherwise, it would not have being raised to the current level. So if there are empirical data that show that a reduction in price will lead to a significant increase in sales this would seem to indicate that the market is probably wide and that there is strong competition from substitute products.

# Inferring MP after the MD

- **Given central role of market shares** need to consider the following issues:
  - Measurement and which thresholds for market shares? (see below too)
  - Also, **qualifying factors**:
    1. Persistence of high shares and variation
    2. Reserves
    3. Capacities
- **Other factors**:
  - Ease and likelihood of entry (entry barriers – sustainability of market power).
  - Buyers' power

- **The MD – MP Paradigm:  
Weaknesses - Criticisms -  
Alternatives**

# The Issues

1. Can the MD paradigm lead to the choice of the best market?
2. Can the estimated Market Shares (MSs) be used to infer accurately market power? I.e. is the MD paradigm useful?
3. Is the MP requirement (or MP screen) useful for optimal decisions about liability? Does a better understanding of MP improve the efficiency of our liability rule?
4. Are there alternatives and what are they?

## Issue 1: Does the MD paradigm lead to the choice of the best market?

- While virtually nothing is written about the criterion for choosing the best market it can be presumed that the “best market is that which leads to the most accurate MP inference, based on all the available information”.
- But having stated this, it becomes evident that “it is impossible to determine which market definition is superior without already formulating one’s best estimate of market power, rendering the exercise pointless” (Kaplow 2010; 2013; 2015).



# What is the implication?

- This suggests that: “**the direct estimation of MP is the only correct way to proceed.....**(though) this does **not imply that the best way to make this estimate is to employ econometric tools** regardless of the stage of the proceedings or quality of the data, or that when such methods can be used that they should be automatically privileged over other sources of information, such as internal documents, views of sophisticated buyers etc.” – see also below.
- **Turn then to the next question:** how do MSs bear on MP?

## Issue 2: How do market shares bear on market power? (1)

- It is standard to **denominate the MP requirements as market share threshold tests.**
- Examples: MP requirement in dominance cases (market share > 50%); MP requirement in horizontal mergers ( $HHH > 2000$ ).
- But this is **extremely problematic** unless it is clear **what inference can be made from MSs to MP.**
- More generally, relying on MSs emerging from the MD / MS procedure conflates two questions.

## How do market shares bear on market power? (2)

- Reliance on MS's conflates two distinct questions. The first is empirical:
  - How much market power is thought to be implied in fact by a stated MS threshold?
- The second question is one of policy:
  - How much market power should be required (as a matter of sound competition policy) with regard to the practice under consideration?
- Since these are separate questions, “how can a single number – a MS threshold – answer both of them simultaneously? The matter is actually worse, because MS's cannot answer either question...”.

# How do market shares bear on market power? (3)

- Consider first question. To see the difficulty note that:
  1. Economic theory offers **formulas for linking MS's to MP for only a very limited set of circumstances** (associated with **homogenous product markets**).
  2. However, **these formulas do not imply that the market definition process must be used** - since, with homogeneous products, we can make inferences directly using these formulas without using the MD paradigm (the latter can at best conclude that products are homogeneous and lead to the same conclusions or it can lead to market (re)definition in which case the formulas cannot be used— see just below).
- [**Economic theory offers two formulas** that combine various quantitative market measures, including market share, to make inferences about market power: one for the **market power of a dominant firm with a competitive fringe of firms** (that act as price takers) and another for firms engaged in **quantity competition in homogeneous product markets** (Landes and Posner, 1981; Ordoover, Sykes and Willig, Harv. L.R, 1982; Kaplow and Shapiro, 2007)].

## How do market shares bear on market power? (4)

3. Further, as Landes and Posner stressed many years ago (1981), even for the cases where economic theory points to a relation, **a given share can convey significantly different levels of market power in different markets characterized by different demand elasticities and/or elasticities of rivals' supply.**
- Thus, economic theory provides no support for any **bright-line tests** (such as those proposed in the famous *Alcoa* case), either as a matter of theory or empirical fact.
- Nor is there any basis in economics for relying on market shares for triggering **safe harbor provisions** (Evans, 2011).

## How do market shares bear on market power? (5)

### Markets with product differentiation

4. Most importantly, as has been recognized for a long time, **market shares are a particularly meaningless indicator for inferring market power and competitive harm in markets with differentiated products.**
- **We do NOT have a model that allows us to infer market power from market shares in redefined (non-homogenous-goods) markets.**

## Other problems with the MD paradigm (1)

- At least in the last 15 years or so, the MD / MS paradigm relies on the **Critical Loss Analysis (CLA)**.
- But the information required to undertake CLA is not more or less than the information needed in merger assessment for a **more direct assessment of** the unilateral price effects of mergers (without MD) – see also below.

## Other problems with the MD paradigm (2)

- As Kuhn (2001) put it succinctly some time ago:
- “empirical research on the problem of market definition and the effects of mergers has made economists realize that the information needed to determine the unilateral effects of mergers requires as much or less information than an economically rigorous estimation of the market boundaries.
- This means that **it is in principle no more difficult to estimate the price effects of mergers directly, skipping the market definition step**”.



## Other Problems with the MD Paradigm (3):

### Exclusionary Retrospective Harm Cases

- Finally, when, as will often be the case, we have to deal with **exclusionary actions that have already taken place** (and which, therefore, would have affected prices) we face the serious problem of the Cellophane Fallacy.
- It has been argued that then “the question of market definition can be largely shunted aside and instead **the focus should be on the price effects of the alleged exclusion**” - see Nelson & White (2003 – Stern, NYU Working Paper) and White (2007 – “Issues in Comp Law and Policy”).
- This was discussed above in the context of the **Cellophane Fallacy**.

# A Summary of Criticisms

1. The MD – MS paradigm of determining MP is often at odds with industrial organisation theory as there exists no valid way to infer MP from MSs in redefined (nonhomogeneous) goods markets AND implementation problems can render it either problematic or unnecessary.
2. MS tests for MP suffer as a matter of empirics because a particular MS does not indicate any determinate degree of MP (Kaplow, 2015).

- **Are there alternatives to the MD-MP paradigm?**

Are there alternatives to the MD–MP paradigm?

- To answer, we split this into two questions:
  1. **Are there alternatives to the MD procedure** that aims to estimate MSs in order to then make inferences about MP? Or: are there alternatives to this specific indirect measurement of MP that relies on the HMT?
  2. **Is the current role of MP in the enforcement of competition policy appropriate?**
- Start with the first question.

# Direct Measurement of MP

- **MP can be estimated directly** by using information on prices and costs and/or information from other markets and from presence of price discrimination (Kaplow and Shapiro (K&S), 2007). And, one can account for the other considerations too, that complicate the basic Lerner index, for assessment in antitrust cases (F&S, 2008, p.4).
- As noted above, at least one prominent commentator (Kaplow, 2015) points out that **“the direct estimation of market power is the only correct way to proceed”**. **And:**
- “there are many sources of evidence (that can be used): internal documents, views of buyers and competitors, various types of expert opinion...”.
- **Also: there are instances where FTC and courts HAVE relied on direct measurements** - see Baker 2007, p. 131 (footnote 11).

## Direct Measurement of MP – what about MC?

- Measuring MC is often considered the main obstacle to pursuing direct measurement. But:
  - F&S (2010): “Agencies are well prepared to measure MC or AIC” that is necessary in order to use the UPP test and in CLA (in the latter the calculation of the Actual Loss also relies on knowledge of the Lerner index).
  - F&S (2008): “there is often good information in company documents about MC (or...AIC) and one can always perform sensitivity analysis on the level of MC”.

# Direct Measurement: Final Comments

- Apart from the direct measurement just mentioned, it should be noted that:

“(Economists) have devoted substantial and successful efforts to developing a number of other **(more direct) means of inferring market power** (than relying on the **HM methodology**) and the competitive harm of challenged practices, in homogeneous **and** in differentiated product markets”.

[In particular: Baker and Bresnahan, 1988, 1992; Nevo, 2001; Capps, Dranove, Greenstein and Satterthwaite, 2002; Farrell and Shapiro, 2008, 2010; Kaplow and Shapiro, 2007; Werden and Froeb, 2008. Details of references in Kaplow, 2010].

- **However, these efforts, directed to abandoning the HM approach have influenced mainly merger assessment.**
- **Specifically:**

# Situation in the Case of Mergers

- As an outcome of these developments, **merger assessment, at least for unilateral effects, does not have to rely anymore on obtaining estimates of market shares.**
- The **Upward Pricing Pressure (UPP) test** (as suggested by F&S, Schmalensee, 2008 and others) can be used as a **screening test** and then, for predicting the **size** of the price effect, assessment can rely on **merger simulations** (with all their limitations), together with traditional analysis of the strength of the short and long-run supply responses and the strength of buyers' power.



# The Case of Monopolisation? (1)

- In **monopolisation cases** we still lack an approach similar to what we have for merger assessment for many years.
- Can we explain the **lack of development** of such an approach for monopolisation cases?
- One **difference is that in mergers we are not so interested in the size (and hence the source) of the extant MP, but just in the change in MP as an outcome of the merger and, for this, L (directly measured) need only be used as a means** towards undertaking the CLA or UPP test.
- This **is** important.

# The Case of Monopolization ? (2)

- In monopolisation the size of the **extant** MP is important, in current law, in the following sense too.
- We need to **be reasonably confident that the source of MP is not “innocent”** – i.e., MP is NOT purely due to “superior skill, efficiency and foresight”. So we have, additionally, to deal with this **“source issue”**.
- But this means that we must always **allow defendants to provide information/evidence that a (directly measured) excessive Lerner index is justified**.
- And, **providing such information and evidence is certainly not more onerous** compared to some of the requirements for information made in merger assessments (see e.g F&S 2008 and 2010).

# The Case of Monopolization? (3)

- **A counterargument to relying on direct estimates of extant MP** in monopolisation cases is the following:
- In using dominance/significant MP as a filter, prohibitions of exclusionary unilateral conduct are concerned not with the firm's ability to exploit customers but rather with its distinct ability to maintain or strengthen the position of MP through the adoption of practices that harm the competitive process. These two abilities have somewhat different determinants. [G Werden, ICN UCWG Workbook, Chapter 2, 2016].
- BUT: this does not show that it is better to rely on MS (an indirect measure of extant MP) as a filter, given the problems of the MD paradigm, exactly for monopolisation cases, mentioned above.
- AND: arguing that “a firm is highly unlikely to have the ability to harm the competitive process through the adoption of anticompetitive practices unless it has a **persistently high market share**” (ICN WB), is far too ambiguous to provide a good basis for effective enforcement practice.

# The Case of Monopolization? (4)

- Finally, if one is not convinced by the above arguments, an **alternative way** is to **avoid altogether any measurement of extant MP** and to concentrate just on the **assessment of competitive harm** when assessing potentially anticompetitive conducts.
- In contrast to mergers, the focus of the assessment must then be on the **impact on prices due to the exclusion of a competitor/product**.
- As noted above a number of **prominent commentators have proposed that we should be moving in that direction**, though much remains to be done before we abandon the presumption, that has dominated enforcement practice, concerning **the usefulness of a screening test that relies on some estimate of MP**.
- **We finally turn to this issue next.**

- **The Role of Market Power  
in Competition Policy**

# The Role of MP in Competition Policy (1)

- ❑ So, let us now finally **come to the second question** posed above: “what is the appropriate role of market power in competition policy”? **Is the current emphasis on the MP requirement justified?**
- ❑ Currently, in order **to assign or not liability** depends on the **magnitude of extant market power (MP) AND the strength of evidence** indicating the **anticompetitive nature of the conduct (A)** under investigation.
- ❑ But, while the literature and agency statements emphasize the central importance of MP to liability, **“they do little to elaborate the actual channels of influence....”**. Though numerous arguments of connection are made in specific analyses of individual practices, these are “largely *ad hoc* with little sense of the governing framework”.

## The Role of MP in Competition Policy (2)

- More specifically, there has not been yet a satisfactory answer to: **why don't we dispense with MP as a separate category of analysis** and simply regard all evidence as potentially relevant to the assessment of the conduct itself and proceed from there?
- Surely there are **statements to justify the MP screen, concerning avoidance of excessive false positives and chilling effects as well as high administrative costs.**
- But these are **mostly informal** with no explicit analysis establishing the first two of these effects.
- And, "If, in the end, there is little more than a long list of potential context-specific factors, whose relevance varies from one setting to another, then it would be **appropriate to abandon routine, systematic enquiry into market power**".

# The Role of MP in Competition Policy (3)

- Kaplow (2015) attempts to examine this a bit more formally, considering a liability function  $f$  and the following inequality as a means of determining whether liability should or should not be assigned:

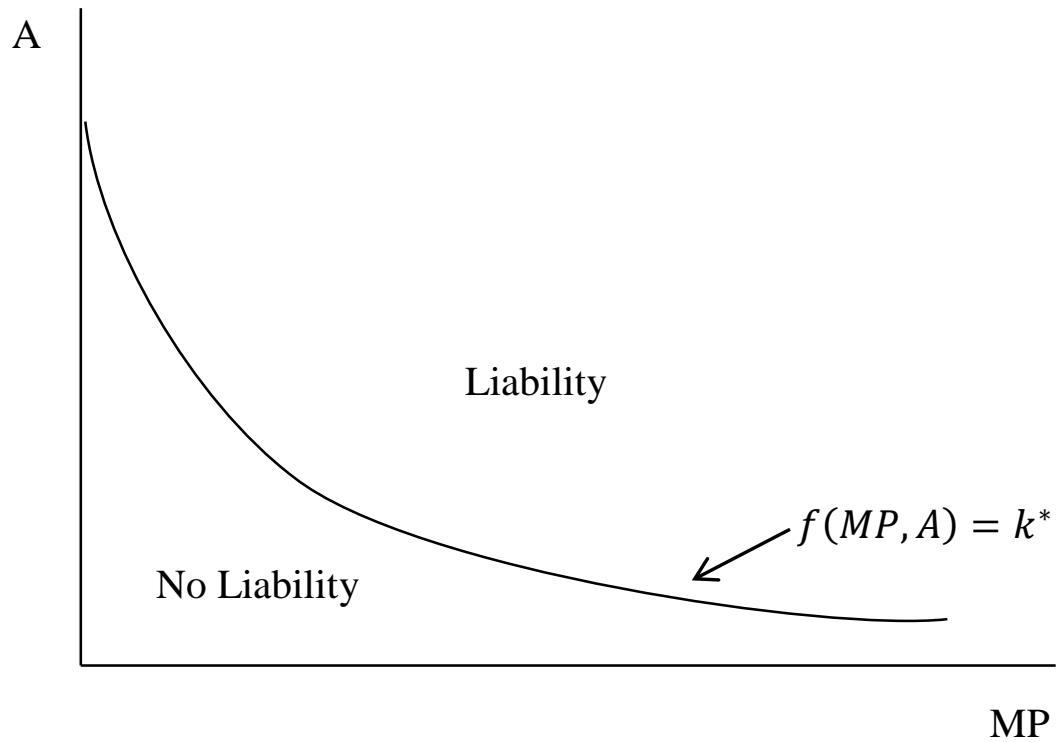
$$f(MP, A) > k^*$$

where  $k^*$  is the critical value above which assignment of liability is optimal.

Diagrammatically:



# Diagram 1



# The Role of MP in Competition Policy (4)

- As he mentions “once this simple relationship is stated concretely, we immediately appreciate that we **in fact know almost nothing about the optimal shape or height of this curve** – that is, about the functional form for  $f$  or, for a given calibration thereof, the optimal value of  $k^*$ ”.
- Kaplow offers what is probably the first careful formal examination of this relationship (though still very preliminary).
- As he shows:

# The Role of MP in Competition Policy (5)

- One **can contemplate “straightforward cases in which MP is nondiagnostic and in which greater MP may disfavour liability”**.
- Example: in product differentiation models with products differing along both horizontal and vertical dimensions, **increasing the extent of vertical differentiation of the dominant firm’s product, increases its market share and MP (measured by L) but reduces the impact of exclusion on consumer and total welfare** (V. Bageri and Y. Katsoulacos "The Market Power Requirement in Antitrust Enforcement and its Usefulness", *Economia e Politica Industriale*, 2016).

# The Role of MP in Competition Policy (6) - Conclusions

- “In all, MP is not even approximately a **sufficient statistic** (in the sense of Chetty, “Sufficient Statistics for Welfare Analysis” Harvard Annual Review of Economics, 2009) **for purposes of assigning liability**” (Kaplow, 2015; p. 160) and research in industrial organisation, both theoretical and empirical, has great potential to contribute further to identifying the appropriate role of MP in competition policy.

# The Role of MP in Competition Policy (7) – Conclusions

- (Paradoxically perhaps) Much remains to be done in order to understand what is the appropriate role of MP in CL enforcement.
- Recent analyses suggest that its emphasis has probably been exaggerated. So, while not ready yet to abandon completely extant MP as a screen we should note that:
  - (i) This screen does **not seem to be necessary anymore in merger analysis,**
  - (ii) In **monopolization cases,** where no alternative screen yet exists, **the MP screen has to be used with extreme caution,** since **neither** its indirect (MS) version nor its direct-estimate version are sufficiently accurate for assigning liability.

# Thank you!

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