Revisiting the hypothetical monopolist test, and the role of common sense market definitions

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Disclaimer: These are not necessarily the views of any organisation with which I am associated.
Summary argument

1. At heart, antitrust, economics and common sense are aligned in terms of what markets are and why market shares are a proxy for market power.

2. But increasing formalisation of the market definition process within antitrust has led to a perverse situation where there is immense focus on market definition, as an *indirect* measure of market power, despite major debate and controversy over details of its methodology and application.

3. In fact, much of the relevant evidence and information used is also relevant to, and far better assessed in, the *direct* analysis of market power. Moreover, the hypothetical monopolist test – or a variant of it - is better applied as a *direct* test of market power.

4. There is a useful role for market definition within simple indicators and preliminary analysis of competitive harm. But this is typically already done on a ‘common sense’ basis, albeit informed by the HMT framework. This is as it should be - but it would be better to avoid the term ‘market’. 

At heart, antitrust, economics and common sense are aligned on what markets are...

- The word ‘market’ derives from the Latin *mercatus*, meaning ‘trading, buying and selling, market’.

- It is a common sense concept, which also makes economic sense:
  - a set of substitute products that buyers can choose between on the basis of price, quality and other factors.

- Early antitrust view fits well with this:
  - Term ‘relevant market’ was first used in 1948...
  - ...to encompass close substitutes, as defined as products with reasonable interchangeability and relatively high cross elasticities, and exclude others.
At heart, antitrust, economics and common sense are also aligned on why shares matter!

- It is also common sense, and good economics, that competition will tend to be weaker when there are fewer firms in a market competing for our business:
  - With fewer choices available to consumers, firms can reduce their product offering without losing so many sales.
  - So, market power tends (all other things equal) to be higher when firms have higher market shares.

- Again, this might seem to fit well with antitrust, with market definition being given a crucial role from as early as 1956 (Du Pont)
  - US Supreme Court adjudged that key question was whether Du Pont competed in the cellophane market - over which it had a monopoly - or competed across the wider ‘flexible packaging material’ market, within which it was a fairly small player.
At heart, antitrust, economics and common sense are also aligned on why shares matter!

- In merger assessment too, market shares (and deltas) are used as an indicator of likely concerns from merger. Eg UK merger assessment guidelines state that:
  - Past decisions suggest that a post-merger share below 40% is unlikely to give rise to concerns.
  - In retail markets, the CMA counts fascia within local catchment areas:
    - Past decisions suggest concerns for 2-to-1 mergers are very likely, 3-to-2 common, 4-to-3 occasional, and 5-to-4 unusual.
  - In terms of the Herfindahl-Hirschman Index:
    - Delta exceeding 250 may give cause for concern in concentrated market (HHI>1,000)
    - Delta exceeding 150 may give cause for concern in highly concentrated market (HHI>2,000)
The modern day antitrust approach to assessing market power

- This sort of thinking has led to authorities adopting a three-step approach to assessing market power:
  
  1. Define the relevant market(s), using the hypothetical monopolist (or SSNIP) test
  
  2. Calculate market shares (or concentration) in those markets
  
  3. (If shares are high) consider mitigating factors that may mean high shares don’t imply market power, such as ease of entry or buyer power.

- In practice, Step 3 is a one-way test. Firms are rarely considered to have market power if they have low shares.
- But how sensible is this approach?
The modern day antitrust approach to assessing market power

- This approach certainly makes sense as an initial or simple indicator of likely competition concerns arising from merger or other conduct:
  - Both for *firms* in carrying out their own self-assessment
  - And for *authorities* when doing preliminary analysis of mergers and antitrust concerns.
  - Can draw on e.g. useful merger assessment guidelines, EU block exemption regulations, EU guidelines, etc.

- But this is usually done using common sense - and cautious - market definitions. No problem with this.
The modern day antitrust approach to assessing market power

- The concern arises because market definition remains highly determinative of case outcomes, even when detailed analysis is done.
  
  - See Baker (2007): "Throughout the history of US antitrust litigation, the outcome of more cases has surely turned on market definition than on any other substantive issue".

- Key question: Is this still sensible?

- Market concentration measures make most sense in simple homogeneous goods markets (characterised by Cournot competition).
  
  - Indeed, market definition may be (relatively) clean in such markets.

- However, the HMT is more often decisive in more complex markets, and in these the test is plagued by major debate and controversy over details of its methodology and application.
The hypothetical monopolist test: A brief reminder

- Recall that market definition in antitrust utilises the hypothetical monopolist test:
  - a ‘relevant economic market’ is defined as a set of products or services that could be profitably monopolised

- The HMT concept popularised by the US 1982 merger guidelines:
  - although first proposed by Morris Adelman in 1958 as a limit on overly narrow market definitions,
  - and first employed by the US DoJ in 1972. (See Werden, 1992, for a detailed history of the development of the HMT)
The hypothetical monopolist test: A brief reminder

Algorithm for application of the HMT:

- Given a particular set of goods or services (a ‘candidate market’), would a hypothetical monopolist be able to sustain profitably a Small but Significant and Non-transitory Increase in Prices (or ‘SSNIP’) above the competitive level?"
  
  - If yes, this is a relevant economic market
  - If no, widen the set of products and start again...
  - ...until you can define a market that can profitably be monopolised.

- NB Price can (theoretically at least) be replaced by quality-adjusted prices, ‘value for money’ or other ways of framing an overall product offering.
The HMT: A few pros...

- The HMT test is intuitively attractive as a framework for thinking about the competitive constraints faced by a firm or firms.
  - At some level, it is clear that what we are interested in is the ability of firms to raise prices (or otherwise reduce their product offering) and that their ability to do this will depend on the extent to which consumers shift to competing offerings.

- It is especially useful in reminding us that competition depends on the preferences of *marginal* consumers, not infra-marginal ones, at least absent price discrimination
  - cf the ‘toothless fallacy’ in *United Brands*.

- It has fostered the development of a variety of useful and important quantitative techniques for antitrust analysis.
The HMT: ...Rather more cons

- The HMT is far more complex and controversial in practice than it might at first appear.

- First, in terms of the core methodology, there is significant (and unresolved!) debate around:
  - whether the SSNIP should be applied to all firms in the ‘candidate market’ or just the core parties?
  - if all firms, whether the SSNIP should be a blanket x% price rise, even if this is less profitable than a tailored rise?
  - whether the SSNIP should be merely profitable or profit-maximising?
  - what price level to use as a baseline: existing prices or ‘competitive’?
  - Indeed what ‘x’ should be? And how should that fit with the SLC test?
The HMT: ...Rather more cons

- Second, there as debate around the practical application of the test when:
  - firms compete differently in different dimensions?
  - firms sell multiple products, potentially including both substitutes and complements to the core products?
  - firms compete in multi-sided markets, potentially exhibiting network effects?
  - firms engage in price discrimination?
  - some firms engage in self-supply?
  - firms have existing market power? (ie the cellophane fallacy)
The HMT: ...Rather more cons

- Third, there are concerns about the output of the HMT process, especially in differentiated goods markets, which can lead to:
  - multiple market definitions, depending on starting point and direction of widening out
  - asymmetric and non-transitive market definitions
  - markets in which there is greater substitutability between some firms inside and outside the market than there is between those firms and other firms inside the market
In consequence....

- Both the process and the precise market delineation adopted can end up:
  - seeming somewhat arbitrary
  - out of line with common sense
  - consequently, hard to justify in front of a Court
  - or indeed in the court of public opinion (via the press)

- At the same time, competition authorities and parties:
  - spend huge time and resources in delineating precise markets, even though this is an *indirect* and imperfect measure of market power,
  - rather than looking at competitive concerns associated with market power *directly*

- Or sometimes they do – or at least write up – what is effectively the same analysis twice.
And note….

- I haven’t even mentioned yet the issue of supply-side substitution in market definition:
  - which is also thorny
  - but does seem to have been largely settled now, in favour of the US/UK approach of aggregating ‘for convenience’ only
  - potentially including ‘swing capacity’ within capacity shares, where relevant
  - but otherwise holding back supply-side substitution arguments for the competitive analysis stage.

- (Although note that this is not quite in line with the EU Commission Notice on market definition.)
An alternative approach: Revisiting the hypothetical monopolist test

- So how can one look at market power concerns more directly?
- In fact, the HMT – or a variant of it - is well suited to this key question of interest in antitrust and merger cases.
  - For mergers: whether a (hypothetical) merged firm would be able profitably to sustain a SSNIP, relative to the pre-merger situation.
  - For cartels: whether a set of firms would be able profitably to sustain a SSNIP, if they (hypothetically) acted as a cartel.
  - For abuse: whether a firm would be able profitably to sustain a SSNIP if it were (hypothetically) able to exclude its rivals (or alternatively would be forced to lower prices significantly if rivals were to enter).
An alternative approach: Revisiting the hypothetical monopolist test

Moreover, the answers to some of the debates around the HMT become more obvious in this context. For example:

- whether the SSNIP should apply to a single firm or to all firms in the candidate market
- what price level the SSNIP should relate to
- how to deal with multi-product firms
- whether the test should ask if the SSNIP is profit-maximising, rather than merely profitable.

Raises a new question: Would this really be such a radical change?
The modern day antitrust approach to assessing market power – in practice

- **For cartels:**
  - authorities do little more than define a common sense market, and check shares are not *de minimis*.

- **For mergers:**
  - authorities use common sense market definition as preliminary screen (in the UK, the CMA use the term ‘frame of reference’ rather than ‘relevant market’)
  - for mergers raising significant concerns, they increasingly carry out a full competitive effects analysis
  - for mergers that are to be challenged, they go on to define markets, but primarily to help protect against legal challenge.
The modern day antitrust approach to assessing market power – in practice

For abuse cases:

- authorities use common sense market definition as a preliminary screen
- consider whether abuse story ‘stacks up’
- then carry out detailed market definition assessment, and careful analysis of market shares (albeit even then the real analytical focus is on assessing market power, even if it is not written up that way).

Hence, the greatest focus of market definition work is on abuse cases.

- This is exactly where the cellophane fallacy is most likely to be a problem, and thus the evidence of existing substitutability most misleading.
- In practice, market definition rarely (never?) sheds additional light
Conclusions

We should draw a greater distinction between two situations:

1. **The use of market definition and markets shares as a *preliminary indicator* of market power and likely competitive harm.**

   Here, a ‘common sense’ approach to market definition can usefully be employed, albeit cautiously and informed by the HMT framework.

2. **Full case analysis, and final case decisions, based on detailed empirical evidence and analysis**

   Here, market power and competitive concerns should be assessed *directly*, albeit drawing on a variant of the HMT methodology, rather than *indirectly* via market delineation.

Lastly, where market definition is done, emphasise its artificiality by using the term ‘frame of reference’ or ‘narrowest antitrust market’, or somesuch.
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