



Webinar on the "Ex-post economic evaluation of European competition policy"

WELCOME

The webinar starts at 16h00 CET

Directorate-General for Competition Webinar
23 June 2020: 16h00 – 17h30

Programme

16:00	Welcome	Adriaan Dierx (DG COMP)
16:05	Book presentation	Fabienne Ilzkovitz (DG COMP, ULB)
16:15	Mergers	Peter Ormosi (CCP, University of East Anglia)
16:30	Abuse of dominance cases	Paolo Buccirossi (LEAR)
16:45	State aid	Nicole Robins (Oxera)
17:00	The way forward	Pierre Régibeau (DG COMP)
17:15	Q&A	Adriaan Dierx (DG COMP)



Ex post economic evaluation of competition policy: The EU experience

Fabienne ILZKOVITZ

Directorate General for Competition

Directorate-General for Competition Webinar

23 June 2020: 16h00 – 17h30

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Ex Post Economic Evaluation of Competition Policy

The EU Experience

EDITED BY
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ADRIAAN DIERX

 Wolters Kluwer

<https://irus.wolterskluwer.com/store/product/ex-post-economic-evaluation-of-competition-policy-the-eu-experience/>.

Outline

1. Origin of the book project
2. Why undertake ex post evaluations of EU competition policy?
3. Contents of the book
4. Lessons learnt and future challenges
5. Conclusion

1. Origin of the book project

- Since 2014, accumulation of experience due to collaboration with academics, consultants and DG Competition colleagues
- Reflected in a number of papers and study reports containing useful information for future ex post evaluations
- Book published by Wolters Kluwer assembles and condenses these valuable contributions, summarising progress made and lessons learnt

2. Why undertake ex post evaluations of EU competition policy?

2019 Nobel Prize winners in economics stress importance of evidence-based policy making:

“What is dangerous is not making mistakes, but to be so enamoured of one’s point of view that one does not let facts get in the way. To make progress, we have to constantly go back to the facts, acknowledge our errors, and move on.”

⇒ Recognition of the key role of evaluations for policy design and enforcement

2. Why undertake ex post evaluations of EU competition policy?

What? Why?	Individual decisions	Regulations/ policies	Sector functioning	Macroeconomic impact
Improve decisions	✓	✓		
Improve design of competition law	✓	✓		
Set priorities	✓		✓	✓
Legitimacy/ Advocacy	✓	✓	✓	✓
Enhance transparency	✓	✓	✓	✓

3. Contents of the book

Introductory chapter defining key concepts of EU competition policy and ex post evaluation

Four parts

- Part I: The ex post evaluation of merger interventions
- Part II: The ex post evaluation of antitrust decisions
- Part III: Ex post evaluation of State Aid
- Part IV: The broader impact of EU competition policy

What is the range of ex post evaluation activities covered in this book?

Subject of evaluations	12 chapters on
Individual decisions (5 chapters)	<ul style="list-style-type: none"> • Mergers (telecoms) • Abuse of dominance (electricity, telecoms) • State aid (broadband, air transport)
Regulations/policies (3 chapters)	<ul style="list-style-type: none"> • Merger control in the EU • Role of evaluation in the EU State aid control • Rescue and restructuring aid
Sector impact (1 chapter)	<ul style="list-style-type: none"> • Impact of mobile telecom mergers on prices and quality
Macroeconomic impact (3 chapters)	<ul style="list-style-type: none"> • Customer savings from the European Commission's cartel prohibitions and merger interventions • Deterrent effects of cartel prohibitions and merger interventions • Macroeconomic and sectoral impact of EU competition policy

Main quantitative methodologies used

Methods	Quantitative
Individual case studies	<ul style="list-style-type: none">• Before/after and cross-sectional descriptive analysis• Counterfactual Impact Evaluation (Difference-in-Differences, Matching methods, Regression Discontinuity Design,...)
Macroeconomic analysis of direct and deterrent effects of EU competition policy	<ul style="list-style-type: none">• Customer savings calculations• Statistical and theoretical modelling• Macro and Input-Output model simulations

4. Lessons learnt and future challenges

Lessons learnt

- Ex post evaluation is a good investment:
 - Better understanding of the impact of competition policy interventions
 - Powerful tool in support of CP enforcement and competition advocacy
- Two conditions for successful ex post evaluations:
 - Good quality data (pre- and post-competition policy intervention)
 - Robust methodology: mix of qualitative and quantitative methods while recognising the limitations of the different methods used
- Combination of internal and external expertise and involvement of external experts at an early stage

4. Lessons learnt and future challenges

Future challenges

Areas for further research:

- Non-price effects of competition policy interventions (innovation)
- Descriptive quantitative analysis to test whether assumptions made at the time of the decision in a sample of cases did materialise afterwards
- Further develop ex-post evaluation in the areas of abuse of dominance (e.g., in the digital economy) and State aids (e.g., Covid-19 State aids)
- Deterrent effects of competition policy interventions
- Macroeconomic effects of competition policy interventions

Organisational challenges:

- Independence of the evaluation team
- More systematic data collection
- Further development of an evaluation culture and better integration of enforcement/policy design and evaluation activities

5. Conclusion

Questions about the future of EU competition policy at the core of Europe's policy debate as competition policy is facing various challenges (due to globalisation, digitalisation, the COVID-19 crisis)

Requests to strengthen EU competition policy:

- Increased market concentration and mark-ups
- Increased market power of internet giants
- Risk of unfair competition due to more flexibility in State aid control

Requests to relax EU competition policy:

- Lack of European champions
- Failures in the global supply chain
- State aids are needed for economic recovery

⇒ **Ex post evaluations to feed this debate with facts**

Ex Post Economic Evaluation of Competition Policy

The EU Experience

EDITED BY
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Ex post evaluation of mergers

Webinar on the Ex-Post Economic Evaluation of European Competition
Policy

Peter L Ormosi

Centre for Competition Policy, University of East Anglia

What are the main lessons learnt?

- Large body of ex-post merger studies.
- Most of these are price effect estimates, using simple causal inference models.
- What we have learnt (or what we have looked at):
 - Building a body of these case-level studies is extremely useful (e.g. for a meta review) but the individual details are also crucial.
 - Less focus has been on dynamic effects (Mariuzzo and Ormosi, 2019 RIO)
 - Less on non-price effects (but..)

Price impact estimates

Industry	Market level estimates			Merger level estimates		
	N	es	se	N	es	se
Hospitals	338	11.628	0.526	10	6.822	2.301
Petroleum	54	-2.039	0.097	17	-0.361	0.218
Car Parking	32	2.581	0.382	1	1.866	1.938
Rail	30	0.951	1.584	3	1.111	4.662
Airlines	28	1.936	0.378	14	2.405	0.215
Spirits	28	0.155	0.158	1	-0.679	0.889
Home appliances	16	0.617	0.492	1	-0.175	1.75
Books	11	0.022	0.156	2	1.028	0.584
Law journal	11	13.267	1.155	4	11.069	1.502
Ready-to-eat cereal	11	9.346	0.564	1	5.164	1.455
Pharmaceuticals	9	33.271	0.299	1	18.489	0.979
Brewing	7	-1.915	0.457	1	-1.557	1.157
⋮	⋮	⋮	⋮	⋮	⋮	⋮
Total	626	11.164	0.255	68	4.189	0.32

Non-price effect of mergers

New studies shifting focus to non-price effects:

- Innovation:
 - Bennato, Davies, Mariuzzo, Ormosi (2020) HDD mergers
 - Castells et al. (2018) Hutchison/Orange
- Effects on product variety: Argentesi et al. (2018)
- Flight frequency: Doi and Ohashi (2019, IJIO)

What is the way forward?

- Impact on inequality
- Impact of digital mergers
- Impact of consumer remedies
- Methodological advances: The causal inference revolution

Effect on inequality

- Previous merger evaluations implicitly assumed that everyone is affected the same way – unlikely.
- Available works on inequality are largely aggregate studies.
- What can we do at the case level?
- We are currently working on two markets: Shell/Rontec (Total) UK, and Australian petrol market concentration

Estimating the effect of digital mergers

- Increased attention on non-horizontal mergers:
 - Acquisition of small start-ups.
 - Conglomerate mergers
- Does this need new evaluation tools?
 - More focus on non-price effects (innovation)
 - Evaluating dynamic effects

Estimating the impact of demand-side remedies

- Examples of consumer remedies:
 - Choice remedies (Windows/Android browser choice screen)
 - Ban on 'opt-out' selling online
 - Disclosure remedies (Fletcher, 2018)
- Do we know how well these work?
- Small number of ex-post studies on their impact (FCA - insurance renewal)
- Relevant in mergers? Non-horizontal mergers, to accompany behavioural remedies (interoperability, data portability, etc) to ensure consumer engagement.

The causal inference revolution

New methods

- Causal effect estimation:
 - Heterogenous treatment effects
 - Causal trees/forests
- Counterfactual estimation:
 - Matrix completion
 - Interaction fixed effects
- New outcome variables
 - Consumer satisfaction/reviews: NLP



EX POST EVALUATION OF ABUSE OF DOMINANCE CASES

23/6/2020

Paolo Buccirossi

Research questions

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- In general we want to understand whether an infringement decision was appropriate
- By appropriate we mean 3 different things
 - 1) Did the decision have an impact on the interested market? Did it improve consumer or social welfare? (**assessment of the outcome**)
 - 2) Was the decision based on a valid theory of harm? Were all the relevant theories of harm properly investigated by the CA? Were all the pieces of evidence available at the time of the decision properly assessed? (**assessment of the analysis**)
 - 3) Was the decision able to deter similar anticompetitive behavior? Did the decision provide clear guidance on which conducts should be deemed illegal? (**assessment of deterrence**)

The general approach for a policy evaluation

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- In general the effects of a policy can be assessed by estimating the value that the outcome variable (y) would have taken if the policy had not been adopted (i.e. the counterfactual)
- The policy is a “treatment”
- The treatment is applied to a certain group (of transactions) (the **treated group**)
- We can observe the outcome variable **before** and **after** the treatment
- To assess the effects of the treatment we observe the same outcome variable on a group that was not treated (**control group**) in the same period of time as the treated group
- If a number of conditions are satisfied, the effect of the treatment is given by

$$DiD = (y_{At} - y_{Bt}) - (y_{Ac} - y_{Bc})$$

Exclusionary abuse (1/6)

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- In this case the counterfactual is not a world without the abuse, but a world without the decision: **the decision is the “treatment”**
- The **ideal control group** is a similar market in which the same abuse occurred but where the competition authority did not intervene; this market was affected by the abuse but not by the decision, i.e. the treatment; finding such a benchmark is impossible most of the times
- We should perform two evaluations: i) assess the effects of the abuse; and ii) assess the effects of the abuse that were removed or alleviated by the decision

Exclusionary abuse (2/6)

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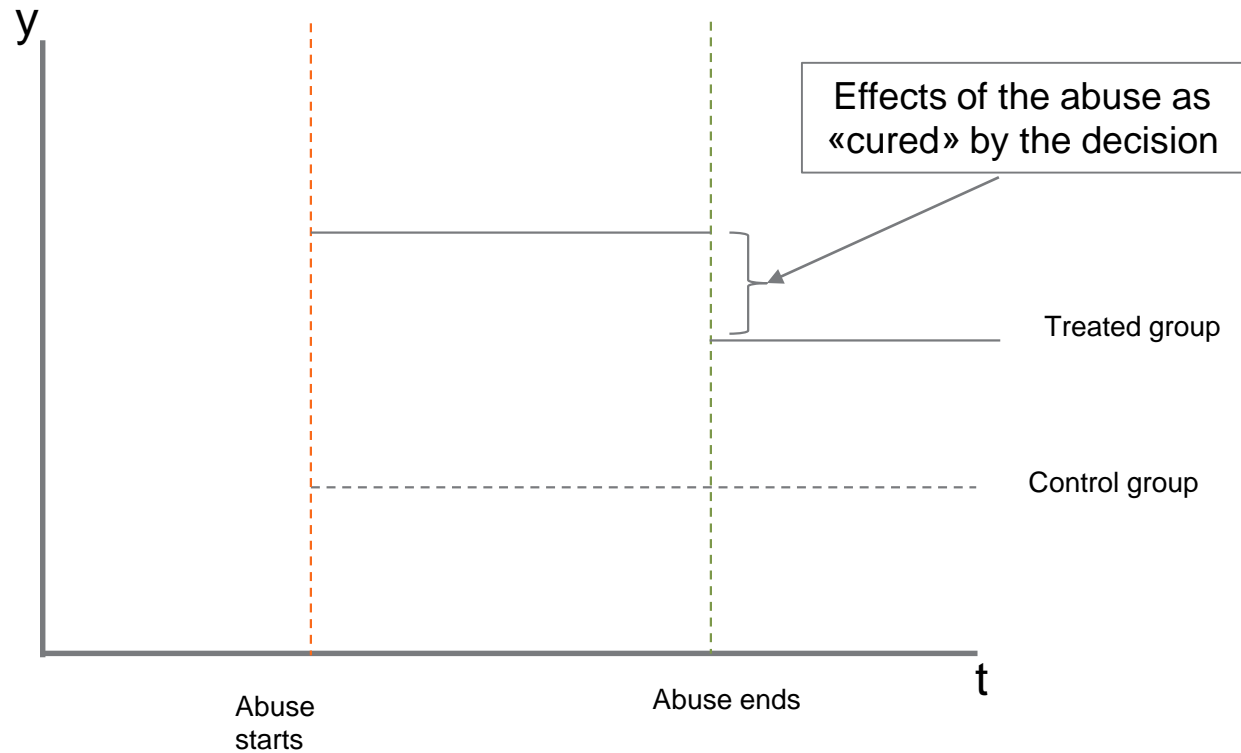
- The assessment is a 2-stage process. Let's start with the second stage
- In this stage we measure the effects of the abuse as removed by the decision.
- Let y be the variable of interest

$$DiD_2 = (y_{At} - y_{Dt}) - (y_{Ac} - y_{Dc})$$

where y is the outcome variable in treated (t) and control (c) group in the abuse period (A) or after the decision stopped the abuse (D)

Exclusionary abuse (3/6)

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Exclusionary abuse (4/6)

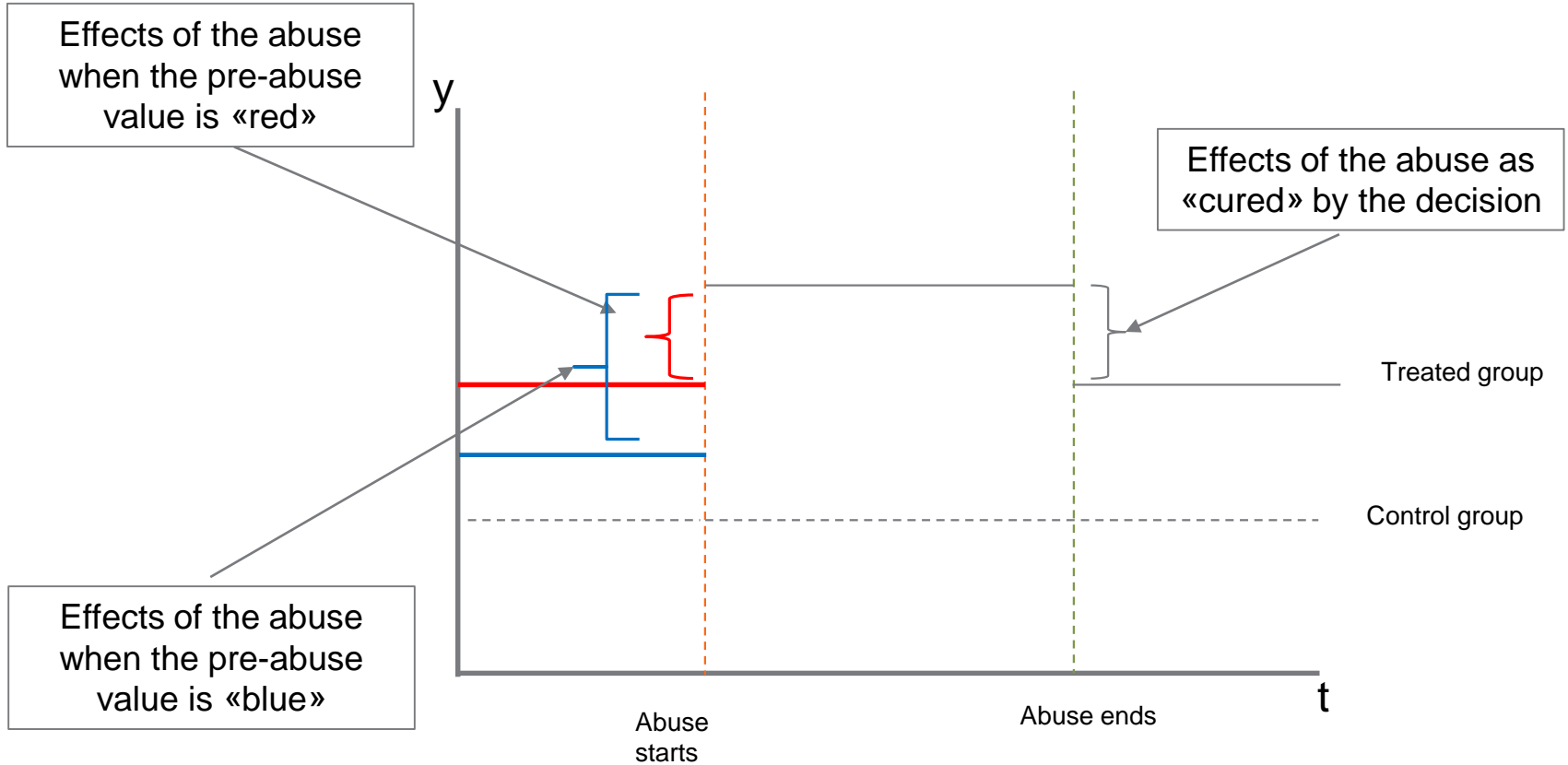
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- Let us now move to the first stage
- The effectiveness of the decision is unknown, and it is precisely what we want to understand.
- In this stage the abuse is the “treatment”
- Hence the effects of the abuse can be obtained by the following analysis

$$DiD_1 = (y_{At} - y_{Pt}) - (y_{Ac} - y_{Pc})$$

Exclusionary abuse (5/6)

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Exclusionary abuse (6/6)

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- The effectiveness of the decision is:

$$E = \frac{DiD_2}{DiD_1}$$

- If $E = 1$ the decision was **completely effective**, if $E = 0$ it was **totally inadequate**. If $E < 0$ it was **counterproductive**
- Note, however, that if $E = 0$, i.e. the decision has been ineffective, this does not imply that it was inappropriate. It may indicate that the intervention was unable to undue the competitive harm caused by the abuse
- We should bear in mind that the enforcement of articles 101 and 102 pursues also a **general deterrence** objective

Some Frequent Issues

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- It may happen that the abusive conduct was ended before it was able to harm consumers (think about a predatory strategy that is stopped at the beginning of the predation phase)
- In this case we cannot say that there was not an abuse or that the decision was ineffective (quite the opposite). It is like a prohibition of a merger... we need to rely on a different approach
- In many instances there is not a proper “before” period. Indeed, an abuse is often the reaction by the dominant firm to a new threat. Therefore, the period before the abuse is one in which there was neither the abuse nor the threat. It may happen that there is no way to use the before period to estimate the effects of the abuse
- We can rely only on the “during the abuse” period and the “after the decision” period. This means that we can only estimate the “effects of the abuse as affected by the decision”. Now if we find that there are some negative effects on consumers, we can state that the decision was able to remedy to some extent the abuse, but we cannot say to what extent
- If we find that there are no effects, there are three possible explanations: 1) the decision was so timely that the abuse did not produce any effect; 2) the decision was completely ineffective; 3) there was no abuse

Ex-post economic evaluation of State aid

Prepared for DG Competition's
webinar on the Ex-post economic
evaluation of European competition
policy

Nicole Robins, Partner

23 June 2020

Overview

A. Role of ex-post evaluations

B. Overcoming challenges encountered in ex-post evaluations

C. Considerations for future ex-post evaluations



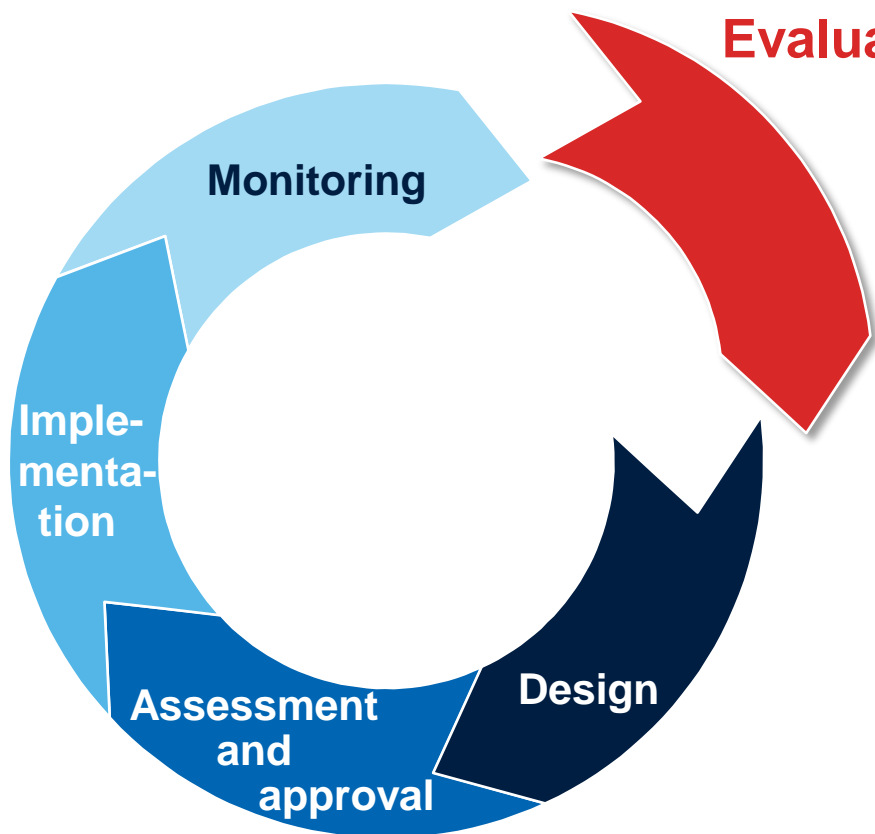
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The role of ex-post evaluations of aid (I)

The aim of the evaluation



Evaluation



Did aid alter the behaviour of the beneficiaries?
Were the objectives of the aid achieved?

Purpose: improve the effectiveness of public expenditure

Scope: large schemes (€150m+)

Evaluator: independent

Sources: European Commission (2014), 'State aid Modernisation', Northern Ireland State aid Awareness Seminar, 16 September; and European Commission (2014), 'Commission Staff Working Document, Common methodology for State aid evaluation', 28 May.

The role of ex-post evaluations of aid (II)

Evaluation questions



Direct effects

- what were the incentive effects?
- what impact has the aid had on beneficiaries?
- did the aid achieve its expected effects?

Indirect effects

- what was the impact on other firms or regions?
- what was the impact on competition and trade?
- has the aid contributed to the relevant policy objectives?

Proportionality and appropriateness of aid

- was the aid proportionate?
- was the most effective aid instrument selected?

European Commission (2014), 'Commission Staff Working Document, Common methodology for State aid evaluation', 28 May.

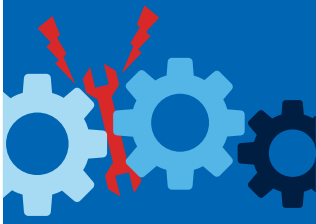
Overcoming challenges encountered in ex-post evaluations

Availability of data



- elements of evaluation plan formulated after aid scheme implemented
- insufficient data to use econometrics
- difficulties obtaining insights from multiple stakeholders

Methodological challenges



- no obvious control group to evaluate direct impact of aid
 - issues identifying appropriate counterfactual
- information asymmetries complicate assessment of efficiency of costs
- qualitative assessment only of impact of aid on competition



Overcoming some of the challenges

- combination of qualitative and quantitative analysis (e.g. interviews with market participants)
- mitigate bias in survey responses through interviews with range of stakeholders
- statistical analysis, particularly matching techniques, can be used to identify control group
- benchmark aid beneficiaries' costs against hypothetically efficient companies

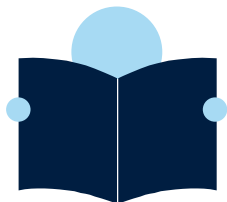
Looking forwards: key considerations for future ex-post evaluations (I)

- evaluators involved upfront in designing evaluation plan to ensure data collection processes in place to:
 - enable counterfactual to be identified
 - potentially introduce features into scheme to facilitate the evaluation
- steps to require parties to provide necessary data would enable more insightful evaluations
- evaluators to set out practical lessons available to aid grantors, covering data collection and assessment methodologies
 - e.g. lessons from assessment of impact of aid on competition:
 - assessment of whether aid changed behaviour
 - methodological issues (i.e. wide initial market definition, differing effects in short-run versus long-run, and impact on adjacent markets)¹

¹ See Oxera (2017), 'Ex post assessment of the impact of state aid on competition', November, available at: <https://ec.europa.eu/competition/publications/reports/kd0617275enn.pdf>.



Looking forwards: key considerations for future ex-post evaluations (II)



- previous evaluation reports readily accessible to aid grantors in different member states
 - insights from previous evaluation studies available to member states
- guidance about the use of results from ex-post evaluations, including implications for extension of existing schemes or new schemes
- ex-post evaluations offer member states opportunities to improve policy design and evidence-based decision making
- ex-post evaluations facilitate meaningful cross-EU comparisons of how member states approach the assessment of the effectiveness of different interventions



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Ex Post Evaluations: What is next?

Pierre Régibeau

June 23 2020

Why?

- To learn and improve our practice
- To enhance our legitimacy, both in the sense of “getting it right” and in the sense of obtaining significant welfare gains for EU citizens
- Required periodic impact assessments
- To address broader policy issues (i.e. deterrence, long term changes in market structure, Covid response....)

Where?

- More useful where the uncertainty is greater.
- Mergers: prospective by definition → we make many assumptions (demand, costs, entry, imports,.....). Moreover, the step from assumptions to conclusion is usually not straightforward. Requires the elaboration of a counterfactual
- Antitrust: amounts to evaluation of remedies. The counterfactual is more straightforward.
- State Aid: existing requirements for some schemes (incentive effects, large R+R or innovative features)
- New tools: market investigations, foreign subsidies

To Do What?

- Check assumptions
- Check counterfactual?
- Check outcome
- Address broader policy issues

Checking Assumptions

- Demand projections
- Imports
- Entry: interpretation can be tricky
 - No entry because no anticompetitive effect
 - No entry because not profitable anyway
 - → It would help to study in conjunction with outcomes (prices/profits)
- Reactions of rivals
- Business plans (State aid)

Counterfactuals

- Requires also looking at cases where we did not intervene.
- For State Aid: comparative performance.

Outcomes

- Prices
- Innovation
- Product Variety
- Important to tie these outcomes to the theories of harm.

Policy Studies

- Necessarily rely on information from a large number of individual cases → need for standard coding of information.
- Cases contain a wealth of information on demand, margins, prices, market shares. Diversion ratios, potential entry, market definition, theories of harm, efficiencies.....

New Tools

- Market Investigations: should include a mandatory review after a few years
- International subsidies: mostly look at broader issues such as the number of foreign takeovers of EU firms, EU firms' access to foreign markets, market shares of non EU firms in the EU (SOEs versus others etc...)
- It makes sense to already set up an ex post evaluation strategy when designing the new tool.

Data are the bedrock of ex post evaluation

- Most urgent task: agree on information to be coded and how to code it.
- Done in consultation with Cas and other competition authorities worldwide if possible.
- Apply to new cases.
- Over time: encode the backlog, possibly starting with “important cases” (e.g. phase II mergers).
- Broaden the number of past cases encoded

Leverage Academia

- Ex post evaluations are very labour intensive
- Here is great interest in academia
- → clearly identify confidential and non-confidential information
- Also set up “data room” type access?



Thank you



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