

**Institution: University of St Andrews**



**Unit of Assessment: 18 – Economics and Econometrics**

**Title of case study: Setting Penalties for Competition Policy**

**1. Summary of the impact** (indicative maximum 100 words)

The underpinning research arose from an ESRC-funded project on the “Optimal Design of Decision and Enforcement Procedures for Competition Policy” by Professor David Ulph (St Andrews) and Professor Yannis Katsoulacos (AUEB). This influenced the penalty policies of competition authorities in two countries: the Office of Fair Trading (OFT) in the UK and the Autorite de la Concurrence (AdC) in France. For OFT it contributed to the formulation of revised penalty guidelines, specifically a proposed increase in baseline penalty from 10% to 30%. For AdC it impacted on the formulation of the first penalty guidelines they published. Thus our research had impact on the only two major Competition Authorities in the world who revised penalty policy in last 5 years.

**2. Underpinning research** (indicative maximum 500 words)

Economics has a long-standing concern with the harm that can be caused by the lack of competition in particular markets, and it tries to identify both theoretically and empirically the conditions under which certain practices (e.g. mergers, bundling) are anti-competitive. Most advanced countries and many developing countries have competition authorities that enforce competition policy by identifying, stopping and penalising what are regarded as anti-competitive practices. Yet there had been comparatively little research into the welfare consequences of different ways of enforcing competition policy: choice of legal standard (Per Se vs Effects-Based); design of penalty regime; timing of interventions; nature of appeals procedures etc. Moreover, what research has been done in this area has typically been framed in the context of specific practices – e.g. mergers.

In 2006 Prof Katsoulacos, Athens University of Economics and Business (AUEB), and Prof D. Ulph, University of St Andrews (in post since 2006), began a systematic programme of research to provide a **general** framework (i.e. not tied to specific practice) in which these issues could be addressed. Their 2009 paper [1] established for the first time the precise conditions under which, generally, an Effects-Based legal standard would be better than a Per Se legal standard in terms of; (i) decision error costs, and (ii) deterrence effects. This led to successful application for ESRC funding for a 3-year project (starting Jan 2010) to extend their research in a number of directions. For example, their 2011 paper [2] showed that multi-stage decision processes - such as appeals - do not necessarily improve the outcomes of an Effects-Based legal standard.

As part of their project Professors Katsoulacos and Ulph committed to a process of knowledge exchange through regular meetings with both OFT and AdC. This engagement indicated that penalties was an area of active concern for both OFT and AdC.

Two major issues have arisen in the existing academic literature on the optimal penalties for anti-competitive behaviour.

(a) Legal Uncertainty. Effects-Based enforcement procedures are often criticised because they entail legal uncertainty. This means that, when deciding whether or not to take a specific action – e.g. merger - then, under an Effects-Based enforcement procedure, firms may not know (a) what decision a competition authority will make (should they be investigated) (b) the sort of evidence the authority will use in reaching its decision; (c) indeed firms may not even understand in what sense their action could be construed to be against the public interest (what have I done wrong?). It has been argued by some scholars that such legal uncertainty should lead to low/zero penalties. In their 2013 paper [4], Professors Katsoulacos and Ulph: (i) show for the first time how to formalise the idea of legal uncertainty and how to distinguish it from errors; (ii) develop its implications for both the choice of the appropriate level of penalties and the choice of legal standard. They establish the precise conditions under which legal uncertainty may lead to a zero penalty, but also show that penalties could be higher if there were legal uncertainty than if there were no legal uncertainty.

## Impact case study (REF3b)

(b) Level of Penalties It has also been argued that, across a wide range of competition authorities, existing penalties are too low to provide effective deterrence. Indeed some scholars have suggested that penalties should be 50% of revenue, or higher. However the existing literature on optimal penalties is based on the Economics of Crime and focuses on criminal activities such as robbery. It therefore ignores a crucial feature of economic crimes such as anti-competitive behaviour and their detection/punishment, which is the very long time periods over which both can take place. This means that firms can either be detected and penalised while the “crime” is being committed (caught red handed) or else detected and penalised long after they have ceased to practice the action. In their 2013 paper [3], Professors Katsoulacos & Ulph extend the existing literature theoretically and exploit a new data set to calculate the impact of these factors on penalties. They show that the optimal penalty should be around 75% of that produced by existing approaches and that the optimal penalty should therefore be between 27% and 35%.

### 3. References to the research (indicative maximum of six references)

As indicated, much of the research reported in Section 2 was undertaken as part of an *ESRC-funded* project: “Optimal Enforcement and Decision Structures for Competition Policy” *ESRC*, RES-062-23-2211, £137,054.00; 1/01/10 – 31/12/2012. Principal Investigator: D. Ulph Co-Investigator Y. Katsoulacos

[1] Y. Katsoulacos and D Ulph, “On Optimal Legal Standards for Competition Policy: A General Welfare-Based Analysis” *Journal of Industrial Economics*, 2009, Vol 57, Issue 3, pp 410-437. DOI: [10.1111/j.1467-6451.2009.00393.x](https://doi.org/10.1111/j.1467-6451.2009.00393.x)

[2] Y. Katsoulacos and D Ulph, “Optimal Enforcement Structures for Competition Policy: Implications of Judicial Reviews and of Internal Error Correction Mechanisms” *European Competition Journal*, 2011, vol 7, No.1 pp 71-88. DOI: [10.5235/174410511795887624](https://doi.org/10.5235/174410511795887624)

[3] Y.Katsoulacos and D.Ulph “Antitrust Penalties and the Implications of Empirical Evidence on Cartel Overcharges” *Economic Journal*, 2013 DOI: [1111/ecej12075](https://doi.org/10.1111/ecej12075)

#### Article in refereed Law and Economics Books

[4] Y. Katsoulacos and D Ulph, “Legal Uncertainty and the Limits to Effects-Based Standards” in *Research Handbook in European Competition Law*, Volume II, edited by I. Lianos, and D. Geradin Edward Elgar, 2013, Chapter 11, pp584-592.

The *Economic Journal* is a core general journal. *Journal of Industrial Economics* is one of the top field journals in Industrial Economics, while the *European Competition Journal* is a leading field journal in the area of Competition Policy with articles by both academics and practitioners. The ranking of these journal articles is 3\*,2\*,3\* respectively.

### 4. Details of the impact (indicative maximum 750 words)

The underpinning research conducted by Professors Katsoulacos and Ulph influenced changes that both OFT and AdC were making to their penalty policies. For OFT it contributed to the formulation of revisions to their published penalty guidelines, and specifically a proposed increase in baseline penalty from 10% to 30% of revenue. For AdC it helped shape the formulation of the penalty guidelines that they published for the first time.

Since other major competition authorities– e.g. the European Commission’s Competition Authority, (DGComp) - currently use a low 10% penalty, the arguments and research could convince other authorities to raise their penalties. Any major change in policy by organisations such as OFT and AdC will be subject to vigorous debate and a vast range of often conflicting advice. Some of this will arise through internal organisational discussions as the policy is being developed. But it can also arise after the policy has been announced and so is subject to external scrutiny and comment. Research can therefore impact on the final policy that is adopted both by shaping the initial policy formulation that is announced (and finally agreed) and also by convincing the organisation that there are robust defences against the arguments that oppose the initial policy that is proposed.

However since the underpinning research by Professors Katsoulacos and Ulph was undertaken at the same time as the policy changes were being considered/proposed, and was published only after the policy was announced/implemented – the impact arose as a result of knowledge exchange activities with both OFT and AdC that was undertaken by Professors Katsoulacos and Ulph in the course of the research. Consequently the supporting documents refer to these engagement activities rather than the subsequent publications.

The underpinning research conducted by Professors Katsoulacos and Ulph shaped OFT's decisions in two ways, and through both these channels identified above.

The first research impact arose through the demonstration that Legal Uncertainty could not be used as a general argument for keeping penalties low. At a meeting in Dec 2010 with OFT's Head of Economics, Professors Katsoulacos and Ulph presented some early findings from their research on legal uncertainty and penalties. The Head of Economics was intrigued by their result that, while legal uncertainty may sometimes be an argument for zero penalties, there were other circumstances under which it might lead to higher penalties [4]. This ran counter to the prevailing view amongst many legal scholars that legal uncertainty would always be an argument for low penalties – a view that had support amongst those in OFT arguing against the proposal to raise penalties. The Head of Economics at OFT thought this work should be presented at greater length to a wider OFT audience that included other policy analysts involved in the review of penalty policy. This presentation took place in January 2011.

In October 2011 OFT published a consultation document on its draft revised penalty guidance. Consistent with the research findings of Professors Katsoulacos and Ulph, OFT announced its intention to raise penalties. However, in para 4.7 of the consultation document, it argues that “*genuine uncertainty on the part of the undertaking as to whether the agreement or conduct constituted an infringement*” could be a mitigating factor in favour of a lower penalty. This describes precisely the type of uncertainty under which the research by Professors Katsoulacos and Ulph suggests that a zero penalty MAY be warranted – though their research indicates that further conditions need to be met to warrant a zero penalty. And indeed OFT does not propose to automatically reduce penalties under this type of uncertainty – it just indicates that it might do so. So the policy formulation is precisely that proposed in the research by Professors Katsoulacos and Ulph. Evidence that the proposed policy was shaped by the research findings on the issue of Legal Uncertainty comes in a letter from OFT's Chief Economist who states that the January 2011 presentation “*was helpful in clarifying our thinking about the role of legal uncertainty and ultimately helped confirm our decision to propose higher starting point penalties.*” [S1]

The second area of impact came by confirming OFT's decision to propose a figure of 30% as the appropriate penalty. The impact came through the evidence submitted by Professors Katsoulacos and Ulph in January 2012, in response to OFT's consultation. In the consultation document OFT provided no indication as to why 30% was the appropriate figure. In their evidence Professors Katsoulacos and Ulph reported on calculations they had undertaken of what implications flowed from their analysis of optimal penalties – work that was subsequently published in an academic paper [3]. The analysis and calculations by Professors Katsoulacos and Ulph showed that while optimal penalties could be higher than the 30% figure proposed by OFT, their proposed figure lay within a reasonable range of values.

Evidence that our advice had an impact through confirming OFT's view that 30% was a defensible figure comes from the letter from OFT's Chief Economist which states “*We found this helpful in terms of contributing to a balanced range of views on our proposals because many of the submissions were arguing against our proposals to raise the penalty starting point, whereas in their submission Professors Katsoulacos and Ulph put forward arguments and calculations that suggested that the optimal baseline penalty might if anything be somewhat higher than the 30% proposed in our consultation document, in particular for infringements that suffer from low detection rates.*” [S1]

In France, the AdC has never published guidance on how penalties would be determined. Research by Professors Katsoulacos and Ulph had an impact on the internal debates taking place within AdC by demonstrating the value of reducing certain types of legal uncertainty through publishing guidelines [4], and by setting out the factors that should be used to determine the optimal penalties [3]. Although the guidelines are heavily constrained by the French legal code, nevertheless evidence that our research had such an impact on AdC's penalty guidelines comes in a letter from AdC's Chief Economist which states “*Discussion on the topic of fine setting was extremely interesting and timely as the Autorité was in the middle of a process to write its own sentencing guidelines (this was ultimately done in May 2011). Although our guidelines on the setting of fines for anticompetitive behaviour were primarily driven by the legal requirements of the French Code of Commerce and our past case law, all the discussions that we have had with – among other – academic economists (and therefore with Professors Katsoulacos and Ulph) have*

**Impact case study (REF3b)**

*greatly influenced our discussions internally and helped thus drafting our guidelines.” [S2]*

**5. Sources to corroborate the impact** (indicative maximum of 10 references)

[S1] A letter from the Chief Economist of OFT The statement which testifies to:

- (i) our active engagement with the Office of Fair Trading on our research as it developed, and so an understanding of our findings prior to publication;
- (ii) the impact our research has had on their thinking and decisions in relation to raise the baseline penalty to 30%.

[S2] A similar letter the Chief Economist at AdC which testifies to:

- (i) our active engagement with the Autorite de la Concurrence on our research as it developed, and so an understanding of our findings before they were published;
- (ii) the impact our research has had on their thinking and decisions in relation to the publication of penalty guidelines.