



# Concurrences

ANTITRUST PUBLICATIONS & EVENTS

## Competition and Regulation in Network Industries

Essays in Industrial Organisation

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Jean-Marc Zogheib

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Foreword by Marc Bourreau

Introduction by Frédéric Marty

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# Competition and Regulation in Network Industries

*Essays in Industrial Organisation*

Jean-Marc Zogheib

*Foreword by Marc Bourreau*  
*Introduction by Frédéric Marty*

Concurrences, 2021



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# INTRODUCTION

It was a great honour for me to chair the first jury established by the journal *Concurrences* to award a thesis prize in economics.

This prize is now taking its place alongside the one awarded for many years in law and, in my opinion, testifies to the transdisciplinarity intrinsic to our field. In the same way that legal doctrine feeds on decision-making practice and fertilises it in return, economics is even more accurate in terms of understanding market strategies and effective in terms of public policy recommendations and of legal frameworks evolutions' proposals when it resolutely engages in a dual dialogue with legal sciences and the practice of jurisdictions.

This legal economic-nexus was at the heart of the approach of the American institutionalist economists who in the 1920s coined the term law and economics. Such an approach at the confluence of economics, law and competition practice is not the prerogative of law and economics alone. This is naturally also true for the *Concurrences* prize. It is intended to cover a broad disciplinary spectrum from political economy to industrial economics.

This is the framework for the thesis of Jean-Marc Zogheib, who was the winner of our first prize and of this first publication. Beyond its exceptional formal qualities and the rigour of its approach, which readers will discover upon reading this work, a few points seem essential to me. This work covers – through the modelling tools used in IO – a particularly representative field of the possible contributions of economic analysis to competition and regulatory law issues.

One of the major interests of Jean-Marc Zogheib's work is to show the extent to which regulatory and competition policies are intertwined and must be considered as complementary rather than substitutable instruments. The current debates on the Digital Markets Act show the need to reconsider this link between *ex ante* and *ex post* interventions, which is a key factor not only for the distribution of tasks between the various public policies but also for the enforcement of competition policies, which by their very nature play on both dimensions.

This articulation between *ex ante* and *ex post* is one of the structuring lines of this book in each of the three essays that structure it and which, as we have noted, cover a wide spectrum of competition issues. The first essay deals with merger control, the second with the framework for state aid and the third with the integration of possible exploitative practices related to data in the implementation of mergers' control in digital markets.

The first contribution deals with merger control. It highlights the impact of control on firms' strategies by showing how they internalise the constraints in their decision-making. The model developed by Jean-Marc Zogheib is based on a trade-off between a merger-acquisition project in the same regional area or in a territory located elsewhere. He shows that the relative rigour of merger control may lead firms to favour the second type of project despite lower efficiency gains.

The second contribution shifts the focus to the area of state aid regulation by considering investments in network infrastructure. Once again, the connections with the major issues related to the reconciliation between firms' strategies and competition policy are at the heart of the analysis. It is not a question here of reconciling industrial policy and competition policy as in the first essay. It is a question here of reconciling competition (and sectoral liberalisation) with the assumption of responsibility for regional development policies and therefore for territorial economic attractiveness. The case in hand is that of the complementarity of public and private investment in the deployment of very high-speed telecommunications infrastructures. The parallel with the deployment plans implemented at national and EU level shows the interest of economic reflection on the subject. Public intervention must be adjusted and proportionate to correct market failure.

The third essay sheds light on another decisive dimension of current competitive issues, which is the functioning of digital markets and the regulation of the practices of dominant firms with regard to both their commercial partners and consumers. These anti-competitive practices include exploitative practices that do not result in overpricing but in excessive data extraction. The damage to the consumer takes the form of damage to privacy, the effects of which will depend on whether or not the consumer is on one or more platforms (i.e. whether he or she chooses to opt for single or multi-homing). This last chapter considers the impacts of mergers not only from the point of view of their impact on prices but also from the point of view of the protection of privacy as a function of consumers' choice between single and multi-homing.

It is therefore a tour de force that Jean-Marc Zogheib has succeeded in achieving in his thesis such an overview of everything that IO can contribute to the competition law related issues. The quality of this work lies in this precious combination of rigorous economic analysis and openness to current competitive and regulatory issues. His work shows that economics can contribute some essential building blocks to the construction of competitive reasoning and symmetrically that the integration of competition law into economic models contributes to extending their scope and collective usefulness.

**Frédéric MARTY**

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Board Member, French Competition Authority

# FOREWORD

It is with great pleasure that I write the preface to this book by Mr. Jean-Marc Zogheib, which results from the doctoral research that I had the honour of supervising. This publication represents a significant achievement of research done with great talent on innovative and policy relevant subjects.

In his research, Mr. Zogheib focuses on network industries, such as telecommunications or the digital sector. Network industries are particularly dynamic and innovative and represent an essential source of growth for our economies. Network industries are characterised by economies of scale and scope in the production of products and services, and network effects in the consumption of goods, generating increasing returns for firms. Increasing returns imply a strong tendency towards concentration, with the emergence of natural monopolies in extreme cases. As a result, firms in network industries may acquire strong market power, raising concerns from competition and regulatory authorities. The general objective of Mr. Zogheib's research is to study the interplay between public policy and firms' strategies in network industries. How do firms react to the rules set by public policy? If their strategic reaction is accounted for, are the objectives of public intervention still being achieved?

A great strength of Mr. Zogheib's research is that he combines various tools of theoretical economic analysis – adopted from industrial economics, network economics and platform economics – to shed light on highly topical issues in the telecommunications and digital sectors.

Mr. Zogheib's thesis consists of three distinct parts, each focused on a specific research topic.

In the first chapter of his thesis, Mr. Zogheib examines how merger control can affect a firm's choice between a local, in-market merger and a cross-border merger. Mr. Zogheib argues that cross-border mergers represent a higher level of risk for firms than in-market mergers. For example, a firm may imperfectly anticipate the organisational difficulties of a cross-border merger due to a lack of relevant information on the foreign market. If the cross-border merger fails, the merging firm may exit the foreign market by selling its foreign subsidiary to a local player, leading to a merger in that market. However, if the merger control policy is particularly strict, the outcome of this local merger may be uncertain. In that case, the firm faces a barrier to exit (by merger), and from an ex-ante perspective, a barrier to entry through cross-border mergers. In this work, Mr. Zogheib highlights that merger policy may affect firms' entry strategies – whether they are local or cross-border – by raising barriers to exit by merger.

In the second chapter, Mr. Zogheib focuses on the role of public players in the deployment of new network infrastructures, such as fibre access networks. The very high rollout costs of network technologies have pushed public players to invest alongside private players to accelerate and expand deployments. In this context, Mr. Zogheib studies how the coexistence of private and public players affects competition and investment

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strategies. Mr. Zogheib shows that the competition from private operators weakens the position of public players, making it difficult for them to break even. A public player must then react either by increasing the price of its services or by reducing its investments, for example, by giving up covering the most remote and costly areas for network deployment. Competition between public and private players seems therefore counterproductive to achieve large coverage. Mr. Zogheib shows that, for example, the deployment of the infrastructure by a public monopoly would be a preferable solution, leading to wider network coverage. For fibre access networks, this is the choice made by some industrialised countries, such as Australia and New Zealand.

The third and final chapter of the thesis focuses on the role of privacy in the competition between digital platforms, when consumers can use a single service or several. In this context, Mr. Zogheib examines the competition between platforms, both on the prices they charge to consumers and on the level of privacy protection they offer. The level of privacy protection dictates to which extent a firm monetises the data it collects from its customers to improve the quality of service. Mr. Zogheib shows that firms adopt either a business model with high privacy protection and high prices, or a business model with low prices and the monetisation of consumer data. Mr. Zogheib then shows that a merger between platforms steers players towards the second business model, the one that is less protective of consumer privacy. The merger can therefore lead to significant harm for consumers in terms of privacy. Mr. Zogheib's research shows the importance of considering the role of consumer data in the competitive analysis of mergers in the digital sector.

The three topics addressed in the thesis are novel and important for the academic research in economics. However, they also provide valuable insights for competition policy and the regulation of network and digital industries.

The thesis has been awarded the Concurrences Prize by leading competition law and economics scholars. The first chapter has also been published independently in a peer-reviewed scientific journal, and the other two chapters have been presented at prestigious conferences.

It remains for me to wish Mr. Jean-Marc Zogheib the best of success in his future professional career.

**Marc BOURREAU**

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Academic Co-Director of the CERRE

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While particularly dynamic and innovative, the digital and telecommunication industries are found to have a great tendency towards concentration, resulting in strong market power and raising concerns from competition and regulatory authorities. In this study focusing on such network industries, Jean-Marc Zogheib explores the interplay between public policy and firms' strategies by combining various tools of theoretical economic analysis adopted from industrial economics, network economics, and platform economics. Mr. Zogheib's thesis consists of three distinct essays: the first chapter examines how merger policy affects firms' entry strategies, the second chapter shifts the focus to public intervention by considering how the coexistence of private and public players affects competition and investment, while the third chapter investigates the role of privacy in competition between digital platforms and the importance of consumer data in the competitive analysis of mergers. This book clearly illustrates how economics can contribute essential building blocks to the construction of competitive reasoning and how the integration of competition law into economic models extended their collective utility. An important read for lawyers and economists alike.

The book was awarded the inaugural Conurrences PhD Award in Economics.

*Jean-Marc Zogheib is an assistant professor in economics at Paris Nanterre University. He holds a Master's degree in Economics from Toulouse School of Economics and completed a Ph.D. in Economics at Telecom Paris in partnership with Orange. His research interests include competition policy and regulation linked to network industries, digital economics, and economics of privacy.*

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