

ÁNGEL LUIS LÓPEZ

CURRENT POSITION

Post-doctoral researcher at IESE Business School, Barcelona, Spain

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Public - Private Sector Research Center
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PERSONAL INFORMATION

Year of birth: 1978
Gender: male
Citizenship: Spanish
Marital status: married

DOCTORAL STUDIES

Toulouse School of Economics (TSE), France
PhD, Economics, September 2002 – June 2007
Summa cum laude (mention très honorable avec félicitations du jury)
THESIS: “Interconnection and the Dynamics of Competition in Telecommunications”

REFERENCES:

Professor Patrick Rey (thesis advisor)
Toulouse School of Economics
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PRIOR EDUCATION

July, 2004	DEEQA (M.Phil) in Mathematical Economics and Econometrics, Toulouse School of Economics, France
July, 2003	M.Sc. Transports and Networks Industrial Economics, Toulouse School of Economics, France
July, 2002	M.Sc. Economic Analysis, University of Las Palmas, Spain
July, 2000	B.S. Economics, University of Las Palmas, Spain

FIELDS

Primary Fields: Industrial Organization, Microeconomics
Secondary Fields: Banking, Energy, Payment Systems, Telecommunications

TEACHING EXPERIENCE

2010-2011	Networks and Standards (graduate studies, PhD program), IESE Business School, teaching fellow for Professor Xavier Vives, 2 academic years
2008-2011	Telecommunications Economics (graduate, MSc Industrial Economics), University of Valencia, guest professor, 4 academic years
2008	Telecommunications Economics (graduate studies, PhD program), IESE Business School, teaching fellow for Professor Xavier Vives
2001	Macroeconomics (undergraduate), University of Las Palmas, teaching fellow for Professor José Antonio Hernandez

FELLOWSHIPS AND RESEARCH GRANTS

2011	Summer grant. NET Institute 2011
2010	Summer grant. NET Institute 2010
2009-2011	“Juan de la Cierva” research fellowship from the Spanish Ministry of Science and Innovation
2008-2011	Participation in R&D project: “Advances in Industrial Economics, Game Theory and Finance”, ECO2008-05155 (Spanish Ministry of Science and Innovation). Directed by Xavier Vives.
2005-2007	Fellowship “Fundación Caja Madrid” for Ph.D. programs abroad.
2002-2004	Research Fellowship at University of Las Palmas, Spain
2001-2004	Research Grant, Project: “Liberalization / Regulation of Telecommunication Sector in Spain”
2001-2002	Research Fellowship of the Applied Economic Analysis Department, University of Las Palmas, Spain

PUBLICATIONS

The Welfare Effects of Mobile Termination Rate Regulation in Asymmetric Oligopolies: the Case of Spain, with Sjaak Hurkens.

Telecommunications Policy, forthcoming.

We examine the effects of mobile termination rate regulation in asymmetric oligopolies. We do this by extending existing models of asymmetric duopoly and symmetric oligopoly where consumer expectations about market shares are passive. We first calibrate product differentiation parameters using detailed data from the Spanish market from 2010. Next, we predict equilibrium outcomes and welfare effects under alternative scenarios of future termination rates. Lowering termination rates typically lowers profits of all networks and improves consumer and total surplus.

Government, taxes and banking crises, with Augusto Hasman and Margarita Samartín.

Journal of Banking & Finance, Volume 35, Issue 10, October 2011, pp. 2761-2770.

This paper analyzes the effectiveness of different government policies to prevent the emergence of banking crises. In particular, we study the impact on welfare of using taxpayers’ money to recapitalize banks, government injection of money into the banking system through credit lines, the creation of a buffer and taxes on financial transactions (the Tobin tax). We illustrate the trade-off between these policies and derive policy implications.

Asymmetric access pricing in the Internet backbone market.

Economics Letters, Volume 112, Issue 1, July 2011, pp. 3-6.

To allow customer interaction Internet service providers must connect their customers with customers of competitors. Laffont et al. (2003) consider a framework in which two network operators engage in a paid peering interconnection regime and compete on the two sides of the market: consumers and websites. I extend their analysis to asymmetric but reciprocal access pricing in the presence of an arbitrary number of network operators. For a particular combination of access charges in the industry, I construct an equilibrium in which competition

is foreclosed by a pair of networks or one side of the market is cornered by one network. I also show that if the reciprocal access charge of a pair of networks departs away from a given symmetric access charge, then the two networks are driven out of one side of the market.

Mobile termination rates and the receiver-pays regime.

Information Economics and Policy, Volume 23, Issue 2, June 2011, pp. 171-181.

The European Commission has recently invited national regulatory authorities to decrease access charges to the cost of an efficient operator. Some large operators warned regulators and users that cutting access charges could result in the US style business model, where mobile users pay for both making and receiving calls. I show that mobile operators charge for incoming calls when the access charge is below cost even if receivers can hang up. In such a case profits are neutral with respect to the level of the access charge. I further show that 'bill and keep' is a constrained social optimum when the call externality is strong, even if receivers pay and can hang up. Finally, I discuss the policy implications of these results.

Selecting effective divestments in electricity generation markets, with Giulio Federico.

European Transactions on Electrical Power, Volume 21, Issue 6, September 2011, pp. 1914-1922.

We study the impact of electricity divestments in a stylised model where a dominant producer faces a competitive fringe with the same cost structure and is forced to sell some of its capacity. For a given demand level, the divestment which achieves the greatest reduction in prices can be several times more effective in reducing prices than a divestment of baseload (or low-cost) plants. We extend this theoretical result to the case with variable electricity demand by considering a numerical example based on data from the Italian market.

RESEARCH PAPERS

Mobile Termination, Network Externalities, and Consumer Expectations, with Sjaak Hurkens (JOB MARKET PAPER).

We re-examine the literature on mobile termination in the presence of network externalities. Externalities arise when firms discriminate between on- and off-net calls or when subscription demand is elastic. This literature predicts that profit decreases and consumer surplus increases in termination charge. This is puzzling since in reality regulators are pushing termination rates down while being opposed to do so by network operators. This puzzle is resolved when consumers' expectations are assumed passive but required to be fulfilled in equilibrium (as defined by Katz and Shapiro, AER 1985), instead of being rationally responsive to non-equilibrium prices, as assumed until now.

Using future access charges to soften network competition.

(Revise and Resubmit: The Journal of Industrial Economics)

This article analyses network competition in a two-period model in which consumers face costs of switching from a network to another. I show that (even symmetric) networks with full participation can use reciprocal access charges to soften competition in two-part tariffs. In particular, the total discounted profit increases when the second-period access charge departs (in any direction) from the marginal cost. This result holds both for naive and rational consumer expectations, and has clear policy implications.

Optimal asset divestments with homogeneous products, with Giulio Federico.

(Revised and Resubmitted: International Journal of Industrial Organization)

We study alternative market power mitigation measures in a homogenous goods industry where productive assets have asymmetric costs. We characterise the asset divestment by a dominant firm which achieves the greatest reduction in prices (taking the size of the divestment as given). The optimal divestment entails the sale of assets whose costs are close to the post-divestment price (i.e. they are price-setting). A divestment of this type can be several times more effective in reducing prices than divestments of low-cost assets. We also establish that virtual divestments (often employed in the power industry) are at best equivalent to low-cost

divestments in terms of their impact on consumer welfare, and cannot replicate the optimal divestment.

Foreclosing Competition through Access Charges and Price Discrimination, with Patrick Rey.

This article analyzes competition between two asymmetric networks, an incumbent and a new entrant. Networks compete in non-linear tariffs and may charge different prices for on-net and off-net calls. Departing from cost-based access pricing allows the incumbent to foreclose the market in a profitable way. If the incumbent benefits from customer inertia, then it has an incentive to insist on the highest possible access mark-up even if access charges are reciprocal and even in the absence of actual switching costs. If instead the entrant benefits from customer activism, then foreclosure is profitable only when switching costs are large enough.

Who should pay for two-way interconnection?, with Sjaak Hurkens.

We analyze how interconnection fees affect retail prices when taking into account that receivers derive some utility from a call and when firms may charge consumers for receiving calls. We assume that consumers form expectations about network sizes in a passive, but ex-post rational way. We show that the receiver-pays regime enlarges the set of equilibria compared to the caller-pays regime. For a given interconnection fee and inelastic subscription demand, the receiver-pays regime allows firms to obtain higher profits at the expense of consumers. Socially optimal interconnection fees are below cost and lower under the caller-pays regime than under receiver-pays regime. We also analyze elastic subscription demand. Total surplus, consumer surplus, and market penetration are all maximized by the same positive but below cost interconnection fee. Firms' profits typically increase when the interconnection fee is removed away from the socially optimal one, in either direction.

Banking Crises and the Government Policy Dilemma, with Augusto Hasman and Margarita Samartín.

In this paper we address the problem of resolving banking crises from the government perspective. The main idea of this paper is that "no rescue" is a no credible policy option. In addition, we introduce the moral hazard problem, inherent in the banking system, and consider the interaction between regulation, policy measures and banks' behaviour. We model an economy with a continuum of risk averse agents (or depositors) and risk neutral investors (or bankers). Consumers have the standard Diamond Dybvig preferences. In addition, there is a government that raises taxes so as to provide public services. Banks have access to illiquid long-term investment projects that allow depositors to increase their expected welfare. Bankers, anticipating a government bail out in case of a banking crisis, might also invest in a gambling asset when they are insufficiently capitalized. We analyze the effectiveness of the different policy measures available to the government for preventing systemic banking crises such as using taxpayers' money to recapitalize banks, taxes on financial transactions (the "Tobin Tax"), suspension of convertibility or increasing capital requirements.

RESEARCH IN PROGRESS

Network Competition and Customer Poaching.

This paper analyzes poaching (i.e., when firms offer rivals' customers special discounts to switch) in the context of a network competition model. I explore how the incentives for firms to poach the customers of their competitors are affected by the level of the access charge. To analyze this issue, I consider a Hotelling model of duopoly network competition (as in Laffont, Rey and Tirole, 1998a,b) and, then I examine poaching as in Fudenberg and Tirole (2000). Preliminary results show that the level of the access charge affects the regions where firms find it profitable to poach the customers of their competitors.

R&D Cooperation, Spillovers and Antitrust Policy, with Ramon Faulí-Oller and Xavier Vives.

It is an old suspicion that cooperation on R&D may facilitate coordination in the product

market (see e.g. Pfeffer and Nowak [1976], Grossman and Shapiro [1986], Jacquemin [1988], Brodley [1990], Geroski [1992], and Jacquemin and Soete [1994]). If this suspicion turns out to be true, policy recommendation on allowing for R&D cooperation should be reconsidered as it should balance a trade-off between market power and efficiency. In that sense, there is growing evidence that research joint ventures facilitate collusion in the product market. Nonetheless, earlier writings have separately considered the cooperative/non-cooperative firms' behaviour at the R&D and output/price setting stage. In contrast, in this paper we consider explicitly that cooperative behaviour on R&D and product market cannot be disentangled. In this context, it is (even for high spillovers) unclear whether cooperative R&D is welfare enhancing. The objective of this paper is therefore to examine under what circumstances allowing for some degree of cooperation enhances social welfare.

PUBLICATIONS IN SPANISH

Book/Report: Competition and Regulation in Spanish telecommunications markets
Informes del Centro Sector Público – Sector Privado, 3, 2009. IESE Business School.

Since the liberalization of the Spanish telecom sector in 1998, a growing number of operators have entered the market and prices have come down. However, market concentration and prices in the sector are generally still higher than the European average, and take-up rates lag behind. The report aims to contribute to the debate over which measures should be taken to offset these imbalances and meet the latest challenges. In particular, the report calls attention to subscription-based audiovisual content, next-generation networks and the process of technological convergence.

Precios de terminación de llamada en telefonía móvil. Sus efectos sobre la competencia y el bienestar social.

Cuadernos Económicos de ICE, Volume 81, June 2011, pp. 71-101.

Despliegue de redes de telecomunicaciones y difusión de banda ancha.

Economistas “España 2008. Un balance”.

Inversión en banda ancha: Competencia en infraestructuras y competencia en servicios,
with Xavier Vives.

Economistas “España 2007. Un balance”.

Impacto de la Liberalización en el Sector de las Telecomunicaciones, with Augusto Hasman.
Economistas “España 2006: Un balance”.

PRESENTATIONS TO BUSINESS EXECUTIVES

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| May, 2011 | IESE – XVII Meeting of the Telecommunication Sector and Information Society. Presentation “An introduction to Net Neutrality”, Madrid, Spain |
| April, 2011 | IESE – Continuous Education Session for IESE Alumni in Barcelona. Presentation “Public-Private Partnership in the deployment of next generation networks”, Barcelona, Spain |
| June, 2010 | IESE - XVI Meeting of the Telecommunication Sector (The impact of the audiovisual revolution) Presentation: “New Competitive Environment”, Madrid, Spain |
| March, 2010 | IESE – Continuous Education Session for IESE Alumni in Barcelona. Presentation: “Spanish Telecommunication Sector: Current Situation and Prospects”, Barcelona, Spain |
| October, 2009 | IESE (SP-SP Research Center) – Fundación Rafael del Pino. Presentation: Report “Competition and regulation of Spanish Telecommunication markets”, Madrid, Spain |
| July, 2009 | “Cercle per al Coneixement” (Circle of Knowledge) – Barcelona Breakfast. Presentation: Report “Competition and regulation of Spanish Telecommunication markets”, Barcelona, Spain |
| March, 2009 | Network for Economic Research on Electronic Communications. |

Presentation: “The Ladder of Investment in Spain”, Madrid, Spain

CONFERENCES AND WORKSHOPS

(P) – Presentation, (D) – Discussion

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|-------|--------------------------------|--|
| (P) | August, 2011 | EEA11 (26 th Annual Congress of the European Economic Association), University of Oslo, Norway |
| (P&D) | March 31st and April 1st, 2011 | 2 nd Workshop on the Economics of ICTs, University of Évora (CEFAGE), Portugal |
| (P) | March, 2011 | Workshop in Economy of Telecommunications, The Spanish Telecommunications Market Commission (CMT), Pompeu Fabra University, Barcelona Graduate School of Economics & FEDEA, Spain |
| (P) | March, 2011 | Economics of Communications and Media markets: from theory to practice, Florence School of Regulation Communications & Media (European University Institute), Italy |
| (P) | February, 2011 | Workshop on Telecommunications Economics, University of Barcelona, Spain |
| (P) | July, 2010 | 8 th ZEW Conference on the Economics of Information and Communication Technologies, Centre for European Economic Research (ZEW), Mannheim, Germany |
| (P) | September, 2009 | XXIV Jornadas de Economía Industrial (Industrial Economy Conference), University of Vigo, Spain |
| (P) | September, 2009 | EARIE09 (36th Annual Conference), Ljubljana, Slovenia |
| (P) | August, 2009 | EEA09 (24th Annual Congress of the European Economic Association), Barcelona, Spain |
| (P) | June, 2009 | Conference on the Economics of Information and Communication Technologies, TELECOM ParisTech, France |
| (P) | April, 2009 | Telecommunications Conference: current situation of national and international markets, University of Barcelona and The Spanish Telecommunications Market Commission (CMT), Spain |
| (P) | February, 2009 | Workshop on the Telecoms Industry, IESE Business School, Spain |
| (D) | September, 2008 | XXIII Jornadas de Economía Industrial (Industrial Economy Conference), University of Rovira i Virgili, Spain |
| (D) | May, 2008 | Workshop: Industrial Organization and Health, IESE Business School, Spain |
| (D) | April, 2008 | Privatization, Partnership and Public Delivery (PPPSD): Government and Governance, Centre for Economic Policy Research (CEPR) and the Public-Private Sector Research Center, IESE Business School, Spain |
| (D) | March, 2008 | IO Contracts and Organization, IESE Business School, Spain |
| (P) | January, 2008 | Competition and Regulatory Policy Workshop (CCRP: Centre for Competition and Regulatory Policy, City University London and University of Las Palmas), University of Las Palmas, Spain |
| (P) | June, 2007 | Conference on the Economics of ICT, Telecom Paris, France |
| (P) | December, 2006 | XXXI Symposium of Spanish Economic Association (SAEe), University of Oviedo, Spain |
| (P) | December, 2004 | XXIX Symposium of Spanish Economic Association (SAEe), University of Navarra, Spain |

(P) September, 2002 ITS 13th European Regional Conference & EARIE, Madrid, Spain

SEMINAR PRESENTATIONS

October, 2011 Institute for Economic Analysis (CSIC) & Autonomous University of Barcelona, Spain
November, 2009 University of Las Palmas, Spain
October, 2009 University of Valencia, Spain
October, 2009 Technical University of Lisbon/IST, Portugal
March, 2009 Fedea (Foundation for Applied Economic Studies), Spain
November, 2008 Pompeu Fabra University, Spain
October, 2008 IESE Business School (SP-SP Research Center), Spain
December, 2007 IESE Business School (SP-SP Research Center), Spain
November, 2007 University of Valencia, Spain
May, 2007 LECG, Madrid, Spain
March, 2007 University of Rovira i Virgili, Spain

INVITED TO ATTEND

July, 2011 European Summer Symposium in Economic Theory, Study Center Gerzensee, Switzerland
April, 2009 Workshop on Telecommunications Economics, COST Network (Econ@Tel), Telecom ParisTech, France
February, 2009 Conference on “Producers and Distributors: Can Regulation of Retail Help Better Regulation of the Internet?”, Chaire Innovation et Régulation, Paris School of Economics, France
November, 2008 Workshop on “Next Generation Access Networks”, ENTER (IE Business School) and NEREC, Spain

EXPERIENCE IN ORGANISING ACADEMIC EVENTS

October, 2010 “Armand Carabén” Workshop on Sports Economics, IESE Business School. 8 papers & 8 discussants Coordinator
February, 2009 Research Workshop on the Telecoms Industry, IESE Business School. 4 papers & 4 discussants Coordinator
June, 2008 Research Workshop on Industrial Organization, IESE Business School. 8 papers & 8 discussants Coordinator
2007-2011 Lunch Seminar Program, SP-SP Research Center, IESE Business School Coordinator

REFEREEING

Information Economics and Policy, International Review of Law and Economics, Journal of Applied Economics, Journal of Economics & Management Strategy, Journal of Institutional and Theoretical Economics, Journal of the European Economic Association, The RAND Journal of Economics, Review of Network Economics

PROFESSIONAL AFFILIATION

Econometric Society , European Economics Association , Royal Economic Society

LANGUAGES

Spanish (mother tongue), English (fluent), French & Russian (beginner)

COMPUTER SKILLS

LaTeX , Maple, Mathematica, MATLAB, SPSS, Stata